



# FPGA Logic Primitive Resource Usage

## Summary

This quick reference provides detailed information about resource usage of all pre-synthesized Logic Primitive cores.

Core Reference

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## Logic Primitive

The available Logic Primitive cores are listed as follows:

- [AND Gates](#)
- [Inverters](#)
- [NAND Gates](#)
- [NOR Gates](#)
- [OR Gates](#)
- [Sum of Product](#)
- [True/Complement](#)
- [XNOR Gates](#)
- [XOR Gates](#)

## AND Gates

The available AND Gates cores are listed as follows:

<a href="#">AND2B</a>	<a href="#">AND2DB</a>	<a href="#">AND2DS</a>	<a href="#">AND2N1B</a>
<a href="#">AND2N1S</a>	<a href="#">AND2N2B</a>	<a href="#">AND2N2S</a>	<a href="#">AND2S</a>
<a href="#">AND3B</a>	<a href="#">AND3DB</a>	<a href="#">AND3DS</a>	<a href="#">AND3N1B</a>
<a href="#">AND3N1S</a>	<a href="#">AND3N2B</a>	<a href="#">AND3N2S</a>	<a href="#">AND3N3B</a>
<a href="#">AND3N3S</a>	<a href="#">AND3S</a>	<a href="#">AND4B</a>	<a href="#">AND4DB</a>
<a href="#">AND4DS</a>	<a href="#">AND4N1B</a>	<a href="#">AND4N1S</a>	<a href="#">AND4N2B</a>
<a href="#">AND4N2S</a>	<a href="#">AND4N3B</a>	<a href="#">AND4N3S</a>	<a href="#">AND4N4B</a>
<a href="#">AND4N4S</a>	<a href="#">AND4S</a>	<a href="#">AND5B</a>	<a href="#">AND5N1B</a>
<a href="#">AND5N1S</a>	<a href="#">AND5N2B</a>	<a href="#">AND5N2S</a>	<a href="#">AND5N3B</a>
<a href="#">AND5N3S</a>	<a href="#">AND5N4B</a>	<a href="#">AND5N4S</a>	<a href="#">AND5N5B</a>
<a href="#">AND5N5S</a>	<a href="#">AND5S</a>	<a href="#">AND6B</a>	<a href="#">AND6S</a>
<a href="#">AND7B</a>	<a href="#">AND7S</a>	<a href="#">AND8B</a>	<a href="#">AND8S</a>
<a href="#">AND9B</a>	<a href="#">AND9S</a>	<a href="#">AND12B</a>	<a href="#">AND12S</a>
<a href="#">AND16B</a>	<a href="#">AND16S</a>	<a href="#">AND32B</a>	

## Inverters

The available Inverters cores are listed as follows:

<i>INV</i>	<i>INV2B</i>	<i>INV2S</i>	<i>INV3B</i>
<i>INV3S</i>	<i>INV4B</i>	<i>INV4S</i>	<i>INV5B</i>
<i>INV5S</i>	<i>INV6B</i>	<i>INV6S</i>	<i>INV7B</i>
<i>INV7S</i>	<i>INV8B</i>	<i>INV8S</i>	<i>INV9B</i>
<i>INV9S</i>	<i>INV10B</i>	<i>INV10S</i>	<i>INV12B</i>
<i>INV12S</i>	<i>INV16B</i>	<i>INV16S</i>	<i>INV32B</i>

## NAND Gates

The available NAND Gates cores are listed as follows:

<i>NAND2B</i>	<i>NAND2N1B</i>	<i>NAND2N1S</i>	<i>NAND2N2B</i>
<i>NAND2N2S</i>	<i>NAND2S</i>	<i>NAND3B</i>	<i>NAND3N1B</i>
<i>NAND3N1S</i>	<i>NAND3N2B</i>	<i>NAND3N2S</i>	<i>NAND3N3B</i>
<i>NAND3N3S</i>	<i>NAND3S</i>	<i>NAND4B</i>	<i>NAND4N1B</i>
<i>NAND4N1S</i>	<i>NAND4N2B</i>	<i>NAND4N2S</i>	<i>NAND4N3B</i>
<i>NAND4N3S</i>	<i>NAND4N4B</i>	<i>NAND4N4S</i>	<i>NAND4S</i>
<i>NAND5B</i>	<i>NAND5N1B</i>	<i>NAND5N1S</i>	<i>NAND5N2B</i>
<i>NAND5N2S</i>	<i>NAND5N3B</i>	<i>NAND5N3S</i>	<i>NAND5N4B</i>
<i>NAND5N4S</i>	<i>NAND5N5B</i>	<i>NAND5N5S</i>	<i>NAND5S</i>
<i>NAND6B</i>	<i>NAND6S</i>	<i>NAND7B</i>	<i>NAND7S</i>
<i>NAND8B</i>	<i>NAND8S</i>	<i>NAND9B</i>	<i>NAND9S</i>
<i>NAND12B</i>	<i>NAND12S</i>	<i>NAND16B</i>	<i>NAND16S</i>
<i>NAND32B</i>			

## NOR Gates

The available NOR Gates cores are listed as follows:

<i>NOR2B</i>	<i>NOR2N1B</i>	<i>NOR2N1S</i>	<i>NOR2N2B</i>
<i>NOR2N2S</i>	<i>NOR2S</i>	<i>NOR3B</i>	<i>NOR3N1B</i>
<i>NOR3N1S</i>	<i>NOR3N2B</i>	<i>NOR3N2S</i>	<i>NOR3N3B</i>
<i>NOR3N3S</i>	<i>NOR3S</i>	<i>NOR4B</i>	<i>NOR4N1B</i>
<i>NOR4N1S</i>	<i>NOR4N2B</i>	<i>NOR4N2S</i>	<i>NOR4N3B</i>
<i>NOR4N3S</i>	<i>NOR4N4B</i>	<i>NOR4N4S</i>	<i>NOR4S</i>
<i>NOR5B</i>	<i>NOR5N1B</i>	<i>NOR5N1S</i>	<i>NOR5N2B</i>
<i>NOR5N2S</i>	<i>NOR5N3B</i>	<i>NOR5N3S</i>	<i>NOR5N4B</i>

<i>NOR5N4S</i>	<i>NOR5N5B</i>	<i>NOR5N5S</i>	<i>NOR5S</i>
<i>NOR6B</i>	<i>NOR6S</i>	<i>NOR7B</i>	<i>NOR7S</i>
<i>NOR8B</i>	<i>NOR8S</i>	<i>NOR9B</i>	<i>NOR9S</i>
<i>NOR12B</i>	<i>NOR12S</i>	<i>NOR16B</i>	<i>NOR16S</i>
<i>NOR32B</i>			

## OR Gates

The available OR Gates cores are listed as follows:

<i>OR2B</i>	<i>OR2DB</i>	<i>OR2DS</i>	<i>OR2N1B</i>
<i>OR2N1S</i>	<i>OR2N2B</i>	<i>OR2N2S</i>	<i>OR2S</i>
<i>OR3B</i>	<i>OR3DB</i>	<i>OR3DS</i>	<i>OR3N1B</i>
<i>OR3N1S</i>	<i>OR3N2B</i>	<i>OR3N2S</i>	<i>OR3N3B</i>
<i>OR3N3S</i>	<i>OR3S</i>	<i>OR4B</i>	<i>OR4DB</i>
<i>OR4DS</i>	<i>OR4N1B</i>	<i>OR4N1S</i>	<i>OR4N2B</i>
<i>OR4N2S</i>	<i>OR4N3B</i>	<i>OR4N3S</i>	<i>OR4N4B</i>
<i>OR4N4S</i>	<i>OR4S</i>	<i>OR5B</i>	<i>OR5N1B</i>
<i>OR5N1S</i>	<i>OR5N2B</i>	<i>OR5N2S</i>	<i>OR5N3B</i>
<i>OR5N3S</i>	<i>OR5N4B</i>	<i>OR5N4S</i>	<i>OR5N5B</i>
<i>OR5N5S</i>	<i>OR5S</i>	<i>OR6B</i>	<i>OR6S</i>
<i>OR7B</i>	<i>OR7S</i>	<i>OR8B</i>	<i>OR8S</i>
<i>OR9B</i>	<i>OR9S</i>	<i>OR12B</i>	<i>OR12S</i>
<i>OR16B</i>	<i>OR16S</i>	<i>OR32B</i>	

## Sum of Product

The available Sum of Product cores are listed as follows:

<i>SOP2_2B</i>	<i>SOP2_2S</i>	<i>SOP2_3B</i>	<i>SOP2_3S</i>
<i>SOP2_4B</i>	<i>SOP2_4S</i>	<i>SOP4_2B</i>	<i>SOP4_2S</i>

## True/Complement

The available True/Complement cores are listed as follows:

*TCZO*

## XNOR Gates

The available XNOR Gates cores are listed as follows:

<i>XNOR2B</i>	<i>XNOR2N1B</i>	<i>XNOR2N1S</i>	<i>XNOR2N2B</i>
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<a href="#">XNOR2N2S</a>	<a href="#">XNOR2S</a>	<a href="#">XNOR3B</a>	<a href="#">XNOR3N1B</a>
<a href="#">XNOR3N1S</a>	<a href="#">XNOR3N2B</a>	<a href="#">XNOR3N2S</a>	<a href="#">XNOR3N3B</a>
<a href="#">XNOR3N3S</a>	<a href="#">XNOR3S</a>	<a href="#">XNOR4B</a>	<a href="#">XNOR4N1B</a>
<a href="#">XNOR4N1S</a>	<a href="#">XNOR4N2B</a>	<a href="#">XNOR4N2S</a>	<a href="#">XNOR4N3B</a>
<a href="#">XNOR4N3S</a>	<a href="#">XNOR4N4B</a>	<a href="#">XNOR4N4S</a>	<a href="#">XNOR4S</a>
<a href="#">XNOR5B</a>	<a href="#">XNOR5N1B</a>	<a href="#">XNOR5N1S</a>	<a href="#">XNOR5N2B</a>
<a href="#">XNOR5N2S</a>	<a href="#">XNOR5N3B</a>	<a href="#">XNOR5N3S</a>	<a href="#">XNOR5N4B</a>
<a href="#">XNOR5N4S</a>	<a href="#">XNOR5N5B</a>	<a href="#">XNOR5N5S</a>	<a href="#">XNOR5S</a>
<a href="#">XNOR6B</a>	<a href="#">XNOR6S</a>	<a href="#">XNOR7B</a>	<a href="#">XNOR7S</a>
<a href="#">XNOR8B</a>	<a href="#">XNOR8S</a>	<a href="#">XNOR9B</a>	<a href="#">XNOR9S</a>
<a href="#">XNOR12B</a>	<a href="#">XNOR12S</a>	<a href="#">XNOR16B</a>	<a href="#">XNOR16S</a>
<a href="#">XNOR32B</a>			

## XOR Gates

The available XOR Gates cores are listed as follows:

