

Kintex-7 FPGAs
Optimized for Best Price-Performance
(1.0V, 0.9V)

Part Number		XC7K70T	XC7K160T	XC7K325T	XC7K355T	XC7K410T	XC7K420T	XC7K480T
EasyPath™ Cost Reduction Solutions ¹⁾		—	—	—	XCE7K355T	XCE7K410T	XCE7K420T	XCE7K480T
Logic Resources	Slices	10,250	25,350	50,950	55,650	63,550	65,150	74,650
	Logic Cells	65,600	162,240	326,080	356,160	406,720	416,960	477,760
	CLB Flip-Flops	82,000	202,800	407,600	445,200	508,400	521,200	597,200
	Maximum Distributed RAM (Kbits)	838	2,188	4,000	5,088	5,663	5,938	6,788
Memory Resources	Block RAM/FIFO w/ ECC (36Kbits each)	135	325	445	715	795	835	955
	Total Block RAM (Kbits)	4,860	11,700	16,020	25,740	28,620	30,060	34,380
Clock Resources	CMTs (1 MMCM + 1 PLL)	6	8	10	6	10	8	8
I/O Resources	Maximum Single-Ended I/O	300	400	500	300	500	400	400
	Maximum Differential I/O Pairs	144	192	240	144	240	192	192
Embedded Hard IP Resources	DSP48E1 Slices	240	600	840	1,440	1,540	1,680	1,920
	PCI Express ^{®2)}	1	1	1	1	1	1	1
	Agile Mixed Signal (AMS) / XADC	1	1	1	1	1	1	1
	Configuration AES / HMAC Blocks	1	1	1	1	1	1	1
	GTX 12.5 Gb/s Transceivers	8	8	16	24	16	32	32
Speed Grades	Commercial	-1, -2	-1, -2	-1, -2	-1, -2	-1, -2	-1, -2	-1, -2
	Extended	-2L, -3	-2L, -3	-2L, -3	-2L, -3	-2L, -3	-2L, -3	-2L, -3
	Industrial	-1, -2	-1, -2	-1, -2	-1, -2	-1, -2	-1, -2	-1, -2
Configuration	Configuration Memory (Mbits)	23.0	51.1	87.3	107.3	121.1	143.0	143.0
	Package ⁴⁾	Dimensions (mm)		Available User I/O: 3.3V SelectIO™ Pins, 1.8V SelectIO Pins (GTX Transceivers)				
Footprint Compatible	FBG484	23 x 23	185, 100 (4)	185, 100 (4)				
	FBG676	27 x 27	200, 100 (8)	250, 150 (8)	250, 150 (8)		250, 150 (8)	
	FFG676	27 x 27		250, 150 (8)	250, 150 (8)		250, 150 (8)	
Footprint Compatible	FBG900	31 x 31			350, 150 (16)		350, 150 (16)	
	FFG900	31 x 31			350, 150 (16)		350, 150 (16)	
	FFG901	31 x 31				300, 0 (24)		380, 0 (28)
	FFG1156	35 x 35					400, 0 (32)	400, 0 (32)

XMP085 (v3.4)

FBG 1.0mm Lidless flip-chip; **FFG**: 1.0mm Flip-chip fine-pitch

- Notes: 1. EasyPath™ solutions provide a fast and conversion-free path for cost reduction.
 2. Hard block supports PCI Express Base 2.1 specification at Gen1 and Gen2 data rates. Gen3 supported with soft IP.
 3. Leaded package options ("FBxxx" or "FFxxx") available for the following Kintex-7 devices: XC7K160T, XC7K325T, XC7K355T, XC7K410T, XC7K420T, XC7K480T
 4. Preliminary product information, subject to change. Please contact your Xilinx representative for the latest information.

Important: Verify all data in this document with the device data sheets found at www.xilinx.com/7