FPGA Buffer Resource Usage

Summary

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

Core Reference
CR0125 (v1.11) December 19, 2008

Buffer

The available Buffer cores are listed as follows:

BUF	*BUF2B*	*BUF2S*	*BUF3B*
BUF3S	*BUF4B*	*BUF4S*	*BUF5B*
BUF5S	*BUF6B*	*BUF6S*	*BUF7B*
BUF7S	*BUF8B*	*BUF8S*	*BUF9B*
BUF9S	*BUF10B*	*BUF10S*	*BUF12B*
BUF12S	*BUF16B*	*BUF16S*	*BUF32B*
BUF32S	*BUFE*	*BUFE2B*	*BUFE2S*
BUFE3B	*BUFE3S*	*BUFE4B*	*BUFE4S*
BUFE5B	*BUFE5S*	*BUFE6B*	*BUFE6S*
BUFE7B	*BUFE7S*	*BUFE8B*	*BUFE8S*
BUFE9B	*BUFE9S*	*BUFE10B*	*BUFE10S*
BUFE12B	*BUFE12S*	*BUFE16B*	*BUFE16S*
BUFE32B	*BUFE32S*	*BUFT*	*BUFT2B*
BUFT2S	*BUFT3B*	*BUFT3S*	*BUFT4B*
BUFT4S	*BUFT5B*	*BUFT5S*	*BUFT6B*
BUFT6S	*BUFT7B*	*BUFT7S*	*BUFT8B*
BUFT8S	*BUFT9B*	*BUFT9S*	*BUFT10B*
BUFT10S	*BUFT12B*	*BUFT12S*	*BUFT16B*
BUFT16S	*BUFT32B*	*BUFT32S*	*IOBUF*
IOBUF2B	*IOBUF2S*	*IOBUF3B*	*IOBUF4B*
IOBUF4S	*IOBUF5B*	*IOBUF6B*	*IOBUF7B*
IOBUF8B	*IOBUF9B*	*IOBUF10B*	*IOBUF12B*
IOBUF16B	*IOBUF32B*	*IOBUFC2B*	*IOBUFC2S*
IOBUFC3B	*IOBUFC4B*	*IOBUFC4S*	*IOBUFC5B*
IOBUFC6B	*IOBUFC7B*	*IOBUFC8B*	*IOBUFC9B*
IOBUFC10B	*IOBUFC12B*	*IOBUFC16B*	*IOBUFC32B*

BUF

1-bit General Purpose (Non-inverting) Buffer

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	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											

BUF2B

2-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2											
Spartan3adsp		2											
Spartan3an		2											
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2	2										
CoolRunner2	2	2											
CoolRunnerXpla3	2	2											
Xc9500	2	2											
Xc9500XL	2	2											
Xc9500XV	2	2											
ProAsicPlus		2	2										
ProAsic3		2	2										
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
Sc		2											
MACHXO		2	2										
XP		2	2										
Xp2		2											

BUF2S

2-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2											
Spartan3adsp		2											
Spartan3an		2											
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2	2										
CoolRunner2	2	2											
CoolRunnerXpla3	2	2											
Xc9500	2	2											
Xc9500XL	2	2											
Xc9500XV	2	2											
ProAsicPlus		2	2										
ProAsic3		2	2										
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
Sc		2											
MACHXO		2	2										
XP		2	2										
Xp2		2											

BUF3B

3-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	3	3											
Max7000b	3	3											
Max7000ae	3	3											
Max7000s	3	3											
Spartan2		3	3										
Spartan2E		3	3										
Spartan3		3	3										
Spartan3A		3											
Spartan3adsp		3											
Spartan3an		3											
Spartan3E		3	3										
Spartan3L		3	3										
Virtex		3	3										
Virtex2		3	3										
Virtex2p		3	3										
VirtexE		3	3										
Virtex4		3	3										
Virtex5		3	3										
CoolRunner2	3	3											
CoolRunnerXpla3	3	3											
Xc9500	3	3											
Xc9500XL	3	3											
Xc9500XV	3	3											
ProAsicPlus		3	3										
ProAsic3		3	3										
ProAsic3E		3											
Fusion		3											
EC		3	3										
ECP		3	3										
ECP2		3	3										
ECP2M		3	3										
Sc		3											
MACHXO		3	3										
XP		3	3										
Xp2		3											

BUF3S

3-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	3	3											
Max7000b	3	3											
Max7000ae	3	3											
Max7000s	3	3											
Spartan2		3	3										
Spartan2E		3	3										
Spartan3		3	3										
Spartan3A		3											
Spartan3adsp		3											
Spartan3an		3											
Spartan3E		3	3										
Spartan3L		3	3										
Virtex		3	3										
Virtex2		3	3										
Virtex2p		3	3										
VirtexE		3	3										
Virtex4		3	3										
Virtex5		3	3										
CoolRunner2	3	3											
CoolRunnerXpla3	3	3											
Xc9500	3	3											
Xc9500XL	3	3											
Xc9500XV	3	3											
ProAsicPlus		3	3										
ProAsic3		3	3										
ProAsic3E		3											
Fusion		3											
EC		3	3										
ECP		3	3										
ECP2		3	3										
ECP2M		3	3										
Sc		3											
MACHXO		3	3										
XP		3	3										
Xp2		3											

BUF4B

4-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	4	4											
Max7000b	4	4											
Max7000ae	4	4											
Max7000s	4	4											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4											
Spartan3adsp		4											
Spartan3an		4											
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4	4										
CoolRunner2	4	4											
CoolRunnerXpla3	4	4											
Xc9500	4	4											
Xc9500XL	4	4											
Xc9500XV	4	4											
ProAsicPlus		4	4										
ProAsic3		4	4										
ProAsic3E		4											
Fusion		4											
EC		4	4										
ECP		4	4										
ECP2		4	4										
ECP2M		4	4										
Sc		4											
MACHXO		4	4										
XP		4	4										
Xp2		4											