<a href="#">XOR2B</a>	<a href="#">XOR2N1B</a>	<a href="#">XOR2N1S</a>	<a href="#">XOR2N2B</a>
<a href="#">XOR2N2S</a>	<a href="#">XOR2S</a>	<a href="#">XOR3B</a>	<a href="#">XOR3N1B</a>
<a href="#">XOR3N1S</a>	<a href="#">XOR3N2B</a>	<a href="#">XOR3N2S</a>	<a href="#">XOR3N3B</a>
<a href="#">XOR3N3S</a>	<a href="#">XOR3S</a>	<a href="#">XOR4B</a>	<a href="#">XOR4N1B</a>
<a href="#">XOR4N1S</a>	<a href="#">XOR4N2B</a>	<a href="#">XOR4N2S</a>	<a href="#">XOR4N3B</a>
<a href="#">XOR4N3S</a>	<a href="#">XOR4N4B</a>	<a href="#">XOR4N4S</a>	<a href="#">XOR4S</a>
<a href="#">XOR5B</a>	<a href="#">XOR5N1B</a>	<a href="#">XOR5N1S</a>	<a href="#">XOR5N2B</a>
<a href="#">XOR5N2S</a>	<a href="#">XOR5N3B</a>	<a href="#">XOR5N3S</a>	<a href="#">XOR5N4B</a>
<a href="#">XOR5N4S</a>	<a href="#">XOR5N5B</a>	<a href="#">XOR5N5S</a>	<a href="#">XOR5S</a>
<a href="#">XOR6B</a>	<a href="#">XOR6S</a>	<a href="#">XOR7B</a>	<a href="#">XOR7S</a>
<a href="#">XOR8B</a>	<a href="#">XOR8S</a>	<a href="#">XOR9B</a>	<a href="#">XOR9S</a>
<a href="#">XOR12B</a>	<a href="#">XOR12S</a>	<a href="#">XOR16B</a>	<a href="#">XOR16S</a>
<a href="#">XOR32B</a>			

## AND2B

## 2-Input AND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L													
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3													
ProAsic3E													
Fusion													
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## AND2DB

## 2-Input AND/NAND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L													
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		1											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		4											
ECP		4											
ECP2		4	2										
ECP2M		4	2										
SC		4	2										
MACHXO		4	2										
XP		4	2										
XP2		4	2										

## AND2DS

## 2-Input AND/NAND Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L													
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		1											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		4											
ECP		4											
ECP2		4	2										
ECP2M		4	2										
SC		4	2										
MACHXO		4	2										
XP		4	2										
XP2		4	2										

**AND2N1B****2-Input AND Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L													
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



**AND2N1S****2-Input AND Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L													
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**AND2N2B****2-Input AND Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**AND2N2S****2-Input AND Gate with Active Low A and B Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## AND2S

## 2-Input AND Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## AND3B

## 3-Input AND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3													
ProAsic3E													
Fusion													
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## AND3DB

## 3-Input AND/NAND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		1											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2											
ECP		2											
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## AND3DS

## 3-Input AND/NAND Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		1											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2											
ECP		2											
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**AND3N1B****3-Input AND Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



**AND3N1S****3-Input AND Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**AND3N2B****3-Input AND Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**AND3N2S****3-Input AND Gate with Active Low A and B Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**AND3N3B****3-Input AND Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**AND3N3S****3-Input AND Gate with Active Low A, B and C Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**AND3S****3-Input AND Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## AND4B

## 4-Input AND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## AND4DB

## 4-Input AND/NAND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		2											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2											
ECP		2											
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



**AND4DS****4-Input AND/NAND Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		2											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2											
ECP		2											
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**AND4N1B****4-Input AND Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**AND4N1S****4-Input AND Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**AND4N2B****4-Input AND Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**AND4N2S****4-Input AND Gate with Active Low A and B Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**AND4N3B****4-Input AND Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**AND4N3S****4-Input AND Gate with Active Low A, B and C Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**AND4N4B****4-Input AND Gate with Active Low A, B, C and D Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



**AND4N4S****4-Input AND Gate with Active Low A, B, C and D Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**AND4S****4-Input AND Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2											
ECP		2											
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## AND5B

## 5-Input AND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2											
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**AND5N1B****5-Input AND Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**AND5N1S****5-Input AND Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**AND5N2B****5-Input AND Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**AND5N2S****5-Input AND Gate with Active Low A and B Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**AND5N3B****5-Input AND Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



**AND5N3S****5-Input AND Gate with Active Low A, B and C Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**AND5N4B****5-Input AND Gate with Active Low A, B, C and D Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**AND5N4S****5-Input AND Gate with Active Low A, B, C and D Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**AND5N5B****5-Input AND Gate with Active Low A, B, C, D and E Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**AND5N5S****5-Input AND Gate with Active Low A, B, C, D and E Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## AND5S

## 5-Input AND Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## AND6B

## 6-Input AND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## AND6S

## 6-Input AND Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



## AND7B

## 7-Input AND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## AND7S

## 7-Input AND Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## AND8B

## 8-Input AND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## AND8S

## 8-Input AND Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## AND9B

## 9-Input AND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		3	3										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## AND9S

## 9-Input AND Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7x			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		3	3										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## AND12B

## 12-Input AND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			3										
Cyclone		4	4										
Cyclone2		4	4										
Cyclone3		4	4										
Stratix		4	4										
Stratix2		4	4										
Stratix3			3										
StratixGX		4	4										
Stratix2GX			3										
Max2		4	4										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4	4										
Spartan3ADSP		4	4										
Spartan3AN		4	4										
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		6											
ProAsic3		6											
ProAsic3E		6											
Fusion		6											
EC		4											
ECP		4											
ECP2		4	4										
ECP2M		4	4										
SC		4	4										
MACHXO		4	4										
XP		4	4										
XP2		4	4										

## AND12S

## 12-Input AND Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			3										
Cyclone		4	4										
Cyclone2		4	4										
Cyclone3		4	4										
Stratix		4	4										
Stratix2		4	4										
Stratix3			3										
StratixGX		4	4										
Stratix2GX			3										
Max2		4	4										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4	4										
Spartan3ADSP		4	4										
Spartan3AN		4	4										
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		6											
ProAsic3		6											
ProAsic3E		6											
Fusion		6											
EC		4											
ECP		4											
ECP2		4	4										
ECP2M		4	4										
SC		4	4										
MACHXO		4	4										
XP		4	4										
XP2		4	4										



**AND16B****16-Input AND Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7x			4										
Cyclone		5	5										
Cyclone2		5	5										
Cyclone3		5	5										
Stratix		5	5										
Stratix2		5	5										
Stratix3			4										
StratixGX		5	5										
Stratix2GX			4										
Max2		5	5										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		6	5										
Spartan2E		6	5										
Spartan3		6	5										
Spartan3A		6	5										
Spartan3ADSP		6	5										
Spartan3AN		6	5										
Spartan3E		6	5										
Spartan3L		6	5										
Virtex		6	5										
Virtex2		6	5										
Virtex2p		6	5										
VirtexE		6	5										
Virtex4		6	5										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		8											
ProAsic3		8											
ProAsic3E		8											
Fusion		8											
EC		6											
ECP		6											
ECP2		6	5										
ECP2M		6	5										
SC		6	5										
MACHXO		6	5										
XP		6	5										
XP2		6	5										

## AND16S

## 16-Input AND Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			4										
Cyclone		5	5										
Cyclone2		5	5										
Cyclone3		5	5										
Stratix		5	5										
Stratix2		5	5										
Stratix3			4										
StratixGX		5	5										
Stratix2GX			4										
Max2		5	5										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		6	5										
Spartan2E		6	5										
Spartan3		6	5										
Spartan3A		6	5										
Spartan3ADSP		6	5										
Spartan3AN		6	5										
Spartan3E		6	5										
Spartan3L		6	5										
Virtex		6	5										
Virtex2		6	5										
Virtex2p		6	5										
VirtexE		6	5										
Virtex4		6	5										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		8											
ProAsic3		8											
ProAsic3E		8											
Fusion		8											
EC		6											
ECP		6											
ECP2		6	5										
ECP2M		6	5										
SC		6	5										
MACHXO		6	5										
XP		6	5										
XP2		6	5										

**AND32B****32-Input AND Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			9										
Cyclone		11	11										
Cyclone2		11	11										
Cyclone3		11	11										
Stratix		11	11										
Stratix2		10	10										
Stratix3			9										
StratixGX		11	11										
Stratix2GX			7										
Max2		11	11										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		12	11										
Spartan2E		12	11										
Spartan3		12	11										
Spartan3A		8	8										
Spartan3ADSP		8	8										
Spartan3AN		8	8										
Spartan3E		8	8										
Spartan3L		8	8										
Virtex		12	11										
Virtex2		12	11										
Virtex2p		12	11										
VirtexE		12	11										
Virtex4		12	11										
Virtex5		8											
CoolRunner2	2												
CoolRunnerXpla3	31												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		16											
ProAsic3		16											
ProAsic3E		16											
Fusion		16											
EC		12											
ECP		12											
ECP2		14	12										
ECP2M		14	12										
SC		12	11										
MACHXO		12	11										
XP		12	11										
XP2		12	11										

## INV

## Inverter

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx		1											
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3		1											
StratixGX		1	1										
Stratix2gx		1											
Max2		1											
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		1	1										
Spartan2E		1	1										
Spartan3		1	1										
Spartan3A		1											
Spartan3adsp		1											
Spartan3an		1											
Spartan3E		1	1										
Spartan3L		1	1										
Virtex		1	1										
Virtex2		1	1										
Virtex2p		1	1										
VirtexE		1	1										
Virtex4		1	1										
Virtex5		1	1										
CoolRunner2	1	1											
CoolRunnerXpla3	1	1											
Xc9500	1	1											
Xc9500XL	1	1											
Xc9500XV	1	1											
ProAsicPlus		1	1										
ProAsic3		1	1										
ProAsic3E		1											
Fusion		1											
EC		1	1										
ECP		1	1										
ECP2		1	1										
ECP2M		1	1										
Sc		1											
MACHXO		1	1										
XP		1	1										
Xp2		1											

## INV2B

## 2-Bit Inverter, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		2	2										
Spartan3L													
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5													
CoolRunner2	2	2											
CoolRunnerXpla3	2	2											
Xc9500	2	2											
Xc9500XL	2	2											
Xc9500XV	2	2											
ProAsicPlus		2	2										
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		4	2										
ECP2M		4	2										
SC		4	2										
MACHXO		4	2										
XP		4	2										
XP2		4	2										

## INV2S

## 2-Bit Inverter, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		2	2										
Spartan3L													
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5													
CoolRunner2	2	2											
CoolRunnerXpla3	2	2											
Xc9500	2	2											
Xc9500XL	2	2											
Xc9500XV	2	2											
ProAsicPlus		2	2										
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		4	2										
ECP2M		4	2										
SC		4	2										
MACHXO		4	2										
XP		4	2										
XP2		4	2										

