

		Virtex-4QV FPGAs
	Part Number	XQR4V5X55
	Core Voltage	1.2V
Logic Resources	Slices <sup>(1)</sup>	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 <sup>®</sup> Processor Blocks	—
Miscellaneous	Speed Grades	-10
	Configuration Memory (Mbits)	22.7
	Manufacturing Grades	V
	Total Ionizing Dose (krad)	300
	SEL Immunity (MeV-cm <sup>2</sup> /mg)	>125

Package <sup>(2)</sup>	Area	Available User I/Os
CGA Packages (CG): ceramic column grid array (1.27 mm ball spacing)		
CG717 <sup>(3)</sup>	35 x 35 mm	
CFA Packages (CF): flip-chip ceramic column grid array (1.0 mm ball spacing)		
CF1144 <sup>(4)</sup>	35 x 35 mm	
CF1140 <sup>(5)</sup>	35 x 35 mm	640
CF1509 <sup>(6)</sup>	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:
1. Each slice comprises two 4-input logic function generators (LUTs), two storage elements, wide-function multiplexers, and carry logic.
  2. For information on DSCC SMD availability contact Xilinx .
  3. The BG728 and CG717 packages are footprint / pin compatible.
  4. The CF1144 and FF1152 packages are footprint / pin compatible.
  5. The CF1140 and FF1148 packages are footprint / pin compatible.
  6. For the XQR4VLX200, the CF1509 and FF1513 packages are footprint / pin compatible. For the XQR4VFX140, the CF1509 and the FF1517 are footprint / pin compatible.