BUF4S

4-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	4	4											
Max7000b	4	4											
Max7000ae	4	4											
Max7000s	4	4											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4											
Spartan3adsp		4											
Spartan3an		4											
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4	4										
CoolRunner2	4	4											
CoolRunnerXpla3	4	4											
Xc9500	4	4											
Xc9500XL	4	4											
Xc9500XV	4	4											
ProAsicPlus		4	4										
ProAsic3		4	4										
ProAsic3E		4											
Fusion		4											
EC		4	4										
ECP		4	4										
ECP2		4	4										
ECP2M		4	4										
Sc		4											
MACHXO		4	4										
XP		4	4										
Xp2		4											

BUF5B

5-Bit General Purpose (Non-inverting) Buffer, 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		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											
Max3000a	5	5											
Max7000b	5	5											
Max7000ae	5	5											
Max7000s	5	5											
Spartan2		5	5										
Spartan2E		5	5										
Spartan3		5	5										
Spartan3A		5											
Spartan3adsp		5											
Spartan3an		5											
Spartan3E		5	5										
Spartan3L		5	5										
Virtex		5	5										
Virtex2		5	5										
Virtex2p		5	5										
VirtexE		5	5										
Virtex4		5	5										
Virtex5		5	5										
CoolRunner2	5	5											
CoolRunnerXpla3	5	5											
Xc9500	5	5											
Xc9500XL	5	5											
Xc9500XV	5	5											
ProAsicPlus		5	5										
ProAsic3		5	5										
ProAsic3E		5											
Fusion		5											
EC		5	5										
ECP		5	5										
ECP2		5	5										
ECP2M		5	5										
Sc		5											
MACHXO		5	5										
XP		5	5										
Xp2		5											

BUF5S

5-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	5	5											
Max7000b	5	5											
Max7000ae	5	5											
Max7000s	5	5											
Spartan2		5	5										
Spartan2E		5	5										
Spartan3		5	5										
Spartan3A		5											
Spartan3adsp		5											
Spartan3an		5											
Spartan3E		5	5										
Spartan3L		5	5										
Virtex		5	5										
Virtex2		5	5										
Virtex2p		5	5										
VirtexE		5	5										
Virtex4		5	5										
Virtex5		5	5										
CoolRunner2	5	5											
CoolRunnerXpla3	5	5											
Xc9500	5	5											
Xc9500XL	5	5											
Xc9500XV	5	5											
ProAsicPlus		5	5										
ProAsic3		5	5										
ProAsic3E		5											
Fusion		5											
EC		5	5										
ECP		5	5										
ECP2		5	5										
ECP2M		5	5										
Sc		5											
MACHXO		5	5										
XP		5	5										
Xp2		5											

BUF6B

6-Bit General Purpose (Non-inverting) Buffer, 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		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											
Max3000a	6	6											
Max7000b	6	6											
Max7000ae	6	6											
Max7000s	6	6											
Spartan2		6	6										
Spartan2E		6	6										
Spartan3		6	6										
Spartan3A		6											
Spartan3adsp		6											
Spartan3an		6											
Spartan3E		6	6										
Spartan3L		6	6										
Virtex		6	6										
Virtex2		6	6										
Virtex2p		6	6										
VirtexE		6	6										
Virtex4		6	6										
Virtex5		6	6										
CoolRunner2	6	6											
CoolRunnerXpla3	6	6											
Xc9500	6	6											
Xc9500XL	6	6											
Xc9500XV	6	6											
ProAsicPlus		6	6										
ProAsic3		6	6										
ProAsic3E		6											
Fusion		6											
EC		6	6										
ECP		6	6										
ECP2		6	6										
ECP2M		6	6										
Sc		6											
MACHXO		6	6										
XP		6	6										
Xp2		6											

BUF6S

6-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	6	6											
Max7000b	6	6											
Max7000ae	6	6											
Max7000s	6	6											
Spartan2		6	6										
Spartan2E		6	6										
Spartan3		6	6										
Spartan3A		6											
Spartan3adsp		6											
Spartan3an		6											
Spartan3E		6	6										
Spartan3L		6	6										
Virtex		6	6										
Virtex2		6	6										
Virtex2p		6	6										
VirtexE		6	6										
Virtex4		6	6										
Virtex5		6	6										
CoolRunner2	6	6											
CoolRunnerXpla3	6	6											
Xc9500	6	6											
Xc9500XL	6	6											
Xc9500XV	6	6											
ProAsicPlus		6	6										
ProAsic3		6	6										
ProAsic3E		6											
Fusion		6											
EC		6	6										
ECP		6	6										
ECP2		6	6										
ECP2M		6	6										
Sc		6											
MACHXO		6	6										
XP		6	6										
Xp2		6											

BUF7B

7-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	7	7											
Max7000b	7	7											
Max7000ae	7	7											
Max7000s	7	7											
Spartan2		7	7										
Spartan2E		7	7										
Spartan3		7	7										
Spartan3A		7											
Spartan3adsp		7											
Spartan3an		7											
Spartan3E		7	7										
Spartan3L		7	7										
Virtex		7	7										
Virtex2		7	7										
Virtex2p		7	7										
VirtexE		7	7										
Virtex4		7	7										
Virtex5		7	7										
CoolRunner2	7	7											
CoolRunnerXpla3	7	7											
Xc9500	7	7											
Xc9500XL	7	7											
Xc9500XV	7	7											
ProAsicPlus		7	7										
ProAsic3		7	7										
ProAsic3E		7											
Fusion		7											
EC		7	7										
ECP		7	7										
ECP2		7	7										
ECP2M		7	7										
Sc		7											
MACHXO		7	7										
XP		7	7										
Xp2		7											