## INV3B

## 3-Bit Inverter, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			3										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		3	3										
Stratix3			3										
StratixGX		3	3										
Stratix2GX			3										
Max2		3	3										
Max3000a	3	3											
Max7000b	3	3											
Max7000ae	3	3											
Max7000s	3	3											
Spartan2		3	3										
Spartan2E		3	3										
Spartan3		3	3										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		3	3										
Spartan3L													
Virtex		3	3										
Virtex2		3	3										
Virtex2p		3	3										
VirtexE		3	3										
Virtex4		3	3										
Virtex5													
CoolRunner2	3	3											
CoolRunnerXpla3	3	3											
Xc9500	3	3											
Xc9500XL	3	3											
Xc9500XV	3	3											
ProAsicPlus		3	3										
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		3	3										
ECP		3	3										
ECP2		6	3										
ECP2M		6	3										
SC		6	3										
MACHXO		6	3										
XP		6	3										
XP2		6	3										

## INV3S

## 3-Bit Inverter, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			3										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		3	3										
Stratix3			3										
StratixGX		3	3										
Stratix2GX			3										
Max2		3	3										
Max3000a	3	3											
Max7000b	3	3											
Max7000ae	3	3											
Max7000s	3	3											
Spartan2		3	3										
Spartan2E		3	3										
Spartan3		3	3										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		3	3										
Spartan3L													
Virtex		3	3										
Virtex2		3	3										
Virtex2p		3	3										
VirtexE		3	3										
Virtex4		3	3										
Virtex5													
CoolRunner2	3	3											
CoolRunnerXpla3	3	3											
Xc9500	3	3											
Xc9500XL	3	3											
Xc9500XV	3	3											
ProAsicPlus		3	3										
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		3	3										
ECP		3	3										
ECP2		6	3										
ECP2M		6	3										
SC		6	3										
MACHXO		6	3										
XP		6	3										
XP2		6	3										



## INV4B

## 4-Bit Inverter, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			4										
Cyclone		4	4										
Cyclone2		4	4										
Cyclone3		4	4										
Stratix		4	4										
Stratix2		4	4										
Stratix3			4										
StratixGX		4	4										
Stratix2GX			4										
Max2		4	4										
Max3000a	4	4											
Max7000b	4	4											
Max7000ae	4	4											
Max7000s	4	4											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		4	4										
Spartan3L													
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5													
CoolRunner2	4	4											
CoolRunnerXpla3	4	4											
Xc9500	4	4											
Xc9500XL	4	4											
Xc9500XV	4	4											
ProAsicPlus		4	4										
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	4										
ECP		4	4										
ECP2		8	4										
ECP2M		8	4										
SC		8	4										
MACHXO		8	4										
XP		8	4										
XP2		8	4										

## INV4S

## 4-Bit Inverter, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			4										
Cyclone		4	4										
Cyclone2		4	4										
Cyclone3		4	4										
Stratix		4	4										
Stratix2		4	4										
Stratix3			4										
StratixGX		4	4										
Stratix2GX			4										
Max2		4	4										
Max3000a	4	4											
Max7000b	4	4											
Max7000ae	4	4											
Max7000s	4	4											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		4	4										
Spartan3L													
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5													
CoolRunner2	4	4											
CoolRunnerXpla3	4	4											
Xc9500	4	4											
Xc9500XL	4	4											
Xc9500XV	4	4											
ProAsicPlus		4	4										
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	4										
ECP		4	4										
ECP2		8	4										
ECP2M		8	4										
SC		8	4										
MACHXO		8	4										
XP		8	4										
XP2		8	4										

## INV5B

## 5-Bit Inverter, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			5										
Cyclone		5	5										
Cyclone2		5	5										
Cyclone3		5	5										
Stratix		5	5										
Stratix2		5	5										
Stratix3			5										
StratixGX		5	5										
Stratix2GX			5										
Max2		5	5										
Max3000a	5	5											
Max7000b	5	5											
Max7000ae	5	5											
Max7000s	5	5											
Spartan2		5	5										
Spartan2E		5	5										
Spartan3		5	5										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		5	5										
Spartan3L													
Virtex		5	5										
Virtex2		5	5										
Virtex2p		5	5										
VirtexE		5	5										
Virtex4		5	5										
Virtex5													
CoolRunner2	5	5											
CoolRunnerXpla3	5	5											
Xc9500	5	5											
Xc9500XL	5	5											
Xc9500XV	5	5											
ProAsicPlus		5	5										
ProAsic3		5											
ProAsic3E		5											
Fusion		5											
EC		5	5										
ECP		5	5										
ECP2		10	5										
ECP2M		10	5										
SC		10	5										
MACHXO		10	5										
XP		10	5										
XP2		10	5										

## INV5S

## 5-Bit Inverter, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			5										
Cyclone		5	5										
Cyclone2		5	5										
Cyclone3		5	5										
Stratix		5	5										
Stratix2		5	5										
Stratix3			5										
StratixGX		5	5										
Stratix2GX			5										
Max2		5	5										
Max3000a	5	5											
Max7000b	5	5											
Max7000ae	5	5											
Max7000s	5	5											
Spartan2		5	5										
Spartan2E		5	5										
Spartan3		5	5										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		5	5										
Spartan3L													
Virtex		5	5										
Virtex2		5	5										
Virtex2p		5	5										
VirtexE		5	5										
Virtex4		5	5										
Virtex5													
CoolRunner2	5	5											
CoolRunnerXpla3	5	5											
Xc9500	5	5											
Xc9500XL	5	5											
Xc9500XV	5	5											
ProAsicPlus		5	5										
ProAsic3		5											
ProAsic3E		5											
Fusion		5											
EC		5	5										
ECP		5	5										
ECP2		10	5										
ECP2M		10	5										
SC		10	5										
MACHXO		10	5										
XP		10	5										
XP2		10	5										

## INV6B

## 6-Bit Inverter, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7		6	6										
Cyclone		6	6										
Cyclone2		6	6										
Cyclone3		6	6										
Stratix		6	6										
Stratix2		6	6										
Stratix3		6	6										
StratixGX		6	6										
Stratix2GX		6	6										
Max2		6	6										
Max3000a	6	6											
Max7000b	6	6											
Max7000ae	6	6											
Max7000s	6	6											
Spartan2		6	6										
Spartan2E		6	6										
Spartan3		6	6										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		6	6										
Spartan3L													
Virtex		6	6										
Virtex2		6	6										
Virtex2p		6	6										
VirtexE		6	6										
Virtex4		6	6										
Virtex5													
CoolRunner2	6	6											
CoolRunnerXpla3	6	6											
Xc9500	6	6											
Xc9500XL	6	6											
Xc9500XV	6	6											
ProAsicPlus		6	6										
ProAsic3		6											
ProAsic3E		6											
Fusion		6											
EC		6	6										
ECP		6	6										
ECP2		12	6										
ECP2M		12	6										
SC		12	6										
MACHXO		12	6										
XP		12	6										
XP2		12	6										

## INV6S

## 6-Bit Inverter, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			6										
Cyclone		6	6										
Cyclone2		6	6										
Cyclone3		6	6										
Stratix		6	6										
Stratix2		6	6										
Stratix3			6										
StratixGX		6	6										
Stratix2GX			6										
Max2		6	6										
Max3000a	6	6											
Max7000b	6	6											
Max7000ae	6	6											
Max7000s	6	6											
Spartan2		6	6										
Spartan2E		6	6										
Spartan3		6	6										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		6	6										
Spartan3L													
Virtex		6	6										
Virtex2		6	6										
Virtex2p		6	6										
VirtexE		6	6										
Virtex4		6	6										
Virtex5													
CoolRunner2	6	6											
CoolRunnerXpla3	6	6											
Xc9500	6	6											
Xc9500XL	6	6											
Xc9500XV	6	6											
ProAsicPlus		6	6										
ProAsic3		6											
ProAsic3E		6											
Fusion		6											
EC		6	6										
ECP		6	6										
ECP2		12	6										
ECP2M		12	6										
SC		12	6										
MACHXO		12	6										
XP		12	6										
XP2		12	6										

## INV7B

## 7-Bit Inverter, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			7										
Cyclone		7	7										
Cyclone2		7	7										
Cyclone3		7	7										
Stratix		7	7										
Stratix2		7	7										
Stratix3			7										
StratixGX		7	7										
Stratix2GX			7										
Max2		7	7										
Max3000a	7	7											
Max7000b	7	7											
Max7000ae	7	7											
Max7000s	7	7											
Spartan2		7	7										
Spartan2E		7	7										
Spartan3		7	7										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		7	7										
Spartan3L													
Virtex		7	7										
Virtex2		7	7										
Virtex2p		7	7										
VirtexE		7	7										
Virtex4		7	7										
Virtex5													
CoolRunner2	7	7											
CoolRunnerXpla3	7	7											
Xc9500	7	7											
Xc9500XL	7	7											
Xc9500XV	7	7											
ProAsicPlus		7	7										
ProAsic3		7											
ProAsic3E		7											
Fusion		7											
EC		7	7										
ECP		7	7										
ECP2		14	7										
ECP2M		14	7										
SC		14	7										
MACHXO		14	7										
XP		14	7										
XP2		14	7										

## INV7S

## 7-Bit Inverter, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			7										
Cyclone		7	7										
Cyclone2		7	7										
Cyclone3		7	7										
Stratix		7	7										
Stratix2		7	7										
Stratix3			7										
StratixGX		7	7										
Stratix2GX			7										
Max2		7	7										
Max3000a	7	7											
Max7000b	7	7											
Max7000ae	7	7											
Max7000s	7	7											
Spartan2		7	7										
Spartan2E		7	7										
Spartan3		7	7										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		7	7										
Spartan3L													
Virtex		7	7										
Virtex2		7	7										
Virtex2p		7	7										
VirtexE		7	7										
Virtex4		7	7										
Virtex5													
CoolRunner2	7	7											
CoolRunnerXpla3	7	7											
Xc9500	7	7											
Xc9500XL	7	7											
Xc9500XV	7	7											
ProAsicPlus		7	7										
ProAsic3		7											
ProAsic3E		7											
Fusion		7											
EC		7	7										
ECP		7	7										
ECP2		14	7										
ECP2M		14	7										
SC		14	7										
MACHXO		14	7										
XP		14	7										
XP2		14	7										



## INV8B

## 8-Bit Inverter, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			8										
Cyclone		8	8										
Cyclone2		8	8										
Cyclone3		8	8										
Stratix		8	8										
Stratix2		8	8										
Stratix3			8										
StratixGX		8	8										
Stratix2GX			8										
Max2		8	8										
Max3000a	8	8											
Max7000b	8	8											
Max7000ae	8	8											
Max7000s	8	8											
Spartan2		8	8										
Spartan2E		8	8										
Spartan3		8	8										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		8	8										
Spartan3L													
Virtex		8	8										
Virtex2		8	8										
Virtex2p		8	8										
VirtexE		8	8										
Virtex4		8	8										
Virtex5													
CoolRunner2	8	8											
CoolRunnerXpla3	8	8											
Xc9500	8	8											
Xc9500XL	8	8											
Xc9500XV	8	8											
ProAsicPlus		8	8										
ProAsic3		8											
ProAsic3E		8											
Fusion		8											
EC		8	8										
ECP		8	8										
ECP2		16	8										
ECP2M		16	8										
SC		16	8										
MACHXO		16	8										
XP		16	8										
XP2		16	8										

