

Artix®-7Q Defense-grade FPGAs

	Part Number	XQ7A50T	XQ7A100T	XQ7A200T
Logic Resources	Slices	8,150	15,850	33,650
	Logic Cells	52,160	101,440	215,360
	CLB Flip-Flops	65,200	126,800	269,200
Memory Resources	Maximum Distributed RAM (Kb)	600	1,188	2,888
	Block RAM/FIFO w/ ECC (36 Kb each)	75	135	365
	Total Block RAM (Kb)	2,700	4,860	13,140
Clock Resources	Mixed Mode Clock Managers (MMCM)	5	6	10
I/O Resources	Maximum Single-Ended I/O	250	285	400
	Maximum Differential I/O Pairs	120	137	192
Embedded Hard IP Resources	DSP48 Slices	120	240	740
	PCI Express ⁽¹⁾	1	1	1
	Analog Front End (XADC) / SysMon Blocks	1	1	1
	Configuration AES / HMAC Blocks	1	1	1
	GTP 5.4/ 6.6 Gb/s Transceivers	4	4	8
Speed Grades	Industrial Temp (–40° to 100°C)	-1, -1L, -2	-1, -1L, -2	-1, -1L, -2
	Military Temp (–55° to 125°C)	-1	-1	-1
	Package⁽²⁾	Dimensions (mm)	Available User I/O: 3.3V SelectIO™ Pins (GTP Transceivers)	
	CS324	15 x 15		210 (0)
	CS325	15 x 15	150 (4)	
Footprint Compatible	FG484	23 x 23	250 (4)	285 (4)
	RB484 ⁽³⁾	23 x 23		285 (4)
	RB676 ⁽³⁾	27 x 27		400 (8)
	RS484 ⁽⁴⁾	19 x 19		285 (4)

XMP089 (v1.2)

- Notes:**
1. Supports PCI Express Base 2.1 specification at Gen1 and Gen2 data rates
 2. Design migration is available within the Artix-7Q family for like packages, but is not supported between other 7 Series families.
(**CS**: 0.8 mm wire-bond chip-scale. **FG**: 1.0 mm wire-bond fine-pitch.)
 3. RB484 & RB676 are ruggedized versions (4-corner lid added) of FB484 and FB676 packages. (**FB**: 1.0 mm lidless flip-chip.)
 4. RS484 is a ruggedized version (4-corner lid added) of SB484 package. (**SB**: 0.8 mm lidless flip-chip.)
 5. This is *preliminary product information, subject to change*. Please contact A&D Marketing for the latest information.

© Copyright 2012–2015 Xilinx, Inc. Xilinx, the Xilinx logo, Artix, ISE, Kintex, Spartan, Virtex, Vivado, Zynq, and other designated brands included herein are trademarks of Xilinx in the United States and other countries. PCI, PCIe and PCI Express are trademarks of PCI-SIG and used under license. All other trademarks are the property of their respective owners.