BUF7S

7-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	7	7											
Max7000b	7	7											
Max7000ae	7	7											
Max7000s	7	7											
Spartan2		7	7										
Spartan2E		7	7										
Spartan3		7	7										
Spartan3A		7											
Spartan3adsp		7											
Spartan3an		7											
Spartan3E		7	7										
Spartan3L		7	7										
Virtex		7	7										
Virtex2		7	7										
Virtex2p		7	7										
VirtexE		7	7										
Virtex4		7	7										
Virtex5		7	7										
CoolRunner2	7	7											
CoolRunnerXpla3	7	7											
Xc9500	7	7											
Xc9500XL	7	7											
Xc9500XV	7	7											
ProAsicPlus		7	7										
ProAsic3		7	7										
ProAsic3E		7											
Fusion		7											
EC		7	7										
ECP		7	7										
ECP2		7	7										
ECP2M		7	7										
Sc		7											
MACHXO		7	7										
XP		7	7										
Xp2		7											

BUF8B

8-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	8	8											
Max7000b	8	8											
Max7000ae	8	8											
Max7000s	8	8											
Spartan2		8	8										
Spartan2E		8	8										
Spartan3		8	8										
Spartan3A		8											
Spartan3adsp		8											
Spartan3an		8											
Spartan3E		8	8										
Spartan3L		8	8										
Virtex		8	8										
Virtex2		8	8										
Virtex2p		8	8										
VirtexE		8	8										
Virtex4		8	8										
Virtex5		8	8										
CoolRunner2	8	8											
CoolRunnerXpla3	8	8											
Xc9500	8	8											
Xc9500XL	8	8											
Xc9500XV	8	8											
ProAsicPlus		8	8										
ProAsic3		8	8										
ProAsic3E		8											
Fusion		8											
EC		8	8										
ECP		8	8										
ECP2		8	8										
ECP2M		8	8										
Sc		8											
MACHXO		8	8										
XP		8	8										
Xp2		8											

BUF8S

8-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	8	8											
Max7000b	8	8											
Max7000ae	8	8											
Max7000s	8	8											
Spartan2		8	8										
Spartan2E		8	8										
Spartan3		8	8										
Spartan3A		8											
Spartan3adsp		8											
Spartan3an		8											
Spartan3E		8	8										
Spartan3L		8	8										
Virtex		8	8										
Virtex2		8	8										
Virtex2p		8	8										
VirtexE		8	8										
Virtex4		8	8										
Virtex5		8	8										
CoolRunner2	8	8											
CoolRunnerXpla3	8	8											
Xc9500	8	8											
Xc9500XL	8	8											
Xc9500XV	8	8											
ProAsicPlus		8	8										
ProAsic3		8	8										
ProAsic3E		8											
Fusion		8											
EC		8	8										
ECP		8	8										
ECP2		8	8										
ECP2M		8	8										
Sc		8											
MACHXO		8	8										
XP		8	8										
Xp2		8											

BUF9B

9-Bit General Purpose (Non-inverting) Buffer, 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		9	9										
Cyclone2		9	9										
Cyclone3		9	9										
Stratix		9	9										
Stratix2		9	9										
Stratix3		9											
StratixGX		9	9										
Stratix2gx		9											
Max2		9											
Max3000a	9	9											
Max7000b	9	9											
Max7000ae	9	9											
Max7000s	9	9											
Spartan2		9	9										
Spartan2E		9	9										
Spartan3		9	9										
Spartan3A		9											
Spartan3adsp		9											
Spartan3an		9											
Spartan3E		9	9										
Spartan3L		9	9										
Virtex		9	9										
Virtex2		9	9										
Virtex2p		9	9										
VirtexE		9	9										
Virtex4		9	9										
Virtex5		9	9										
CoolRunner2	9	9											
CoolRunnerXpla3	9	9											
Xc9500	9	9											
Xc9500XL	9	9											
Xc9500XV	9	9											
ProAsicPlus		9	9										
ProAsic3		9	9										
ProAsic3E		9											
Fusion		9											
EC		9	9										
ECP		9	9										
ECP2		9	9										
ECP2M		9	9										
Sc		9											
MACHXO		9	9										
XP		9	9										
Xp2		9											

BUF9S

9-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	9	9											
Max7000b	9	9											
Max7000ae	9	9											
Max7000s	9	9											
Spartan2		9	9										
Spartan2E		9	9										
Spartan3		9	9										
Spartan3A		9											
Spartan3adsp		9											
Spartan3an		9											
Spartan3E		9	9										
Spartan3L		9	9										
Virtex		9	9										
Virtex2		9	9										
Virtex2p		9	9										
VirtexE		9	9										
Virtex4		9	9										
Virtex5		9	9										
CoolRunner2	9	9											
CoolRunnerXpla3	9	9											
Xc9500	9	9											
Xc9500XL	9	9											
Xc9500XV	9	9											
ProAsicPlus		9	9										
ProAsic3		9	9										
ProAsic3E		9											
Fusion		9											
EC		9	9										
ECP		9	9										
ECP2		9	9										
ECP2M		9	9										
Sc		9											
MACHXO		9	9										
XP		9	9										
Xp2		9											

BUF10B

10-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	10	10											
Max7000b	10	10											
Max7000ae	10	10											
Max7000s	10	10											
Spartan2		10	10										
Spartan2E		10	10										
Spartan3		10	10										
Spartan3A		10											
Spartan3adsp		10											
Spartan3an		10											
Spartan3E		10	10										
Spartan3L		10	10										
Virtex		10	10										
Virtex2		10	10										
Virtex2p		10	10										
VirtexE		10	10										
Virtex4		10	10										
Virtex5		10	10										
CoolRunner2	10	10											
CoolRunnerXpla3	10	10											
Xc9500	10	10											
Xc9500XL	10	10											
Xc9500XV	10	10											
ProAsicPlus		10	10										
ProAsic3		10	10										
ProAsic3E		10											
Fusion		10											
EC		10	10										
ECP		10	10										
ECP2		10	10										
ECP2M		10	10										
Sc		10											
MACHXO		10	10										
XP		10	10										
Xp2		10											