## INV8S

## 8-Bit Inverter, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			8										
Cyclone		8	8										
Cyclone2		8	8										
Cyclone3		8	8										
Stratix		8	8										
Stratix2		8	8										
Stratix3			8										
StratixGX		8	8										
Stratix2GX			8										
Max2		8	8										
Max3000a	8	8											
Max7000b	8	8											
Max7000ae	8	8											
Max7000s	8	8											
Spartan2		8	8										
Spartan2E		8	8										
Spartan3		8	8										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		8	8										
Spartan3L													
Virtex		8	8										
Virtex2		8	8										
Virtex2p		8	8										
VirtexE		8	8										
Virtex4		8	8										
Virtex5													
CoolRunner2	8	8											
CoolRunnerXpla3	8	8											
Xc9500	8	8											
Xc9500XL	8	8											
Xc9500XV	8	8											
ProAsicPlus		8	8										
ProAsic3		8											
ProAsic3E		8											
Fusion		8											
EC		8	8										
ECP		8	8										
ECP2		16	8										
ECP2M		16	8										
SC		16	8										
MACHXO		16	8										
XP		16	8										
XP2		16	8										

## INV9B

## 9-Bit Inverter, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			9										
Cyclone		9	9										
Cyclone2		9	9										
Cyclone3		9	9										
Stratix		9	9										
Stratix2		9	9										
Stratix3			9										
StratixGX		9	9										
Stratix2GX			9										
Max2		9	9										
Max3000a	9	9											
Max7000b	9	9											
Max7000ae	9	9											
Max7000s	9	9											
Spartan2		9	9										
Spartan2E		9	9										
Spartan3		9	9										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		9	9										
Spartan3L													
Virtex		9	9										
Virtex2		9	9										
Virtex2p		9	9										
VirtexE		9	9										
Virtex4		9	9										
Virtex5													
CoolRunner2	9	9											
CoolRunnerXpla3	9	9											
Xc9500	9	9											
Xc9500XL	9	9											
Xc9500XV	9	9											
ProAsicPlus		9	9										
ProAsic3		9											
ProAsic3E		9											
Fusion		9											
EC		9	9										
ECP		9	9										
ECP2		18	9										
ECP2M		18	9										
SC		18	9										
MACHXO		18	9										
XP		18	9										
XP2		18	9										

## INV9S

## 9-Bit Inverter, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			9										
Cyclone		9	9										
Cyclone2		9	9										
Cyclone3		9	9										
Stratix		9	9										
Stratix2		9	9										
Stratix3			9										
StratixGX		9	9										
Stratix2GX			9										
Max2		9	9										
Max3000a	9	9											
Max7000b	9	9											
Max7000ae	9	9											
Max7000s	9	9											
Spartan2		9	9										
Spartan2E		9	9										
Spartan3		9	9										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		9	9										
Spartan3L													
Virtex		9	9										
Virtex2		9	9										
Virtex2p		9	9										
VirtexE		9	9										
Virtex4		9	9										
Virtex5													
CoolRunner2	9	9											
CoolRunnerXpla3	9	9											
Xc9500	9	9											
Xc9500XL	9	9											
Xc9500XV	9	9											
ProAsicPlus		9	9										
ProAsic3		9											
ProAsic3E		9											
Fusion		9											
EC		9	9										
ECP		9	9										
ECP2		18	9										
ECP2M		18	9										
SC		18	9										
MACHXO		18	9										
XP		18	9										
XP2		18	9										

## INV10B

## 10-Bit Inverter, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			10										
Cyclone		10	10										
Cyclone2		10	10										
Cyclone3		10	10										
Stratix		10	10										
Stratix2		10	10										
Stratix3			10										
StratixGX		10	10										
Stratix2GX			10										
Max2		10	10										
Max3000a	10	10											
Max7000b	10	10											
Max7000ae	10	10											
Max7000s	10	10											
Spartan2		10	10										
Spartan2E		10	10										
Spartan3		10	10										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		10	10										
Spartan3L													
Virtex		10	10										
Virtex2		10	10										
Virtex2p		10	10										
VirtexE		10	10										
Virtex4		10	10										
Virtex5													
CoolRunner2	10	10											
CoolRunnerXpla3	10	10											
Xc9500	10	10											
Xc9500XL	10	10											
Xc9500XV	10	10											
ProAsicPlus		10	10										
ProAsic3		10											
ProAsic3E		10											
Fusion		10											
EC		10	10										
ECP		10	10										
ECP2		20	10										
ECP2M		20	10										
SC		20	10										
MACHXO		20	10										
XP		20	10										
XP2		20	10										

## INV10S

## 10-Bit Inverter, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			10										
Cyclone		10	10										
Cyclone2		10	10										
Cyclone3		10	10										
Stratix		10	10										
Stratix2		10	10										
Stratix3			10										
StratixGX		10	10										
Stratix2GX			10										
Max2		10	10										
Max3000a	10	10											
Max7000b	10	10											
Max7000ae	10	10											
Max7000s	10	10											
Spartan2		10	10										
Spartan2E		10	10										
Spartan3		10	10										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		10	10										
Spartan3L													
Virtex		10	10										
Virtex2		10	10										
Virtex2p		10	10										
VirtexE		10	10										
Virtex4		10	10										
Virtex5													
CoolRunner2	10	10											
CoolRunnerXpla3	10	10											
Xc9500	10	10											
Xc9500XL	10	10											
Xc9500XV	10	10											
ProAsicPlus		10	10										
ProAsic3		10											
ProAsic3E		10											
Fusion		10											
EC		10	10										
ECP		10	10										
ECP2		20	10										
ECP2M		20	10										
SC		20	10										
MACHXO		20	10										
XP		20	10										
XP2		20	10										

## INV12B

## 12-Bit Inverter, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			12										
Cyclone		12	12										
Cyclone2		12	12										
Cyclone3		12	12										
Stratix		12	12										
Stratix2		12	12										
Stratix3			12										
StratixGX		12	12										
Stratix2GX			12										
Max2		12	12										
Max3000a	12	12											
Max7000b	12	12											
Max7000ae	12	12											
Max7000s	12	12											
Spartan2		12	12										
Spartan2E		12	12										
Spartan3		12	12										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		12	12										
Spartan3L													
Virtex		12	12										
Virtex2		12	12										
Virtex2p		12	12										
VirtexE		12	12										
Virtex4		12	12										
Virtex5													
CoolRunner2	12	12											
CoolRunnerXpla3	12	12											
Xc9500	12	12											
Xc9500XL	12	12											
Xc9500XV	12	12											
ProAsicPlus		12	12										
ProAsic3		12											
ProAsic3E		12											
Fusion		12											
EC		12	12										
ECP		12	12										
ECP2		24	12										
ECP2M		24	12										
SC		24	12										
MACHXO		24	12										
XP		24	12										
XP2		24	12										

## INV12S

## 12-Bit Inverter, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			12										
Cyclone		12	12										
Cyclone2		12	12										
Cyclone3		12	12										
Stratix		12	12										
Stratix2		12	12										
Stratix3			12										
StratixGX		12	12										
Stratix2GX			12										
Max2		12	12										
Max3000a	12	12											
Max7000b	12	12											
Max7000ae	12	12											
Max7000s	12	12											
Spartan2		12	12										
Spartan2E		12	12										
Spartan3		12	12										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		12	12										
Spartan3L													
Virtex		12	12										
Virtex2		12	12										
Virtex2p		12	12										
VirtexE		12	12										
Virtex4		12	12										
Virtex5													
CoolRunner2	12	12											
CoolRunnerXpla3	12	12											
Xc9500	12	12											
Xc9500XL	12	12											
Xc9500XV	12	12											
ProAsicPlus		12	12										
ProAsic3		12											
ProAsic3E		12											
Fusion		12											
EC		12	12										
ECP		12	12										
ECP2		24	12										
ECP2M		24	12										
SC		24	12										
MACHXO		24	12										
XP		24	12										
XP2		24	12										



## INV16B

## 16-Bit Inverter, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			16										
Cyclone		16	16										
Cyclone2		16	16										
Cyclone3		16	16										
Stratix		16	16										
Stratix2		16	16										
Stratix3			16										
StratixGX		16	16										
Stratix2GX			16										
Max2		16	16										
Max3000a	16	16											
Max7000b	16	16											
Max7000ae	16	16											
Max7000s	16	16											
Spartan2		16	16										
Spartan2E		16	16										
Spartan3		16	16										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		16	16										
Spartan3L													
Virtex		16	16										
Virtex2		16	16										
Virtex2p		16	16										
VirtexE		16	16										
Virtex4		16	16										
Virtex5													
CoolRunner2	16	16											
CoolRunnerXpla3	16	16											
Xc9500	16	16											
Xc9500XL	16	16											
Xc9500XV	16	16											
ProAsicPlus		16	16										
ProAsic3		16											
ProAsic3E		16											
Fusion		16											
EC		16	16										
ECP		16	16										
ECP2		32	16										
ECP2M		32	16										
SC		32	16										
MACHXO		32	16										
XP		32	16										
XP2		32	16										

## INV16S

## 16-Bit Inverter, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			16										
Cyclone		16	16										
Cyclone2		16	16										
Cyclone3		16	16										
Stratix		16	16										
Stratix2		16	16										
Stratix3			16										
StratixGX		16	16										
Stratix2GX			16										
Max2		16	16										
Max3000a	16	16											
Max7000b	16	16											
Max7000ae	16	16											
Max7000s	16	16											
Spartan2		16	16										
Spartan2E		16	16										
Spartan3		16	16										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		16	16										
Spartan3L													
Virtex		16	16										
Virtex2		16	16										
Virtex2p		16	16										
VirtexE		16	16										
Virtex4		16	16										
Virtex5													
CoolRunner2	16	16											
CoolRunnerXpla3	16	16											
Xc9500	16	16											
Xc9500XL	16	16											
Xc9500XV	16	16											
ProAsicPlus		16	16										
ProAsic3		16											
ProAsic3E		16											
Fusion		16											
EC		16	16										
ECP		16	16										
ECP2		32	16										
ECP2M		32	16										
SC		32	16										
MACHXO		32	16										
XP		32	16										
XP2		32	16										

## INV32B

## 32-Bit Inverter, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			32										
Cyclone		32	32										
Cyclone2		32	32										
Cyclone3		32	32										
Stratix		32	32										
Stratix2		32	32										
Stratix3			32										
StratixGX		32	32										
Stratix2GX			32										
Max2		32	32										
Max3000a	32	32											
Max7000b	32	32											
Max7000ae	32	32											
Max7000s	32	32											
Spartan2		32	32										
Spartan2E		32	32										
Spartan3		32	32										
Spartan3A													
Spartan3ADSP													
Spartan3AN													
Spartan3E		32	32										
Spartan3L													
Virtex		32	32										
Virtex2		32	32										
Virtex2p		32	32										
VirtexE		32	32										
Virtex4		32	32										
Virtex5													
CoolRunner2	32	32											
CoolRunnerXpla3	32	32											
Xc9500	32	32											
Xc9500XL	32	32											
Xc9500XV	32	32											
ProAsicPlus		32	32										
ProAsic3		32											
ProAsic3E		32											
Fusion		32											
EC		32	32										
ECP		32	32										
ECP2		64	32										
ECP2M		64	32										
SC		64	32										
MACHXO		64	32										
XP		64	32										
XP2		64	32										

