

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.

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