BUF10S

10-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	10	10											
Max7000b	10	10											
Max7000ae	10	10											
Max7000s	10	10											
Spartan2		10	10										
Spartan2E		10	10										
Spartan3		10	10										
Spartan3A		10											
Spartan3adsp		10											
Spartan3an		10											
Spartan3E		10	10										
Spartan3L		10	10										
Virtex		10	10										
Virtex2		10	10										
Virtex2p		10	10										
VirtexE		10	10										
Virtex4		10	10										
Virtex5		10	10										
CoolRunner2	10	10											
CoolRunnerXpla3	10	10											
Xc9500	10	10											
Xc9500XL	10	10											
Xc9500XV	10	10											
ProAsicPlus		10	10										
ProAsic3		10	10										
ProAsic3E		10											
Fusion		10											
EC		10	10										
ECP		10	10										
ECP2		10	10										
ECP2M		10	10										
Sc		10											
MACHXO		10	10										
XP		10	10										
Xp2		10											

BUF12B

12-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	12	12											
Max7000b	12	12											
Max7000ae	12	12											
Max7000s	12	12											
Spartan2		12	12										
Spartan2E		12	12										
Spartan3		12	12										
Spartan3A		12											
Spartan3adsp		12											
Spartan3an		12											
Spartan3E		12	12										
Spartan3L		12	12										
Virtex		12	12										
Virtex2		12	12										
Virtex2p		12	12										
VirtexE		12	12										
Virtex4		12	12										
Virtex5		12	12										
CoolRunner2	12	12											
CoolRunnerXpla3	12	12											
Xc9500	12	12											
Xc9500XL	12	12											
Xc9500XV	12	12											
ProAsicPlus		12	12										
ProAsic3		12	12										
ProAsic3E		12											
Fusion		12											
EC		12	12										
ECP		12	12										
ECP2		12	12										
ECP2M		12	12										
Sc		12											
MACHXO		12	12										
XP		12	12										
Xp2		12											

BUF12S

12-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	12	12											
Max7000b	12	12											
Max7000ae	12	12											
Max7000s	12	12											
Spartan2		12	12										
Spartan2E		12	12										
Spartan3		12	12										
Spartan3A		12											
Spartan3adsp		12											
Spartan3an		12											
Spartan3E		12	12										
Spartan3L		12	12										
Virtex		12	12										
Virtex2		12	12										
Virtex2p		12	12										
VirtexE		12	12										
Virtex4		12	12										
Virtex5		12	12										
CoolRunner2	12	12											
CoolRunnerXpla3	12	12											
Xc9500	12	12											
Xc9500XL	12	12											
Xc9500XV	12	12											
ProAsicPlus		12	12										
ProAsic3		12	12										
ProAsic3E		12											
Fusion		12											
EC		12	12										
ECP		12	12										
ECP2		12	12										
ECP2M		12	12										
Sc		12											
MACHXO		12	12										
XP		12	12										
Xp2		12											

BUF16B

16-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	16	16											
Max7000b	16	16											
Max7000ae	16	16											
Max7000s	16	16											
Spartan2		16	16										
Spartan2E		16	16										
Spartan3		16	16										
Spartan3A		16											
Spartan3adsp		16											
Spartan3an		16											
Spartan3E		16	16										
Spartan3L		16	16										
Virtex		16	16										
Virtex2		16	16										
Virtex2p		16	16										
VirtexE		16	16										
Virtex4		16	16										
Virtex5		16	16										
CoolRunner2	16	16											
CoolRunnerXpla3	16	16											
Xc9500	16	16											
Xc9500XL	16	16											
Xc9500XV	16	16											
ProAsicPlus		16	16										
ProAsic3		16	16										
ProAsic3E		16											
Fusion		16											
EC		16	16										
ECP		16	16										
ECP2		16	16										
ECP2M		16	16										
Sc		16											
MACHXO		16	16										
XP		16	16										
Xp2		16											

BUF16S

16-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	16	16											
Max7000b	16	16											
Max7000ae	16	16											
Max7000s	16	16											
Spartan2		16	16										
Spartan2E		16	16										
Spartan3		16	16										
Spartan3A		16											
Spartan3adsp		16											
Spartan3an		16											
Spartan3E		16	16										
Spartan3L		16	16										
Virtex		16	16										
Virtex2		16	16										
Virtex2p		16	16										
VirtexE		16	16										
Virtex4		16	16										
Virtex5		16	16										
CoolRunner2	16	16											
CoolRunnerXpla3	16	16											
Xc9500	16	16											
Xc9500XL	16	16											
Xc9500XV	16	16											
ProAsicPlus		16	16										
ProAsic3		16	16										
ProAsic3E		16											
Fusion		16											
EC		16	16										
ECP		16	16										
ECP2		16	16										
ECP2M		16	16										
Sc		16											
MACHXO		16	16										
XP		16	16										
Xp2		16											

BUF32B

32-Bit General Purpose (Non-inverting) Buffer, 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											
Max3000a	32	32											
Max7000b	32	32											
Max7000ae	32	32											
Max7000s	32	32											
Spartan2		32	32										
Spartan2E		32	32										
Spartan3		32	32										
Spartan3A		32											
Spartan3adsp		32											
Spartan3an		32											
Spartan3E		32	32										
Spartan3L		32	32										
Virtex		32	32										
Virtex2		32	32										
Virtex2p		32	32										
VirtexE		32	32										
Virtex4		32	32										
Virtex5		32	32										
CoolRunner2	32	32											
CoolRunnerXpla3	32	32											
Xc9500	32	32											
Xc9500XL	32	32											
Xc9500XV	32	32											
ProAsicPlus		32	32										
ProAsic3		32	32										
ProAsic3E		32											
Fusion		32											
EC		32	32										
ECP		32	32										
ECP2		32	32										
ECP2M		32	32										
Sc		32											
MACHXO		32	32										
XP		32	32										
Xp2		32											