## NAND2B

## 2-Input NAND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3													
ProAsic3E													
Fusion													
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NAND2N1B****2-Input NAND Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NAND2N1S

## 2-Input NAND Gate with Active Low A Input, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5													
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NAND2N2B****2-Input NAND Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5													
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NAND2N2S

## 2-Input NAND Gate with Active Low A and B Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



**NAND2S****2-Input NAND Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NAND3B****3-Input NAND Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3													
ProAsic3E													
Fusion													
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NAND3N1B****3-Input NAND Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NAND3N1S****3-Input NAND Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NAND3N2B****3-Input NAND Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NAND3N2S

## 3-Input NAND Gate with Active Low A and B Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NAND3N3B****3-Input NAND Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NAND3N3S

## 3-Input NAND Gate with Active Low A, B and C Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



## NAND3S

## 3-Input NAND Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NAND4B****4-Input NAND Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NAND4N1B****4-Input NAND Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NAND4N1S****4-Input NAND Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NAND4N2B****4-Input NAND Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NAND4N2S

## 4-Input NAND Gate with Active Low A and B Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NAND4N3B****4-Input NAND Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NAND4N3S

## 4-Input NAND Gate with Active Low A, B and C Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



**NAND4N4B****4-Input NAND Gate with Active Low A, B, C and D Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NAND4N4S****4-Input NAND Gate with Active Low A, B, C and D Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NAND4S****4-Input NAND Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NAND5B

## 5-Input NAND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NAND5N1B

## 5-Input NAND Gate with Active Low A Input, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NAND5N1S

## 5-Input NAND Gate with Active Low A Input, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**NAND5N2B****5-Input NAND Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NAND5N2S

## 5-Input NAND Gate with Active Low A and B Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



**NAND5N3B****5-Input NAND Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NAND5N3S

## 5-Input NAND Gate with Active Low A, B and C Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**NAND5N4B****5-Input NAND Gate with Active Low A, B, C and D Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NAND5N4S

## 5-Input NAND Gate with Active Low A, B, C and D Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**NAND5N5B****5-Input NAND Gate with Active Low A, B, C, D and E Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NAND5N5S

## 5-Input NAND Gate with Active Low A, B, C, D and E Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**NAND5S****5-Input NAND Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**NAND6B****6-Input NAND Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



**NAND6S****6-Input NAND Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NAND7B

## 7-Input NAND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NAND7S

## 7-Input NAND Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NAND8B

## 8-Input NAND Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

**NAND8S****8-Input NAND Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

**NAND9B****9-Input NAND Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		3	3										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

**NAND9S****9-Input NAND Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		3	3										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

**NAND12B****12-Input NAND Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			3										
Cyclone		4	4										
Cyclone2		4	4										
Cyclone3		4	4										
Stratix		4	4										
Stratix2		4	4										
Stratix3			3										
StratixGX		4	4										
Stratix2GX			3										
Max2		4	4										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4	4										
Spartan3ADSP		4	4										
Spartan3AN		4	4										
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		6											
ProAsic3		6											
ProAsic3E		6											
Fusion		6											
EC		4	4										
ECP		4	4										
ECP2		4	4										
ECP2M		4	4										
SC		4	4										
MACHXO		4	4										
XP		4	4										
XP2		4	4										



**NAND12S****12-Input NAND Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7x			3										
Cyclone		4	4										
Cyclone2		4	4										
Cyclone3		4	4										
Stratix		4	4										
Stratix2		4	4										
Stratix3			3										
StratixGX		4	4										
Stratix2GX			3										
Max2		4	4										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4	4										
Spartan3ADSP		4	4										
Spartan3AN		4	4										
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		6											
ProAsic3		6											
ProAsic3E		6											
Fusion		6											
EC		4	4										
ECP		4	4										
ECP2		4	4										
ECP2M		4	4										
SC		4	4										
MACHXO		4	4										
XP		4	4										
XP2		4	4										

**NAND16B****16-Input NAND Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			4										
Cyclone		5	5										
Cyclone2		5	5										
Cyclone3		5	5										
Stratix		5	5										
Stratix2		5	5										
Stratix3			4										
StratixGX		5	5										
Stratix2GX			4										
Max2		5	5										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		6	5										
Spartan2E		6	5										
Spartan3		6	5										
Spartan3A		6	5										
Spartan3ADSP		6	5										
Spartan3AN		6	5										
Spartan3E		6	5										
Spartan3L		6	5										
Virtex		6	5										
Virtex2		6	5										
Virtex2p		6	5										
VirtexE		6	5										
Virtex4		6	5										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		8											
ProAsic3		8											
ProAsic3E		8											
Fusion		8											
EC		6	5										
ECP		6	5										
ECP2		6	5										
ECP2M		6	5										
SC		6	5										
MACHXO		6	5										
XP		6	5										
XP2		6	5										

**NAND16S****16-Input NAND Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			4										
Cyclone		5	5										
Cyclone2		5	5										
Cyclone3		5	5										
Stratix		5	5										
Stratix2		5	5										
Stratix3			4										
StratixGX		5	5										
Stratix2GX			4										
Max2		5	5										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		6	5										
Spartan2E		6	5										
Spartan3		6	5										
Spartan3A		6	5										
Spartan3ADSP		6	5										
Spartan3AN		6	5										
Spartan3E		6	5										
Spartan3L		6	5										
Virtex		6	5										
Virtex2		6	5										
Virtex2p		6	5										
VirtexE		6	5										
Virtex4		6	5										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		8											
ProAsic3		8											
ProAsic3E		8											
Fusion		8											
EC		6	5										
ECP		6	5										
ECP2		6	5										
ECP2M		6	5										
SC		6	5										
MACHXO		6	5										
XP		6	5										
XP2		6	5										

**NAND32B****32-Input NAND Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			9										
Cyclone		11	11										
Cyclone2		11	11										
Cyclone3		11	11										
Stratix		11	11										
Stratix2		10	10										
Stratix3			9										
StratixGX		11	11										
Stratix2GX			7										
Max2		11	11										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		12	11										
Spartan2E		12	11										
Spartan3		12	11										
Spartan3A		8	8										
Spartan3ADSP		8	8										
Spartan3AN		8	8										
Spartan3E		8	8										
Spartan3L		8	8										
Virtex		12	11										
Virtex2		12	11										
Virtex2p		12	11										
VirtexE		12	11										
Virtex4		12	11										
Virtex5		8											
CoolRunner2	2												
CoolRunnerXpla3	31												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		16											
ProAsic3		16											
ProAsic3E		16											
Fusion		16											
EC		12	11										
ECP		12	11										
ECP2		14	12										
ECP2M		14	12										
SC		12	11										
MACHXO		12	11										
XP		12	11										
XP2		12	11										

## NOR2B

## 2-Input NOR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3													
ProAsic3E													
Fusion													
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NOR2N1B****2-Input NOR Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NOR2N1S****2-Input NOR Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NOR2N2B****2-Input NOR Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



## NOR2N2S

## 2-Input NOR Gate with Active Low A and B Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NOR2S

## 2-Input NOR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NOR3B

## 3-Input NOR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3													
ProAsic3E													
Fusion													
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NOR3N1B****3-Input NOR Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NOR3N1S****3-Input NOR Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NOR3N2B****3-Input NOR Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NOR3N2S

## 3-Input NOR Gate with Active Low A and B Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NOR3N3B****3-Input NOR Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



**NOR3N3S****3-Input NOR Gate with Active Low A, B and C Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NOR3S

## 3-Input NOR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NOR4B

## 4-Input NOR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NOR4N1B****4-Input NOR Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NOR4N1S****4-Input NOR Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NOR4N2B****4-Input NOR Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NOR4N2S

## 4-Input NOR Gate with Active Low A and B Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NOR4N3B****4-Input NOR Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



**NOR4N3S****4-Input NOR Gate with Active Low A, B and C Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NOR4N4B****4-Input NOR Gate with Active Low A, B, C and D Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**NOR4N4S****4-Input NOR Gate with Active Low A, B, C and D Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NOR4S

## 4-Input NOR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## NOR5B

## 5-Input NOR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**NOR5N1B****5-Input NOR Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**NOR5N1S****5-Input NOR Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**NOR5N2B****5-Input NOR Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



## NOR5N2S

## 5-Input NOR Gate with Active Low A and B Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**NOR5N3B****5-Input NOR Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**NOR5N3S****5-Input NOR Gate with Active Low A, B and C Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**NOR5N4B****5-Input NOR Gate with Active Low A, B, C and D Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**NOR5N4S****5-Input NOR Gate with Active Low A, B, C and D Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NOR5N5B

## 5-Input NOR Gate with Active Low A, B, C, D and E Inputs, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**NOR5N5S****5-Input NOR Gate with Active Low A, B, C, D and E Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NOR5S

## 5-Input NOR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



## NOR6B

## 6-Input NOR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NOR6S

## 6-Input NOR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NOR7B

## 7-Input NOR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NOR7S

## 7-Input NOR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## NOR8B

## 8-Input NOR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7x			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## NOR8S

## 8-Input NOR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## NOR9B

## 9-Input NOR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		3	3										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## NOR9S

## 9-Input NOR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		3	3										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										



## NOR12B

## 12-Input NOR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			3										
Cyclone		4	4										
Cyclone2		4	4										
Cyclone3		4	4										
Stratix		4	4										
Stratix2		4	4										
Stratix3			3										
StratixGX		4	4										
Stratix2GX			3										
Max2		4	4										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4	4										
Spartan3ADSP		4	4										
Spartan3AN		4	4										
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		6											
ProAsic3		6											
ProAsic3E		6											
Fusion		6											
EC		4	4										
ECP		4	4										
ECP2		4	4										
ECP2M		4	4										
SC		4	4										
MACHXO		4	4										
XP		4	4										
XP2		4	4										

## NOR12S

## 12-Input NOR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			3										
Cyclone		4	4										
Cyclone2		4	4										
Cyclone3		4	4										
Stratix		4	4										
Stratix2		4	4										
Stratix3			3										
StratixGX		4	4										
Stratix2GX			3										
Max2		4	4										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4	4										
Spartan3ADSP		4	4										
Spartan3AN		4	4										
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		6											
ProAsic3		6											
ProAsic3E		6											
Fusion		6											
EC		4	4										
ECP		4	4										
ECP2		4	4										
ECP2M		4	4										
SC		4	4										
MACHXO		4	4										
XP		4	4										
XP2		4	4										

