CoolRunner™-II Family

		Part Number	XC2C32A	XC2C64A	XC2C128	XC2C256	XC2C384	XC2C512
Logic Resources		System Gates	750	1,500	3,000	6,000	9,000	12,000
		Macrocells	32	64	128	256	384	512
		Product Terms Per Macrocell	56	56	56	56	56	56
Clock Resources		Global Clocks	3	3	3	3	3	3
		Product Term Clocks Per Function Block	16	16	16	16	16	16
I/O Resources		Maximum I/O	33	64	100	184	240	270
		Input Voltage Compatible	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3
		Output Voltage Compatible	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3
Speed Grades		Min. Pin-to-Pin Logic Delay (ns)	3.8	4.6	5.7	5.7	7.1	7.1
		Commercial Speed Grades (Fastest to Slowest)	-4, -6	-5, -7	-6, -7	-6, -7	-7, -10	-7, -10
		Industrial Speed Grades (Fastest to Slowest)	-6	-7	-7	-7	-10	-7[1], -10
	Package[2]	Area[3]	Maximum User I/Os					
QFN Packages (QFG): Quad, flat, no-lead (0.5 mm lead spacing)								
QF32[4]	5 x 5 mm		21					
QF48[4]	7 x 7 mm			37				
VQFP Packages (VQ): Very thin QFP (VQ44: 0.8 mm lead spacing, VQ100: 0.5 mm lead spacing)								
VQ44	12 x 12 mm		33	33				
VQ100	16 x 16 mm			64	80	80		
Chip Scale Packages (CP): Wire-bond, chip-scale, BGA (0.5 mm ball spacing)								
CP56	6 x 6 mm		33	45				
CP132	8 x 8 mm				100	106		
TQFP Packages (TQ): Thin QFP (0.5 mm lead spacing)								
TQ100	16 x 16 mm							
TQ144	22 x 22 mm				100	118	118	
PQFP Packages (PQ): Wire-bond, plastic, QFP (0.5 mm lead spacing)								
PQ208	30.6 x 30.6 mm					173	173	173
FGA Packages (FG): Wire-bond, fine-pitch, BGA (1.0 mm ball spacing)								
FT256	17 x 17 mm					184	212	212
FBGA Packages (FG): Wire-bond, fine-line, BGA (1.0 mm ball spacing)								
FG324	23 x 23 mm						240	270

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Notes: 1. -7 speed grade is only available in FT(G)256 package.

2. All packages are available in Pb-Free and RoHS6 compliant versions.

3. Area dimensions for lead-frame product are inclusive of the leads.

4. Only available in RoHS6 compliant and Halogen-free packages.

Important: Verify all data in this document with the device data sheets found at www.xilinx.com

		XC9500XL Family			
Part Number		XC9536XL	XC9572XL	XC95144XL	XC95288XL
Logic Resources System Gates		800	1,600	3,200	6,400
Macrocells		36	72	144	288
Product Terms Per Macrocell		90	90	90	90
Clock Resources Global Clocks		3	3	3	3
Product Term Clocks Per Function Block		18	18	18	18
I/O Resources Maximum I/O		36	72	117	192
Input Voltage Compatible		2.5/3.3/5	2.5/3.3/5	2.5/3.3/5	2.5/3.3/5
Output Voltage Compatible		2.5/3.3	2.5/3.3	2.5/3.3	2.5/3.3
Speed Grades Min. Pin-to-Pin Logic Delay (ns)		5	5	5	6
Commercial Speed Grades (Fastest to Slowest)		-5, -7, -10	-5, -7, -10	-5, -7, -10	-6, -7, -10
Industrial Speed Grades (Fastest to Slowest)		-7, -10	-7, -10	-7, -10	-7, -10
Package[1]	Area[2]	Maximum User I/Os			
VQFP Packages (VQ): Very thin QFP (VQ44: 0.8 mm lead spacing, VQ64: 0.5 mm lead spacing)					
VQ44	12 x 12 mm	34	34		
VQ64	12 x 12 mm	36	52		
PLCC Packages (PC): Wire-bond, plastic, chip carrier (1.27 mm lead spacing)					
PC44	17.5 x 17.5 mm	34	34		
Chip Scale Packages (CS): Wire-bond, chip-scale, BGA (0.8 mm ball spacing)					
CS48	7 x 7 mm	36	38		
CS144	12 x 12 mm			117	
CS280	16 x 16 mm				192
TQFP Packages (TQ): Thin QFP (0.5 mm lead spacing)					
TQ100	16 x 16 mm		72	81	
TQ144	22 x 22 mm			117	117
PQFP Packages (PQ): Wire-bond, plastic, QFP (0.5 mm lead spacing)					
PQ208	30.6 x 30.6 mm				168
FGA Packages (FG): Wire-bond, fine-pitch, BGA (1.0 mm ball spacing)					
FG256	17 x 17 mm				192
FBGA Packages (BG): Wire-bond, fine-line, BGA (1.0 mm ball spacing)					
BG256	27 x 27 mm				192

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Notes: 1. All packages are available in Pb-Free and RoHS6 compliant versions.

2. Area dimensions for lead-frame product are inclusive of the leads.

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