BUF32S

32-Bit General Purpose (Non-inverting) Buffer, 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		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											
Max3000a	32	32											
Max7000b	32	32											
Max7000ae	32	32											
Max7000s	32	32											
Spartan2		32	32										
Spartan2E		32	32										
Spartan3		32	32										
Spartan3A		32											
Spartan3adsp		32											
Spartan3an		32											
Spartan3E		32	32										
Spartan3L		32	32										
Virtex		32	32										
Virtex2		32	32										
Virtex2p		32	32										
VirtexE		32	32										
Virtex4		32	32										
Virtex5		32	32										
CoolRunner2	32	32											
CoolRunnerXpla3	32	32											
Xc9500	32	32											
Xc9500XL	32	32											
Xc9500XV	32	32											
ProAsicPlus		32	32										
ProAsic3		32	32										
ProAsic3E		32											
Fusion		32											
EC		32	32										
ECP		32	32										
ECP2		32	32										
ECP2M		32	32										
Sc		32											
MACHXO		32	32										
XP		32	32										
Xp2		32											

BUFE

1-bit 3-state Buffer with Active High Enable

Device Family	Macrocells	Logic Cells/Elements	4-Input LUT	Registers	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											

BUFE2B

2-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2											
Spartan3adsp		2											
Spartan3an		2											
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2	2										
CoolRunner2	2	2											
CoolRunnerXpla3	2	2											
Xc9500	2	2											
Xc9500XL	2	2											
Xc9500XV	2	2											
ProAsicPlus		2	2										
ProAsic3		2	2										
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
Sc		2											
MACHXO		2	2										
XP		2	2										
Xp2		2											

BUFE2S

2-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	2	2											
Max7000b	2	2											
Max7000ae	2	2											
Max7000s	2	2											
Spartan2		2	2										
Spartan2E		2	2										
Spartan3		2	2										
Spartan3A		2											
Spartan3adsp		2											
Spartan3an		2											
Spartan3E		2	2										
Spartan3L		2	2										
Virtex		2	2										
Virtex2		2	2										
Virtex2p		2	2										
VirtexE		2	2										
Virtex4		2	2										
Virtex5		2	2										
CoolRunner2	2	2											
CoolRunnerXpla3	2	2											
Xc9500	2	2											
Xc9500XL	2	2											
Xc9500XV	2	2											
ProAsicPlus		2	2										
ProAsic3		2	2										
ProAsic3E		2											
Fusion		2											
EC		2	2										
ECP		2	2										
ECP2		2	2										
ECP2M		2	2										
Sc		2											
MACHXO		2	2										
XP		2	2										
Xp2		2											

BUFE3B

3-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	3	3											
Max7000b	3	3											
Max7000ae	3	3											
Max7000s	3	3											
Spartan2		3	3										
Spartan2E		3	3										
Spartan3		3	3										
Spartan3A		3											
Spartan3adsp		3											
Spartan3an		3											
Spartan3E		3	3										
Spartan3L		3	3										
Virtex		3	3										
Virtex2		3	3										
Virtex2p		3	3										
VirtexE		3	3										
Virtex4		3	3										
Virtex5		3	3										
CoolRunner2	3	3											
CoolRunnerXpla3	3	3											
Xc9500	3	3											
Xc9500XL	3	3											
Xc9500XV	3	3											
ProAsicPlus		3	3										
ProAsic3		3	3										
ProAsic3E		3											
Fusion		3											
EC		3	3										
ECP		3	3										
ECP2		3	3										
ECP2M		3	3										
Sc		3											
MACHXO		3	3										
XP		3	3										
Xp2		3											

BUFE3S

3-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	3	3											
Max7000b	3	3											
Max7000ae	3	3											
Max7000s	3	3											
Spartan2		3	3										
Spartan2E		3	3										
Spartan3		3	3										
Spartan3A		3											
Spartan3adsp		3											
Spartan3an		3											
Spartan3E		3	3										
Spartan3L		3	3										
Virtex		3	3										
Virtex2		3	3										
Virtex2p		3	3										
VirtexE		3	3										
Virtex4		3	3										
Virtex5		3	3										
CoolRunner2	3	3											
CoolRunnerXpla3	3	3											
Xc9500	3	3											
Xc9500XL	3	3											
Xc9500XV	3	3											
ProAsicPlus		3	3										
ProAsic3		3	3										
ProAsic3E		3											
Fusion		3											
EC		3	3										
ECP		3	3										
ECP2		3	3										
ECP2M		3	3										
Sc		3											
MACHXO		3	3										
XP		3	3										
Xp2		3											

BUFE4B

4-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	4	4											
Max7000b	4	4											
Max7000ae	4	4											
Max7000s	4	4											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4											
Spartan3adsp		4											
Spartan3an		4											
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4	4										
CoolRunner2	4	4											
CoolRunnerXpla3	4	4											
Xc9500	4	4											
Xc9500XL	4	4											
Xc9500XV	4	4											
ProAsicPlus		4	4										
ProAsic3		4	4										
ProAsic3E		4											
Fusion		4											
EC		4	4										
ECP		4	4										
ECP2		4	4										
ECP2M		4	4										
Sc		4											
MACHXO		4	4										
XP		4	4										
Xp2		4											

BUFE4S

4-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	4	4											
Max7000b	4	4											
Max7000ae	4	4											
Max7000s	4	4											
Spartan2		4	4										
Spartan2E		4	4										
Spartan3		4	4										
Spartan3A		4											
Spartan3adsp		4											
Spartan3an		4											
Spartan3E		4	4										
Spartan3L		4	4										
Virtex		4	4										
Virtex2		4	4										
Virtex2p		4	4										
VirtexE		4	4										
Virtex4		4	4										
Virtex5		4	4										
CoolRunner2	4	4											
CoolRunnerXpla3	4	4											
Xc9500	4	4											
Xc9500XL	4	4											
Xc9500XV	4	4											
ProAsicPlus		4	4										
ProAsic3		4	4										
ProAsic3E		4											
Fusion		4											
EC		4	4										
ECP		4	4										
ECP2		4	4										
ECP2M		4	4										
Sc		4											
MACHXO		4	4										
XP		4	4										
Xp2		4											