## NOR16B

## 16-Input NOR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			4										
Cyclone		5	5										
Cyclone2		5	5										
Cyclone3		5	5										
Stratix		5	5										
Stratix2		5	5										
Stratix3			4										
StratixGX		5	5										
Stratix2GX			4										
Max2		5	5										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		6	5										
Spartan2E		6	5										
Spartan3		6	5										
Spartan3A		6	5										
Spartan3ADSP		6	5										
Spartan3AN		6	5										
Spartan3E		6	5										
Spartan3L		6	5										
Virtex		6	5										
Virtex2		6	5										
Virtex2p		6	5										
VirtexE		6	5										
Virtex4		6	5										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		8											
ProAsic3		8											
ProAsic3E		8											
Fusion		8											
EC		6	5										
ECP		6	5										
ECP2		6	5										
ECP2M		6	5										
SC		6	5										
MACHXO		6	5										
XP		6	5										
XP2		6	5										

## NOR16S

## 12-Input NOR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			4										
Cyclone		5	5										
Cyclone2		5	5										
Cyclone3		5	5										
Stratix		5	5										
Stratix2		5	5										
Stratix3			4										
StratixGX		5	5										
Stratix2GX			4										
Max2		5	5										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		6	5										
Spartan2E		6	5										
Spartan3		6	5										
Spartan3A		6	5										
Spartan3ADSP		6	5										
Spartan3AN		6	5										
Spartan3E		6	5										
Spartan3L		6	5										
Virtex		6	5										
Virtex2		6	5										
Virtex2p		6	5										
VirtexE		6	5										
Virtex4		6	5										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		8											
ProAsic3		8											
ProAsic3E		8											
Fusion		8											
EC		6	5										
ECP		6	5										
ECP2		6	5										
ECP2M		6	5										
SC		6	5										
MACHXO		6	5										
XP		6	5										
XP2		6	5										

**NOR32B****32-Input NOR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			9										
Cyclone		11	11										
Cyclone2		11	11										
Cyclone3		11	11										
Stratix		11	11										
Stratix2		10	10										
Stratix3			9										
StratixGX		11	11										
Stratix2GX			7										
Max2		11	11										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		12	11										
Spartan2E		12	11										
Spartan3		12	11										
Spartan3A		8	8										
Spartan3ADSP		8	8										
Spartan3AN		8	8										
Spartan3E		8	8										
Spartan3L		8	8										
Virtex		12	11										
Virtex2		12	11										
Virtex2p		12	11										
VirtexE		12	11										
Virtex4		12	11										
Virtex5		8											
CoolRunner2	2												
CoolRunnerXpla3	31												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		16											
ProAsic3		16											
ProAsic3E		16											
Fusion		16											
EC		12	11										
ECP		12	11										
ECP2		14	12										
ECP2M		14	12										
SC		12	11										
MACHXO		12	11										
XP		12	11										
XP2		12	11										

## OR2B

## 2-Input OR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3													
ProAsic3E													
Fusion													
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR2DB

## 2-Input OR/NOR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		1											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		4	2										
ECP		4	2										
ECP2		4	2										
ECP2M		4	2										
SC		4	2										
MACHXO		4	2										
XP		4	2										
XP2		4	2										

## OR2DS

## 2-Input OR/NOR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		1											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		4	2										
ECP		4	2										
ECP2		4	2										
ECP2M		4	2										
SC		4	2										
MACHXO		4	2										
XP		4	2										
XP2		4	2										



## OR2N1B

## 2-Input OR Gate with Active Low A Input, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR2N1S

## 2-Input OR Gate with Active Low A Input, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR2N2B

## 2-Input OR Gate with Active Low A and B Inputs, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR2N2S

## 2-Input OR Gate with Active Low A and B Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR2S

## 2-Input OR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR3B

## 3-Input OR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3													
ProAsic3E													
Fusion													
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR3DB

## 3-Input OR/NOR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		1											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR3DS

## 3-Input OR/NOR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		1											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



## OR3N1B

## 3-Input OR Gate with Active Low A Input, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR3N1S

## 3-Input OR Gate with Active Low A Input, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR3N2B

## 3-Input OR Gate with Active Low A and B Inputs, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR3N2S

## 3-Input OR Gate with Active Low A and B Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR3N3B

## 3-Input OR Gate with Active Low A, B and C Inputs, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR3N3S

## 3-Input OR Gate with Active Low A, B and C Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR3S

## 3-Input OR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A													
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR4B

## 4-Input OR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



## OR4DB

## 4-Input OR/NOR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		2											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR4DS

## 4-Input OR/NOR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		2											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR4N1B

## 4-Input OR Gate with Active Low A Input, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR4N1S

## 4-Input OR Gate with Active Low A Input, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR4N2B

## 4-Input OR Gate with Active Low A and B Inputs, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR4N2S

## 4-Input OR Gate with Active Low A and B Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR4N3B

## 4-Input OR Gate with Active Low A, B and C Inputs, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR4N3S

## 4-Input OR Gate with Active Low A, B and C Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



## OR4N4B

## 4-Input OR Gate with Active Low A, B, C and D Inputs, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR4N4S

## 4-Input OR Gate with Active Low A, B, C and D Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR4S

## 4-Input OR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## OR5B

## 5-Input OR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR5N1B

## 5-Input OR Gate with Active Low A Input, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR5N1S

## 5-Input OR Gate with Active Low A Input, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR5N2B

## 5-Input OR Gate with Active Low A and B Inputs, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR5N2S

## 5-Input OR Gate with Active Low A and B Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



## OR5N3B

## 5-Input OR Gate with Active Low A, B and C Inputs, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR5N3S

## 5-Input OR Gate with Active Low A, B and C Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR5N4B

## 5-Input OR Gate with Active Low A, B, C and D Inputs, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR5N4S

## 5-Input OR Gate with Active Low A, B, C and D Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR5N5B

## 5-Input OR Gate with Active Low A, B, C, D and E Inputs, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR5N5S

## 5-Input OR Gate with Active Low A, B, C, D and E Inputs, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR5S

## 5-Input OR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR6B

## 6-Input OR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



## OR6S

## 6-Input OR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR7B

## 7-Input OR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR7S

## 7-Input OR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## OR8B

## 8-Input OR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## OR8S

## 8-Input OR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## OR9B

## 9-Input OR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		3	3										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## OR9S

## 9-Input OR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		3	3										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## OR12B

## 12-Input OR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			3										
Cyclone		4	4										
Cyclone2		4	4										
Cyclone3		4	4										
Stratix		4	4										
Stratix2		4	4										
Stratix3			3										
StratixGX		4	4										
Stratix2GX			3										
Max2		4	4										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4	4										
Spartan3ADSP		4	4										
Spartan3AN		4	4										
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		6											
ProAsic3		6											
ProAsic3E		6											
Fusion		6											
EC		4	4										
ECP		4	4										
ECP2		4	4										
ECP2M		4	4										
SC		4	4										
MACHXO		4	4										
XP		4	4										
XP2		4	4										



## OR12S

## 12-Input OR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			3										
Cyclone		4	4										
Cyclone2		4	4										
Cyclone3		4	4										
Stratix		4	4										
Stratix2		4	4										
Stratix3			3										
StratixGX		4	4										
Stratix2GX			3										
Max2		4	4										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4	4										
Spartan3ADSP		4	4										
Spartan3AN		4	4										
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		6											
ProAsic3		6											
ProAsic3E		6											
Fusion		6											
EC		4	4										
ECP		4	4										
ECP2		4	4										
ECP2M		4	4										
SC		4	4										
MACHXO		4	4										
XP		4	4										
XP2		4	4										

## OR16B

## 16-Input OR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			4										
Cyclone		5	5										
Cyclone2		5	5										
Cyclone3		5	5										
Stratix		5	5										
Stratix2		5	5										
Stratix3			4										
StratixGX		5	5										
Stratix2GX			4										
Max2		5	5										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		6	5										
Spartan2E		6	5										
Spartan3		6	5										
Spartan3A		6	5										
Spartan3ADSP		6	5										
Spartan3AN		6	5										
Spartan3E		6	5										
Spartan3L		6	5										
Virtex		6	5										
Virtex2		6	5										
Virtex2p		6	5										
VirtexE		6	5										
Virtex4		6	5										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		8											
ProAsic3		8											
ProAsic3E		8											
Fusion		8											
EC		6	5										
ECP		6	5										
ECP2		6	5										
ECP2M		6	5										
SC		6	5										
MACHXO		6	5										
XP		6	5										
XP2		6	5										

## OR16S

## 16-Input OR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			4										
Cyclone		5	5										
Cyclone2		5	5										
Cyclone3		5	5										
Stratix		5	5										
Stratix2		5	5										
Stratix3			4										
StratixGX		5	5										
Stratix2GX			4										
Max2		5	5										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		6	5										
Spartan2E		6	5										
Spartan3		6	5										
Spartan3A		6	5										
Spartan3ADSP		6	5										
Spartan3AN		6	5										
Spartan3E		6	5										
Spartan3L		6	5										
Virtex		6	5										
Virtex2		6	5										
Virtex2p		6	5										
VirtexE		6	5										
Virtex4		6	5										
Virtex5		4											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		8											
ProAsic3		8											
ProAsic3E		8											
Fusion		8											
EC		6	5										
ECP		6	5										
ECP2		6	5										
ECP2M		6	5										
SC		6	5										
MACHXO		6	5										
XP		6	5										
XP2		6	5										

## OR32B

## 32-Input OR Gate, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			9										
Cyclone		11	11										
Cyclone2		11	11										
Cyclone3		11	11										
Stratix		11	11										
Stratix2		10	10										
Stratix3			9										
StratixGX		11	11										
Stratix2GX			7										
Max2		11	11										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		12	11										
Spartan2E		12	11										
Spartan3		12	11										
Spartan3A		8	8										
Spartan3ADSP		8	8										
Spartan3AN		8	8										
Spartan3E		8	8										
Spartan3L		8	8										
Virtex		12	11										
Virtex2		12	11										
Virtex2p		12	11										
VirtexE		12	11										
Virtex4		12	11										
Virtex5		8											
CoolRunner2	2												
CoolRunnerXpla3	31												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		16											
ProAsic3		16											
ProAsic3E		16											
Fusion		16											
EC		12	11										
ECP		12	11										
ECP2		14	12										
ECP2M		14	12										
SC		12	11										
MACHXO		12	11										
XP		12	11										
XP2		12	11										

## SOP2\_2B

## Sum of Product, two 2-inputs AND-OR-INVERT Gates Combination, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## SOP2\_2S

## Sum of Product, two 2-inputs AND-OR-INVERT Gates Combination, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

## SOP2\_3B

## Sum of Product, two 3-inputs AND-OR-INVERT Gates Combination, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## SOP2\_3S

## Sum of Product, two 3-inputs AND-OR-INVERT Gates Combination, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



## SOP2\_4B

## Sum of Product, two 4-Inputs AND-OR-INVERT Gates Combination, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## SOP2\_4S

## Sum of Product, two 4-Inputs AND-OR-INVERT Gates Combination, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## SOP4\_2B

## Sum of Product, four 2-inputs AND-OR-INVERT Gates Combination, Bus Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		5											
ProAsic3E		5											
Fusion		5											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## SOP4\_2S

## Sum of Product, four 2-inputs AND-OR-INVERT Gates Combination, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		5											
ProAsic3E		5											
Fusion		5											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

