

		Virtex-4QV FPGAs
Logic Resources	Part Number	XQR4VSX55
	Core Voltage	1.2V
	Slices ⁽¹⁾	24,576
	Logic Cells	55,296
	CLB Flip-Flops	49,152
Memory Resources	Maximum Distributed RAM (Kbits)	384
	Block RAM/FIFO w/ECC (18kbits each)	320
	Total Block RAM (Kbits)	5,760
Clock Resources	Digital Clock Manager (DCM)	8
I/O Resources	Maximum Single-Ended I/Os	640
	Maximum Differential I/O Pairs	320
	Digitally Controlled Impedance	Yes
Embedded Hard IP Resources	DSP Slices	512
	18 x 18 Multipliers	—
	10/100/1000 Ethernet MAC Blocks	—
	PowerPC® Processor Blocks	—
Miscellaneous	Speed Grades	-10
	Configuration Memory (Mbits)	22.7
	Manufacturing Grades	V
	Total Ionizing Dose (krad)	300
	SEL Immunity (MeV-cm²/mg)	>125

Package ⁽²⁾	Area	Available User I/Os
CGA Packages (CG): ceramic column grid array (1.27 mm ball spacing)		
CG717 ⁽³⁾	35 x 35 mm	
CFA Packages (CF): flip-chip ceramic column grid array (1.0 mm ball spacing)		
CF1144 ⁽⁴⁾	35 x 35 mm	
CF1140 ⁽⁵⁾	35 x 35 mm	640
CF1509 ⁽⁶⁾	40 x 40 mm	
CQFP Packages (CB): ceramic brazed quad flat pack (0.025 inch lead spacing)		
CB228	1.55 x 1.55 in	

- Notes:
- Each slice comprises two 4-input logic function generators (LUTs), two storage elements, wide-function multiplexers, and carry logic.
 - For information on DSCC SMD availability contact Xilinx .
 - The BG728 and CG717 packages are footprint / pin compatible.
 - The CF1144 and FF1152 packages are footprint / pin compatible.
 - The CF1140 and FF1148 packages are footprint / pin compatible.
 - For the XQR4VLX200, the CF1509 and FF1513 packages are footprint / pin compatible. For the XQR4VFX140, the CF1509 and the FF1517 are footprint / pin compatible.