XILINX AEROSPACE & DEFENSE SOLUTIONS

		Defense-Grade FPGAs												
		Virtex®-4Q FPGAs								Virtex-II Pro XQ FPGAs		Virtex-II XQ FPGAs		
	Part Number	XQ4VLX25	XQ4VLX40	XQ4VLX60	XQ4VLX100	XQ4VLX160	XQ4VSX55	XQ4VFX60	XQ4VFX100	XQ2VP40	XQ2VP70	XQ2V1000	XQ2V3000	XQ2V6000
	Core Voltage	1.2V	1.2V	1.2V	1.2V	1.2V	1.2V	1.2V	1.2V	1.5V	1.5V	1.5V	1.5V	1.5V
Logic Resources	Slices[1]	10,752	18,432	26,624	49,152	67,584	24,576	25,280	42,176	19.392	33,088	5,120	14,336	33,792
	Logic Cells	24,192	41,472	59.904	110,592	152,064	55,296	56,880	94,896	44,632	74,448	11,520	32,256	76,032
	CLB Flip-Flops	21,504	36,864	53,248	98,304	135,168	49,152	50,560	84,352	38,784	66,176	10,240	28,672	67,584
Memory Resources	Maximum Distributed RAM (Kb)	168	288	416	768	1,056	384	395	659	606	1,034	160	448	1,056
	Block RAM/FIFO w/ECC (36 Kb each)	72	96	160	240	288	320	232	376	192	328	40	96	144
	Total Block RAM (Kb)	1,296	1,728	2,880	4,320	5,184	5,760	4,176	6,768	3,456	5,904	720	1,728	2,592
Clock Resources	Digital Clock Manager (DCM)	8	8	8	12	12	8	12	12	8	8	8	12	12
I/O Resources	Maximum Single-Ended I/Os	448	640	640	960	960	640	576	768	804	996	432	720	1,104
	Maximum Differential I/O Pairs	224	320	320	480	480	320	228	384	396	492	216	360	552
	Digitally Controlled Impedance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Embedded Hard IP Resources	DSP Slices	48	64	64	96	96	512	128	160	—	—	—	—	—
	18 x 18 Multipliers	—	—	—	—	—	—	—	—	192	328	40	96	144
	RocketIO™ Transceivers	—	—	—	—	—	—	16	20	8 or 12	20	—	—	—
	PowerPC® Processor Blocks	—	—	—	—	—	—	2	2	2	2	—	—	—
Miscellaneous	Speed Grades	-10	-10	-10	-10	-10	-10	-10	-10	-5	-5	-4	-4	-4
	Configuration Memory (Mb)	4.8	12.3	17.7	30.7	40.3	22.7	21	33	15.5	25.6	4.1	10.5	21.9
	Manufacturing Grades	M	I, M	M	I	I	M	I, M	I	N	N	N	M, N, B	M
	Packages	SF363, FF668	FF668	:668, FF1148, EF6	FF1148	FF1148	FF1148	EF672, FFG1152*	FF1152	FF1152, FG676	FF1704	FG456, BG575	CG717, BG728	CF1144

XMP076 (v2.3)

Notes: 1. Each slice comprises two 4-input logic function generators (LUTs), two storage elements, wide-function multiplexers, and carry logic.

Manufacturing Grades
http://www.xilinx.com/products/milaero/rpt003.pdf

Grade	Description	Temperature
V	Device Xilinx V-Grade Flow[1] Military Ceramic	T_j = –55°C to +125°C
H	Device Flip-Chip Radiation Tolerant Ceramic	T_j = –55°C to +125°C
B	SMD Radiation Tolerant and Non-RT SMD Military Ceran	T_j = –55°C to +125°C
N	Military Plastic	T_j = –55°C to +125°C
M	Military Ceramic or Plastic	T_j = –55°C to +125°C
I	Industrial Plastic	T_j = –40°C to +100°C

Notes: 1. Per ADQ0007.

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