## TCZO

## True/Complement, Zero/One Element

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR2B****2-Input Exclusive-NOR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR2N1B****2-Input Exclusive-NOR Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR2N1S****2-Input Exclusive-NOR Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



**XNOR2N2B****2-Input Exclusive-NOR Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR2N2S****2-Input Exclusive-NOR Gate with Active Low A and B Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR2S****2-Input Exclusive-NOR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR3B****3-Input Exclusive-NOR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR3N1B****3-Input Exclusive-NOR Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR3N1S****3-Input Exclusive-NOR Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR3N2B****3-Input Exclusive-NOR Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR3N2S****3-Input Exclusive-NOR Gate with Active Low A and B Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



**XNOR3N3B****3-Input Exclusive-NOR Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR3N3S****3-Input Exclusive-NOR Gate with Active Low A, B and C Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR3S****3-Input Exclusive-NOR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR4B****4-Input Exclusive-NOR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR4N1B****4-Input Exclusive-NOR Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR4N1S****4-Input Exclusive-NOR Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR4N2B****4-Input Exclusive-NOR Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR4N2S****4-Input Exclusive-NOR Gate with Active Low A and B Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



**XNOR4N3B****4-Input Exclusive-NOR Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR4N3S****4-Input Exclusive-NOR Gate with Active Low A, B and C Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR4N4B****4-Input Exclusive-NOR Gate with Active Low A, B, C and D Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR4N4S****4-Input Exclusive-NOR Gate with Active Low A, B, C and D Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR4S****4-Input Exclusive-NOR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XNOR5B****5-Input Exclusive-NOR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XNOR5N1B****5-Input Exclusive-NOR Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XNOR5N1S****5-Input Exclusive-NOR Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



**XNOR5N2B****5-Input Exclusive-NOR Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XNOR5N2S****5-Input Exclusive-NOR Gate with Active Low A and B Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XNOR5N3B****5-Input Exclusive-NOR Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XNOR5N3S****5-Input Exclusive-NOR Gate with Active Low A, B and C Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XNOR5N4B****5-Input Exclusive-NOR Gate with Active Low A, B, C and D Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XNOR5N4S****5-Input Exclusive-NOR Gate with Active Low A, B, C and D Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XNOR5N5B****5-Input Exclusive-NOR Gate with Active Low A, B, C, D and E Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XNOR5N5S****5-Input Exclusive-NOR Gate with Active Low A, B, C, D and E Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



**XNOR5S****5-Input Exclusive-NOR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XNOR6B****6-Input Exclusive-NOR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		5											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XNOR6S****6-Input Exclusive-NOR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		5											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XNOR7B****7-Input Exclusive-NOR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		6											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XNOR7S****7-Input Exclusive-NOR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7		2	2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3		2	2										
StratixGX		2	2										
Stratix2GX		2	2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		6											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XNOR8B****8-Input Exclusive-NOR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	3	3											
Max7000b	3	3											
Max7000ae	3	3											
Max7000s	3	3											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		7											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

**XNOR8S****8-Input Exclusive-NOR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7x			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	3	3											
Max7000b	3	3											
Max7000ae	3	3											
Max7000s	3	3											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		7											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

**XNOR9B****9-Input Exclusive-NOR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		3	3										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	3	3											
Max7000b	3	3											
Max7000ae	3	3											
Max7000s	3	3											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		8											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										



**XNOR9S****9-Input Exclusive-NOR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		3	3										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	3	3											
Max7000b	3	3											
Max7000ae	3	3											
Max7000s	3	3											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		8											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

**XNOR12B****12-Input Exclusive-NOR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			3										
Cyclone		4	4										
Cyclone2		4	4										
Cyclone3		4	4										
Stratix		4	4										
Stratix2		4	4										
Stratix3			3										
StratixGX		4	4										
Stratix2GX			3										
Max2		4	4										
Max3000a	4	4											
Max7000b	4	4											
Max7000ae	4	4											
Max7000s	4	4											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4	4										
Spartan3ADSP		4	4										
Spartan3AN		4	4										
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4											
CoolRunner2	3												
CoolRunnerXpla3	3												
Xc9500	4												
Xc9500XL	4												
Xc9500XV	4												
ProAsicPlus		11											
ProAsic3		6											
ProAsic3E		6											
Fusion		6											
EC		4	4										
ECP		4	4										
ECP2		4	4										
ECP2M		4	4										
SC		4	4										
MACHXO		4	4										
XP		4	4										
XP2		4	4										

**XNOR12S****12-Input Exclusive-NOR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			3										
Cyclone		4	4										
Cyclone2		4	4										
Cyclone3		4	4										
Stratix		4	4										
Stratix2		4	4										
Stratix3			3										
StratixGX		4	4										
Stratix2GX			3										
Max2		4	4										
Max3000a	4	4											
Max7000b	4	4											
Max7000ae	4	4											
Max7000s	4	4											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4	4										
Spartan3ADSP		4	4										
Spartan3AN		4	4										
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4											
CoolRunner2	3												
CoolRunnerXpla3	3												
Xc9500	4												
Xc9500XL	4												
Xc9500XV	4												
ProAsicPlus		11											
ProAsic3		6											
ProAsic3E		6											
Fusion		6											
EC		4	4										
ECP		4	4										
ECP2		4	4										
ECP2M		4	4										
SC		4	4										
MACHXO		4	4										
XP		4	4										
XP2		4	4										

**XNOR16B****16-Input Exclusive-NOR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			4										
Cyclone		5	5										
Cyclone2		5	5										
Cyclone3		5	5										
Stratix		5	5										
Stratix2		5	5										
Stratix3			4										
StratixGX		5	5										
Stratix2GX			4										
Max2		5	5										
Max3000a	5	5											
Max7000b	5	5											
Max7000ae	5	5											
Max7000s	5	5											
Spartan2		6	5										
Spartan2E		6	5										
Spartan3		6	5										
Spartan3A		6	5										
Spartan3ADSP		6	5										
Spartan3AN		6	5										
Spartan3E		6	5										
Spartan3L		6	5										
Virtex		6	5										
Virtex2		6	5										
Virtex2p		6	5										
VirtexE		6	5										
Virtex4		6	5										
Virtex5		4											
CoolRunner2	5												
CoolRunnerXpla3	5												
Xc9500	4												
Xc9500XL	4												
Xc9500XV	4												
ProAsicPlus		15											
ProAsic3		8											
ProAsic3E		8											
Fusion		8											
EC		6	5										
ECP		6	5										
ECP2		6	5										
ECP2M		6	5										
SC		6	5										
MACHXO		6	5										
XP		6	5										
XP2		6	5										

**XNOR16S****16-Input Exclusive-NOR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			4										
Cyclone		5	5										
Cyclone2		5	5										
Cyclone3		5	5										
Stratix		5	5										
Stratix2		5	5										
Stratix3			4										
StratixGX		5	5										
Stratix2GX			4										
Max2		5	5										
Max3000a	5	5											
Max7000b	5	5											
Max7000ae	5	5											
Max7000s	5	5											
Spartan2		6	5										
Spartan2E		6	5										
Spartan3		6	5										
Spartan3A		6	5										
Spartan3ADSP		6	5										
Spartan3AN		6	5										
Spartan3E		6	5										
Spartan3L		6	5										
Virtex		6	5										
Virtex2		6	5										
Virtex2p		6	5										
VirtexE		6	5										
Virtex4		6	5										
Virtex5		4											
CoolRunner2	5												
CoolRunnerXpla3	5												
Xc9500	4												
Xc9500XL	4												
Xc9500XV	4												
ProAsicPlus		15											
ProAsic3		8											
ProAsic3E		8											
Fusion		8											
EC		6	5										
ECP		6	5										
ECP2		6	5										
ECP2M		6	5										
SC		6	5										
MACHXO		6	5										
XP		6	5										
XP2		6	5										

**XNOR32B****32-Input Exclusive-NOR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			9										
Cyclone		11	11										
Cyclone2		11	11										
Cyclone3		11	11										
Stratix		11	11										
Stratix2		10	10										
Stratix3			9										
StratixGX		11	11										
Stratix2GX			7										
Max2		11	11										
Max3000a	11	11											
Max7000b	11	11											
Max7000ae	11	11											
Max7000s	11	11											
Spartan2		12	11										
Spartan2E		12	11										
Spartan3		12	11										
Spartan3A		12	11										
Spartan3ADSP		12	11										
Spartan3AN		12	11										
Spartan3E		18	11										
Spartan3L		12	11										
Virtex		12	11										
Virtex2		12	11										
Virtex2p		12	11										
VirtexE		12	11										
Virtex4		12	11										
Virtex5		8											
CoolRunner2	12												
CoolRunnerXpla3	12												
Xc9500	8												
Xc9500XL	8												
Xc9500XV	8												
ProAsicPlus		31											
ProAsic3		16											
ProAsic3E		16											
Fusion		16											
EC		12	11										
ECP		12	11										
ECP2		12	11										
ECP2M		12	11										
SC		12	11										
MACHXO		12	11										
XP		12	11										
XP2		12	11										

**XOR2B****2-Input Exclusive-OR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR2N1B****2-Input Exclusive-OR Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



**XOR2N1S****2-Input Exclusive-OR Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR2N2B****2-Input Exclusive-OR Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR2N2S****2-Input Exclusive-OR Gate with Active Low A and B Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR2S****2-Input Exclusive-OR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		1											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR3B****3-Input Exclusive-OR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR3N1B****3-Input Exclusive-OR Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR3N1S****3-Input Exclusive-OR Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR3N2B****3-Input Exclusive-OR Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



**XOR3N2S****3-Input Exclusive-OR Gate with Active Low A and B Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR3N3B****3-Input Exclusive-OR Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR3N3S****3-Input Exclusive-OR Gate with Active Low A, B and C Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR3S****3-Input Exclusive-OR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		2											
ProAsic3		1											
ProAsic3E		1											
Fusion		1											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR4B****4-Input Exclusive-OR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR4N1B****4-Input Exclusive-OR Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR4N1S****4-Input Exclusive-OR Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR4N2B****4-Input Exclusive-OR Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										



**XOR4N2S****4-Input Exclusive-OR Gate with Active Low A and B Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR4N3B****4-Input Exclusive-OR Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR4N3S****4-Input Exclusive-OR Gate with Active Low A, B and C Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR4N4B****4-Input Exclusive-OR Gate with Active Low A, B, C and D Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR4N4S****4-Input Exclusive-OR Gate with Active Low A, B, C and D Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR4S****4-Input Exclusive-OR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		1	1										
Cyclone2		1	1										
Cyclone3		1	1										
Stratix		1	1										
Stratix2		1	1										
Stratix3			1										
StratixGX		1	1										
Stratix2GX			1										
Max2		1	1										
Max3000a	1	1											
Max7000b	1	1											
Max7000ae	1	1											
Max7000s	1	1											
Spartan2		2	1										
Spartan2E		2	1										
Spartan3		2	1										
Spartan3A		2	1										
Spartan3ADSP		2	1										
Spartan3AN		2	1										
Spartan3E		2	1										
Spartan3L		2	1										
Virtex		2	1										
Virtex2		2	1										
Virtex2p		2	1										
VirtexE		2	1										
Virtex4		2	1										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		3											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	1										
ECP		2	1										
ECP2		2	1										
ECP2M		2	1										
SC		2	1										
MACHXO		2	1										
XP		2	1										
XP2		2	1										