BUFE5B

5-Bit 3-state Buffer with Active High Enable, 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		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											
Max3000a	5	5											
Max7000b	5	5											
Max7000ae	5	5											
Max7000s	5	5											
Spartan2		5	5										
Spartan2E		5	5										
Spartan3		5	5										
Spartan3A		5											
Spartan3adsp		5											
Spartan3an		5											
Spartan3E		5	5										
Spartan3L		5	5										
Virtex		5	5										
Virtex2		5	5										
Virtex2p		5	5										
VirtexE		5	5										
Virtex4		5	5										
Virtex5		5	5										
CoolRunner2	5	5											
CoolRunnerXpla3	5	5											
Xc9500	5	5											
Xc9500XL	5	5											
Xc9500XV	5	5											
ProAsicPlus		5	5										
ProAsic3		5	5										
ProAsic3E		5											
Fusion		5											
EC		5	5										
ECP		5	5										
ECP2		5	5										
ECP2M		5	5										
Sc		5											
MACHXO		5	5										
XP		5	5										
Xp2		5											

BUFE5S

5-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	5	5											
Max7000b	5	5											
Max7000ae	5	5											
Max7000s	5	5											
Spartan2		5	5										
Spartan2E		5	5										
Spartan3		5	5										
Spartan3A		5											
Spartan3adsp		5											
Spartan3an		5											
Spartan3E		5	5										
Spartan3L		5	5										
Virtex		5	5										
Virtex2		5	5										
Virtex2p		5	5										
VirtexE		5	5										
Virtex4		5	5										
Virtex5		5	5										
CoolRunner2	5	5											
CoolRunnerXpla3	5	5											
Xc9500	5	5											
Xc9500XL	5	5											
Xc9500XV	5	5											
ProAsicPlus		5	5										
ProAsic3		5	5										
ProAsic3E		5											
Fusion		5											
EC		5	5										
ECP		5	5										
ECP2		5	5										
ECP2M		5	5										
Sc		5											
MACHXO		5	5										
XP		5	5										
Xp2		5											

BUFE6B

6-Bit 3-state Buffer with Active High Enable, 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		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											
Max3000a	6	6											
Max7000b	6	6											
Max7000ae	6	6											
Max7000s	6	6											
Spartan2		6	6										
Spartan2E		6	6										
Spartan3		6	6										
Spartan3A		6											
Spartan3adsp		6											
Spartan3an		6											
Spartan3E		6	6										
Spartan3L		6	6										
Virtex		6	6										
Virtex2		6	6										
Virtex2p		6	6										
VirtexE		6	6										
Virtex4		6	6										
Virtex5		6	6										
CoolRunner2	6	6											
CoolRunnerXpla3	6	6											
Xc9500	6	6											
Xc9500XL	6	6											
Xc9500XV	6	6											
ProAsicPlus		6	6										
ProAsic3		6	6										
ProAsic3E		6											
Fusion		6											
EC		6	6										
ECP		6	6										
ECP2		6	6										
ECP2M		6	6										
Sc		6											
MACHXO		6	6										
XP		6	6										
Xp2		6											

BUFE6S

6-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	6	6											
Max7000b	6	6											
Max7000ae	6	6											
Max7000s	6	6											
Spartan2		6	6										
Spartan2E		6	6										
Spartan3		6	6										
Spartan3A		6											
Spartan3adsp		6											
Spartan3an		6											
Spartan3E		6	6										
Spartan3L		6	6										
Virtex		6	6										
Virtex2		6	6										
Virtex2p		6	6										
VirtexE		6	6										
Virtex4		6	6										
Virtex5		6	6										
CoolRunner2	6	6											
CoolRunnerXpla3	6	6											
Xc9500	6	6											
Xc9500XL	6	6											
Xc9500XV	6	6											
ProAsicPlus		6	6										
ProAsic3		6	6										
ProAsic3E		6											
Fusion		6											
EC		6	6										
ECP		6	6										
ECP2		6	6										
ECP2M		6	6										
Sc		6											
MACHXO		6	6										
XP		6	6										
Xp2		6											

BUFE7B

7-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	7	7											
Max7000b	7	7											
Max7000ae	7	7											
Max7000s	7	7											
Spartan2		7	7										
Spartan2E		7	7										
Spartan3		7	7										
Spartan3A		7											
Spartan3adsp		7											
Spartan3an		7											
Spartan3E		7	7										
Spartan3L		7	7										
Virtex		7	7										
Virtex2		7	7										
Virtex2p		7	7										
VirtexE		7	7										
Virtex4		7	7										
Virtex5		7	7										
CoolRunner2	7	7											
CoolRunnerXpla3	7	7											
Xc9500	7	7											
Xc9500XL	7	7											
Xc9500XV	7	7											
ProAsicPlus		7	7										
ProAsic3		7	7										
ProAsic3E		7											
Fusion		7											
EC		7	7										
ECP		7	7										
ECP2		7	7										
ECP2M		7	7										
Sc		7											
MACHXO		7	7										
XP		7	7										
Xp2		7											

BUFE7S

7-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	7	7											
Max7000b	7	7											
Max7000ae	7	7											
Max7000s	7	7											
Spartan2		7	7										
Spartan2E		7	7										
Spartan3		7	7										
Spartan3A		7											
Spartan3adsp		7											
Spartan3an		7											
Spartan3E		7	7										
Spartan3L		7	7										
Virtex		7	7										
Virtex2		7	7										
Virtex2p		7	7										
VirtexE		7	7										
Virtex4		7	7										
Virtex5		7	7										
CoolRunner2	7	7											
CoolRunnerXpla3	7	7											
Xc9500	7	7											
Xc9500XL	7	7											
Xc9500XV	7	7											
ProAsicPlus		7	7										
ProAsic3		7	7										
ProAsic3E		7											
Fusion		7											
EC		7	7										
ECP		7	7										
ECP2		7	7										
ECP2M		7	7										
Sc		7											
MACHXO		7	7										
XP		7	7										
Xp2		7											

