





## PACKAGE OPTIONS AND USER I/O

## PRODUCT SELECTION MATRIX

																					
		CoolRunner-II					CoolRunner XPLA3					XC9500XV				XC9500XL					
		XC2C32	XC2C64	XC2C128	XC2C256	XC2C384	XC2C512	XCR3032XL	XCR3064XL	XCR3128XL	XCR3256XL	XCR3384XL	XCR3512XL	XC9536XV	XC9572XV	XC95144XV	XC95288XV	XC9536XL	XC9572XL	XC95144XL	XC95288XL
	Body Size																				
PLCC Packages (PC)																					
44	17.5 x 17.5 mm	33	33				36	36					34	34				34	34		
PQFP Packages (PQ)																					
208	28 x 28 mm				173	173	173					164	172	180			168			168	
VQFP Packages (VQ)																					
44	12 x 12 mm	33	33				36	36					34	34				34	34		
64	12 x 12 mm																	36	52		
100	16 x 16 mm		64	80	80			68	84												
TQFP Packages (TQ)																					
100	14 x 14 mm												72	81				72	81		
144	20 x 20 mm			100	118	118				108	120	118			117	117			117	117	
Chip Scale Packages (CP) — wire-bond chip-scale BGA (0.5 mm ball spacing)																					
56	6 X 6 mm	33	45					48													
132	8 X 8 mm			100	106																
Chip Scale Packages (CS) — wire-bond chip-scale BGA (0.8 mm ball spacing)																					
48	7 x 7mm						36	40					36	38				36	38		
144	12 x 12 mm								108						117				117		
280	16 x 16 mm								164						192				192		
BGA Packages (BG) — wire-bond standard BGA (1.27 mm ball spacing)																					
256	27 x 27 mm																		192		
FGA Packages (FT) — wire-bond fine-pitch thin BGA (1.0 mm ball spacing)																					
256	17 x 17 mm				184	212	212														
FBGA Packages (FG) — wire-bond Finline BGA (1.0 mm ball spacing)																					
256	17 x 17 mm								164	212	212				192				192		
324	23 x 23 mm					240	270					220	260								

Important: Verify all Data with Device Data Sheet and Product Availability with your local Xilinx Rep

	System Gates	Macrocells	Product terms per Macrocell	Input Voltage Compatible	Output Voltage Compatible	I/O Features		Speed			Clocking		
						Max. I/O	I/O Banking	Min. Pin-to-Pin Logic Delay (ns)	Commercial Speed Grades (fastest to slowest)	Industrial Speed Grades (fastest to slowest)	Global Clocks	Product Term Clocks per Function Block	
CoolRunner-II Family — 1.8 Volt													
	XC2C32	750	32	40	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3	33	1	3.5	-3 -4 -6	-4 -6	3	17
	XC2C64	1500	64	40	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3	64	1	4	-4 -5 -7	-5 -7	3	17
	XC2C128	3000	128	40	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3	100	2	4.5	-4 -6 -7	-6 -7	3	17
	XC2C256	6000	256	40	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3	184	2	5	-5 -6 -7	-6 -7	3	17
	XC2C384	9000	384	40	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3	240	4	6	-6 -7 -10	-7 -10	3	17
XC2C512	12000	512	40	1.5/1.8/2.5/3.3	1.5/1.8/2.5/3.3	270	4	6	-6 -7 -10	-7 -10	3	17	
CoolRunner XPLA3 Family — 3.3 Volt													
	XCR3032XL	750	32	48	3.3/5	3.3	36		5	-5 -7 -10	-7 -10	4	16
	XCR3064XL	1500	64	48	3.3/5	3.3	68		6	-6 -7 -10	-7 -10	4	16
	XCR3128XL	3000	128	48	3.3/5	3.3	108		6	-6 -7 -10	-7 -10	4	16
	XCR3256XL	6000	256	48	3.3/5	3.3	164		7.5	-7 -10 -12	-10 -12	4	16
	XCR3384XL	9000	384	48	3.3/5	3.3	220		7.5	-7 -10 -12	-10 -12	4	16
XCR3512XL	12000	512	48	3.3/5	3.3	260		7.5	-7 -10 -12	-10 -12	4	16	
XC9500XV Family — 2.5 Volt													
	XC9536XV	800	36	90	1.8/2.5/3.3	1.8/2.5/3.3	36	1	3.5	-3 -4 -5 -7	-7	3	18
	XC9572XV	1600	72	90	1.8/2.5/3.3	1.8/2.5/3.3	72	1	4	-4 -5 -7	-7	3	18
	XC95144XV	3200	144	90	1.8/2.5/3.3	1.8/2.5/3.3	117	2	4	-4 -5 -7	-7	3	18
	XC95288XV	6400	288	90	1.8/2.5/3.3	1.8/2.5/3.3	192	4	5	-5 -7 -10	-10	3	18
XC9500XL Family — 3.3 Volt													
	XC9536XL	800	36	90	2.5/3.3/5	2.5/3.3	36		5	-5 -7 -10	-7 -10	3	18
	XC9572XL	1600	72	90	2.5/3.3/5	2.5/3.3	72		5	-5 -7 -10	-7 -10	3	18
	XC95144XL	3200	144	90	2.5/3.3/5	2.5/3.3	117		5	-5 -7 -10	-7 -10	3	18
	XC95288XL	6400	288	90	2.5/3.3/5	2.5/3.3	192		6	-6 -7 -10	-7 -10	3	18