**XOR5B****5-Input Exclusive-OR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XOR5N1B****5-Input Exclusive-OR Gate with Active Low A Input, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



**XOR5N1S****5-Input Exclusive-OR Gate with Active Low A Input, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XOR5N2B****5-Input Exclusive-OR Gate with Active Low A and B Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XOR5N2S****5-Input Exclusive-OR Gate with Active Low A and B Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XOR5N3B****5-Input Exclusive-OR Gate with Active Low A, B and C Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XOR5N3S****5-Input Exclusive-OR Gate with Active Low A, B and C Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XOR5N4B****5-Input Exclusive-OR Gate with Active Low A, B, C and D Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XOR5N4S****5-Input Exclusive-OR Gate with Active Low A, B, C and D Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XOR5N5B****5-Input Exclusive-OR Gate with Active Low A, B, C, D and E Inputs, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										



**XOR5N5S****5-Input Exclusive-OR Gate with Active Low A, B, C, D and E Inputs, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XOR5S****5-Input Exclusive-OR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		1	1										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	1												
CoolRunnerXpla3	1												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		4											
ProAsic3		2											
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XOR6B****6-Input Exclusive-OR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		5											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XOR6S****6-Input Exclusive-OR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			1										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			1										
StratixGX		2	2										
Stratix2GX			1										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	1												
Xc9500XL	1												
Xc9500XV	1												
ProAsicPlus		5											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XOR7B****7-Input Exclusive-OR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX													
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN													
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		6											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

## XOR7S

## 7-Input Exclusive-OR Gate, Single Pin Version

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		2	2										
Cyclone2		2	2										
Cyclone3		2	2										
Stratix		2	2										
Stratix2		2	2										
Stratix3			2										
StratixGX		2	2										
Stratix2GX			2										
Max2		2	2										
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2	2										
Spartan3ADSP		2	2										
Spartan3AN		2	2										
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		6											
ProAsic3		3											
ProAsic3E		3											
Fusion		3											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
SC		2	2										
MACHXO		2	2										
XP		2	2										
XP2		2	2										

**XOR8B****8-Input Exclusive-OR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arria7			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	3	3											
Max7000b	3	3											
Max7000ae	3	3											
Max7000s	3	3											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		7											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

**XOR8S****8-Input Exclusive-OR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		2	2										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	3	3											
Max7000b	3	3											
Max7000ae	3	3											
Max7000s	3	3											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		7											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										



**XOR9B****9-Input Exclusive-OR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		3	3										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	3	3											
Max7000b	3	3											
Max7000ae	3	3											
Max7000s	3	3											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		8											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

**XOR9S****9-Input Exclusive-OR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			2										
Cyclone		3	3										
Cyclone2		3	3										
Cyclone3		3	3										
Stratix		3	3										
Stratix2		3	3										
Stratix3			2										
StratixGX		3	3										
Stratix2GX			2										
Max2		3	3										
Max3000a	3	3											
Max7000b	3	3											
Max7000ae	3	3											
Max7000s	3	3											
Spartan2		4	3										
Spartan2E		4	3										
Spartan3		4	3										
Spartan3A		4	3										
Spartan3ADSP		4	3										
Spartan3AN		4	3										
Spartan3E		4	3										
Spartan3L		4	3										
Virtex		4	3										
Virtex2		4	3										
Virtex2p		4	3										
VirtexE		4	3										
Virtex4		4	3										
Virtex5		2											
CoolRunner2	2												
CoolRunnerXpla3	2												
Xc9500	2												
Xc9500XL	2												
Xc9500XV	2												
ProAsicPlus		8											
ProAsic3		4											
ProAsic3E		4											
Fusion		4											
EC		4	3										
ECP		4	3										
ECP2		4	3										
ECP2M		4	3										
SC		4	3										
MACHXO		4	3										
XP		4	3										
XP2		4	3										

**XOR12B****12-Input Exclusive-OR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			3										
Cyclone		4	4										
Cyclone2		4	4										
Cyclone3		4	4										
Stratix		4	4										
Stratix2		4	4										
Stratix3			3										
StratixGX		4	4										
Stratix2GX			3										
Max2		4	4										
Max3000a	4	4											
Max7000b	4	4											
Max7000ae	4	4											
Max7000s	4	4											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4	4										
Spartan3ADSP		4	4										
Spartan3AN		4	4										
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4											
CoolRunner2	3												
CoolRunnerXpla3	3												
Xc9500	4												
Xc9500XL	4												
Xc9500XV	4												
ProAsicPlus		11											
ProAsic3		6											
ProAsic3E		6											
Fusion		6											
EC		4	4										
ECP		4	4										
ECP2		4	4										
ECP2M		4	4										
SC		4	4										
MACHXO		4	4										
XP		4	4										
XP2		4	4										

**XOR12S****12-Input Exclusive-OR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			3										
Cyclone		4	4										
Cyclone2		4	4										
Cyclone3		4	4										
Stratix		4	4										
Stratix2		4	4										
Stratix3			3										
StratixGX		4	4										
Stratix2GX			3										
Max2		4	4										
Max3000a	4	4											
Max7000b	4	4											
Max7000ae	4	4											
Max7000s	4	4											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4	4										
Spartan3ADSP		4	4										
Spartan3AN		4	4										
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4											
CoolRunner2	3												
CoolRunnerXpla3	3												
Xc9500	4												
Xc9500XL	4												
Xc9500XV	4												
ProAsicPlus		11											
ProAsic3		6											
ProAsic3E		6											
Fusion		6											
EC		4	4										
ECP		4	4										
ECP2		4	4										
ECP2M		4	4										
SC		4	4										
MACHXO		4	4										
XP		4	4										
XP2		4	4										

**XOR16B****16-Input Exclusive-OR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			4										
Cyclone		5	5										
Cyclone2		5	5										
Cyclone3		5	5										
Stratix		5	5										
Stratix2		5	5										
Stratix3			4										
StratixGX		5	5										
Stratix2GX			4										
Max2		5	5										
Max3000a	5	5											
Max7000b	5	5											
Max7000ae	5	5											
Max7000s	5	5											
Spartan2		6	5										
Spartan2E		6	5										
Spartan3		6	5										
Spartan3A		6	5										
Spartan3ADSP		6	5										
Spartan3AN		6	5										
Spartan3E		6	5										
Spartan3L		6	5										
Virtex		6	5										
Virtex2		6	5										
Virtex2p		6	5										
VirtexE		6	5										
Virtex4		6	5										
Virtex5		4											
CoolRunner2	5												
CoolRunnerXpla3	5												
Xc9500	4												
Xc9500XL	4												
Xc9500XV	4												
ProAsicPlus		15											
ProAsic3		8											
ProAsic3E		8											
Fusion		8											
EC		6	5										
ECP		6	5										
ECP2		6	5										
ECP2M		6	5										
SC		6	5										
MACHXO		6	5										
XP		6	5										
XP2		6	5										

**XOR16S****16-Input Exclusive-OR Gate, Single Pin Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			4										
Cyclone		5	5										
Cyclone2		5	5										
Cyclone3		5	5										
Stratix		5	5										
Stratix2		5	5										
Stratix3			4										
StratixGX		5	5										
Stratix2GX			4										
Max2		5	5										
Max3000a	5	5											
Max7000b	5	5											
Max7000ae	5	5											
Max7000s	5	5											
Spartan2		6	5										
Spartan2E		6	5										
Spartan3		6	5										
Spartan3A		6	5										
Spartan3ADSP		6	5										
Spartan3AN		6	5										
Spartan3E		6	5										
Spartan3L		6	5										
Virtex		6	5										
Virtex2		6	5										
Virtex2p		6	5										
VirtexE		6	5										
Virtex4		6	5										
Virtex5		4											
CoolRunner2	5												
CoolRunnerXpla3	5												
Xc9500	4												
Xc9500XL	4												
Xc9500XV	4												
ProAsicPlus		15											
ProAsic3		8											
ProAsic3E		8											
Fusion		8											
EC		6	5										
ECP		6	5										
ECP2		6	5										
ECP2M		6	5										
SC		6	5										
MACHXO		6	5										
XP		6	5										
XP2		6	5										

**XOR32B****32-Input Exclusive-OR Gate, Bus Version**

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	Block RAM (16K-Bit)	Block RAM (4K-Bit)	Block RAM (8Kx18)	Block RAM (256x9)	Block Multipliers	Total PLLs	Total DLLs	D/GCLK	DCMs
Arriagx			9										
Cyclone		11	11										
Cyclone2		11	11										
Cyclone3		11	11										
Stratix		11	11										
Stratix2		10	10										
Stratix3			9										
StratixGX		11	11										
Stratix2GX			7										
Max2		11	11										
Max3000a	11	11											
Max7000b	11	11											
Max7000ae	11	11											
Max7000s	11	11											
Spartan2		12	11										
Spartan2E		12	11										
Spartan3		12	11										
Spartan3A		12	11										
Spartan3ADSP		12	11										
Spartan3AN		12	11										
Spartan3E		18	11										
Spartan3L		12	11										
Virtex		12	11										
Virtex2		12	11										
Virtex2p		12	11										
VirtexE		12	11										
Virtex4		12	11										
Virtex5		8											
CoolRunner2	12												
CoolRunnerXpla3	12												
Xc9500	8												
Xc9500XL	8												
Xc9500XV	8												
ProAsicPlus		31											
ProAsic3		16											
ProAsic3E		16											
Fusion		16											
EC		12	11										
ECP		12	11										
ECP2		12	11										
ECP2M		12	11										
SC		12	11										
MACHXO		12	11										
XP		12	11										
XP2		12	11										

## Tools Utilized

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The following vendor device tools were used to determine the resource usage statistics:

### **Actel**

Actel Designer Software Version 6.2

### **Altera**

Quartus II 5.0

### **Lattice**

ispLEVER 5.0

### **Xilinx**

Xilinx ISE 6.3

For Virtex4, Spartan3, Spartan3E the Xilinx ISE 7.1 was used.



## Revision History

Date	Version No.	Revision
6-Dec-2004	1.0	Service pack 2 release
12-Apr-2005	1.01	Added Virtex4 and Stratix2 resource usage
6-Jun-2005	1.02	Added MAX2 resource usage
15-Sep-2005	1.03	Added EC, ECP, Spartan3E, Cyclone2 and StratixGX resource usage
13-Oct-2005	1.04	Added ProAsic3 and ProAsic3E resource usage
20-Apr-2006	1.06	Tools Utilized section added
16-Jun-2006	1.07	XP resource usage added
28-Jul-2006	1.08	MACHXO resource usage added
10-Apr-2007	1.09	Cyclone3, ECP2, ECP2M, Spartan3A, Spartan3E, Spartan3L and Virtex5 resource usage added
17-Jul-2008	1.10	Altium Designer Summer 08 SP1
19-Dec-2008	1.11	Altium Designer Winter 09 SP1

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