BUFE8B

8-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	8	8											
Max7000b	8	8											
Max7000ae	8	8											
Max7000s	8	8											
Spartan2		8	8										
Spartan2E		8	8										
Spartan3		8	8										
Spartan3A		8											
Spartan3adsp		8											
Spartan3an		8											
Spartan3E		8	8										
Spartan3L		8	8										
Virtex		8	8										
Virtex2		8	8										
Virtex2p		8	8										
VirtexE		8	8										
Virtex4		8	8										
Virtex5		8	8										
CoolRunner2	8	8											
CoolRunnerXpla3	8	8											
Xc9500	8	8											
Xc9500XL	8	8											
Xc9500XV	8	8											
ProAsicPlus		8	8										
ProAsic3		8	8										
ProAsic3E		8											
Fusion		8											
EC		8	8										
ECP		8	8										
ECP2		8	8										
ECP2M		8	8										
Sc		8											
MACHXO		8	8										
XP		8	8										
Xp2		8											

BUFE8S

8-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	8	8											
Max7000b	8	8											
Max7000ae	8	8											
Max7000s	8	8											
Spartan2		8	8										
Spartan2E		8	8										
Spartan3		8	8										
Spartan3A		8											
Spartan3adsp		8											
Spartan3an		8											
Spartan3E		8	8										
Spartan3L		8	8										
Virtex		8	8										
Virtex2		8	8										
Virtex2p		8	8										
VirtexE		8	8										
Virtex4		8	8										
Virtex5		8	8										
CoolRunner2	8	8											
CoolRunnerXpla3	8	8											
Xc9500	8	8											
Xc9500XL	8	8											
Xc9500XV	8	8											
ProAsicPlus		8	8										
ProAsic3		8	8										
ProAsic3E		8											
Fusion		8											
EC		8	8										
ECP		8	8										
ECP2		8	8										
ECP2M		8	8										
Sc		8											
MACHXO		8	8										
XP		8	8										
Xp2		8											

BUFE9B

9-Bit 3-state Buffer with Active High Enable, 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		9	9										
Cyclone2		9	9										
Cyclone3		9	9										
Stratix		9	9										
Stratix2		9	9										
Stratix3		9											
StratixGX		9	9										
Stratix2gx		9											
Max2		9											
Max3000a	9	9											
Max7000b	9	9											
Max7000ae	9	9											
Max7000s	9	9											
Spartan2		9	9										
Spartan2E		9	9										
Spartan3		9	9										
Spartan3A		9											
Spartan3adsp		9											
Spartan3an		9											
Spartan3E		9	9										
Spartan3L		9	9										
Virtex		9	9										
Virtex2		9	9										
Virtex2p		9	9										
VirtexE		9	9										
Virtex4		9	9										
Virtex5		9	9										
CoolRunner2	9	9											
CoolRunnerXpla3	9	9											
Xc9500	9	9											
Xc9500XL	9	9											
Xc9500XV	9	9											
ProAsicPlus		9	9										
ProAsic3		9	9										
ProAsic3E		9											
Fusion		9											
EC		9	9										
ECP		9	9										
ECP2		9	9										
ECP2M		9	9										
Sc		9											
MACHXO		9	9										
XP		9	9										
Xp2		9											

BUFE9S

9-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	9	9											
Max7000b	9	9											
Max7000ae	9	9											
Max7000s	9	9											
Spartan2		9	9										
Spartan2E		9	9										
Spartan3		9	9										
Spartan3A		9											
Spartan3adsp		9											
Spartan3an		9											
Spartan3E		9	9										
Spartan3L		9	9										
Virtex		9	9										
Virtex2		9	9										
Virtex2p		9	9										
VirtexE		9	9										
Virtex4		9	9										
Virtex5		9	9										
CoolRunner2	9	9											
CoolRunnerXpla3	9	9											
Xc9500	9	9											
Xc9500XL	9	9											
Xc9500XV	9	9											
ProAsicPlus		9	9										
ProAsic3		9	9										
ProAsic3E		9											
Fusion		9											
EC		9	9										
ECP		9	9										
ECP2		9	9										
ECP2M		9	9										
Sc		9											
MACHXO		9	9										
XP		9	9										
Xp2		9											

BUFE10B

10-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	10	10											
Max7000b	10	10											
Max7000ae	10	10											
Max7000s	10	10											
Spartan2		10	10										
Spartan2E		10	10										
Spartan3		10	10										
Spartan3A		10											
Spartan3adsp		10											
Spartan3an		10											
Spartan3E		10	10										
Spartan3L		10	10										
Virtex		10	10										
Virtex2		10	10										
Virtex2p		10	10										
VirtexE		10	10										
Virtex4		10	10										
Virtex5		10	10										
CoolRunner2	10	10											
CoolRunnerXpla3	10	10											
Xc9500	10	10											
Xc9500XL	10	10											
Xc9500XV	10	10											
ProAsicPlus		10	10										
ProAsic3		10	10										
ProAsic3E		10											
Fusion		10											
EC		10	10										
ECP		10	10										
ECP2		10	10										
ECP2M		10	10										
Sc		10											
MACHXO		10	10										
XP		10	10										
Xp2		10											

BUFE10S

10-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	10	10											
Max7000b	10	10											
Max7000ae	10	10											
Max7000s	10	10											
Spartan2		10	10										
Spartan2E		10	10										
Spartan3		10	10										
Spartan3A		10											
Spartan3adsp		10											
Spartan3an		10											
Spartan3E		10	10										
Spartan3L		10	10										
Virtex		10	10										
Virtex2		10	10										
Virtex2p		10	10										
VirtexE		10	10										
Virtex4		10	10										
Virtex5		10	10										
CoolRunner2	10	10											
CoolRunnerXpla3	10	10											
Xc9500	10	10											
Xc9500XL	10	10											
Xc9500XV	10	10											
ProAsicPlus		10	10										
ProAsic3		10	10										
ProAsic3E		10											
Fusion		10											
EC		10	10										
ECP		10	10										
ECP2		10	10										
ECP2M		10	10										
Sc		10											
MACHXO		10	10										
XP		10	10										
Xp2		10											

BUFE12B

12-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	12	12											
Max7000b	12	12											
Max7000ae	12	12											
Max7000s	12	12											
Spartan2		12	12										
Spartan2E		12	12										
Spartan3		12	12										
Spartan3A		12											
Spartan3adsp		12											
Spartan3an		12											
Spartan3E		12	12										
Spartan3L		12	12										
Virtex		12	12										
Virtex2		12	12										
Virtex2p		12	12										
VirtexE		12	12										
Virtex4		12	12										
Virtex5		12	12										
CoolRunner2	12	12											
CoolRunnerXpla3	12	12											
Xc9500	12	12											
Xc9500XL	12	12											
Xc9500XV	12	12											
ProAsicPlus		12	12										
ProAsic3		12	12										
ProAsic3E		12											
Fusion		12											
EC		12	12										
ECP		12	12										
ECP2		12	12										
ECP2M		12	12										
Sc		12											
MACHXO		12	12										
XP		12	12										
Xp2		12											

BUFE12S

12-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	12	12											
Max7000b	12	12											
Max7000ae	12	12											
Max7000s	12	12											
Spartan2		12	12										
Spartan2E		12	12										
Spartan3		12	12										
Spartan3A		12											
Spartan3adsp		12											
Spartan3an		12											
Spartan3E		12	12										
Spartan3L		12	12										
Virtex		12	12										
Virtex2		12	12										
Virtex2p		12	12										
VirtexE		12	12										
Virtex4		12	12										
Virtex5		12	12										
CoolRunner2	12	12											
CoolRunnerXpla3	12	12											
Xc9500	12	12											
Xc9500XL	12	12											
Xc9500XV	12	12											
ProAsicPlus		12	12										
ProAsic3		12	12										
ProAsic3E		12											
Fusion		12											
EC		12	12										
ECP		12	12										
ECP2		12	12										
ECP2M		12	12										
Sc		12											
MACHXO		12	12										
XP		12	12										
Xp2		12											

BUFE16B

16-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	16	16											
Max7000b	16	16											
Max7000ae	16	16											
Max7000s	16	16											
Spartan2		16	16										
Spartan2E		16	16										
Spartan3		16	16										
Spartan3A		16											
Spartan3adsp		16											
Spartan3an		16											
Spartan3E		16	16										
Spartan3L		16	16										
Virtex		16	16										
Virtex2		16	16										
Virtex2p		16	16										
VirtexE		16	16										
Virtex4		16	16										
Virtex5		16	16										
CoolRunner2	16	16											
CoolRunnerXpla3	16	16											
Xc9500	16	16											
Xc9500XL	16	16											
Xc9500XV	16	16											
ProAsicPlus		16	16										
ProAsic3		16	16										
ProAsic3E		16											
Fusion		16											
EC		16	16										
ECP		16	16										
ECP2		16	16										
ECP2M		16	16										
Sc		16											
MACHXO		16	16										
XP		16	16										
Xp2		16											

BUFE16S

16-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	16	16											
Max7000b	16	16											
Max7000ae	16	16											
Max7000s	16	16											
Spartan2		16	16										
Spartan2E		16	16										
Spartan3		16	16										
Spartan3A		16											
Spartan3adsp		16											
Spartan3an		16											
Spartan3E		16	16										
Spartan3L		16	16										
Virtex		16	16										
Virtex2		16	16										
Virtex2p		16	16										
VirtexE		16	16										
Virtex4		16	16										
Virtex5		16	16										
CoolRunner2	16	16											
CoolRunnerXpla3	16	16											
Xc9500	16	16											
Xc9500XL	16	16											
Xc9500XV	16	16											
ProAsicPlus		16	16										
ProAsic3		16	16										
ProAsic3E		16											
Fusion		16											
EC		16	16										
ECP		16	16										
ECP2		16	16										
ECP2M		16	16										
Sc		16											
MACHXO		16	16										
XP		16	16										
Xp2		16											

BUFE32B

32-Bit 3-state Buffer with Active High Enable, 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											
Max3000a	32	32											
Max7000b	32	32											
Max7000ae	32	32											
Max7000s	32	32											
Spartan2		32	32										
Spartan2E		32	32										
Spartan3		32	32										
Spartan3A		32											
Spartan3adsp		32											
Spartan3an		32											
Spartan3E		32	32										
Spartan3L		32	32										
Virtex		32	32										
Virtex2		32	32										
Virtex2p		32	32										
VirtexE		32	32										
Virtex4		32	32										
Virtex5		32	32										
CoolRunner2	32	32											
CoolRunnerXpla3	32	32											
Xc9500	32	32											
Xc9500XL	32	32											
Xc9500XV	32	32											
ProAsicPlus		32	32										
ProAsic3		32	32										
ProAsic3E		32											
Fusion		32											
EC		32	32										
ECP		32	32										
ECP2		32	32										
ECP2M		32	32										
Sc		32											
MACHXO		32	32										
XP		32	32										
Xp2		32											

BUFE32S

32-Bit 3-state Buffer with Active High Enable, 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		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											
Max3000a	32	32											
Max7000b	32	32											
Max7000ae	32	32											
Max7000s	32	32											
Spartan2		32	32										
Spartan2E		32	32										
Spartan3		32	32										
Spartan3A		32											
Spartan3adsp		32											
Spartan3an		32											
Spartan3E		32	32										
Spartan3L		32	32										
Virtex		32	32										
Virtex2		32	32										
Virtex2p		32	32										
VirtexE		32	32										
Virtex4		32	32										
Virtex5		32	32										
CoolRunner2	32	32											
CoolRunnerXpla3	32	32											
Xc9500	32	32											
Xc9500XL	32	32											
Xc9500XV	32	32											
ProAsicPlus		32	32										
ProAsic3		32	32										
ProAsic3E		32											
Fusion		32											
EC		32	32										
ECP		32	32										
ECP2		32	32										
ECP2M		32	32										
Sc		32											
MACHXO		32	32										
XP		32	32										
Xp2		32											