

	Usable Gates (K)	Logic Gates	System Gates (see note 1)	Logic Cells (see note 2)	Total CLBs	Total Flip-Flop	Max. I/O	Max. RAM Bits	Config. Memory (K Bits)	XC1700 Serial PROM Req.
<b>XC4000EX Family - 5 Volt</b> <span style="float: right;">.5µm Triple Layer Metal Process</span>										
XC/XQ4028EX	18-50	28K	50K	2,432	1,024	2,560	256	32.8K	668	XC1701
XC4036EX	22-65	36K	65K	3,078	1,296	3,168	288	41.5K	833	XC1701
<b>XC4000XLA Family - 3.3 Volt</b> <span style="float: right;">Advanced .35µm Five Layer Metal Process</span>										
XC/XQ4013XLA	10-30	13K	30K	1,368	576	1,536	192	18.4K	393	XC17512L
XC4020XLA	13-40	20K	40K	1,862	784	2,016	224	25.1K	522	XC17512L
XC4028XLA	18-50	28K	50K	2,432	1,024	2,560	256	32.8K	668	XC1701L
XC/XQ4036XLA	22-65	36K	65K	3,078	1,296	3,168	288	41.5K	833	XC1701L
XC4044XLA	27-80	44K	80K	3,800	1,600	3,840	320	51.2K	1,015	XC1701L
XC4052XLA	33-100	52K	100K	4,598	1,936	4,576	352	62.0K	1,215	XC1702L
XC/XQ4062XLA	40-130	62K	130K	5,472	2,304	5,376	384	73.8K	1,434	XC1702L
XC4085XLA	55-180	58K	180K	7,448	3,136	7,168	448	100.4K	1,925	XC1702L
<b>XC4000XV Family - 2.5 Volt</b> <span style="float: right;">.25µm Five Layer Metal Process</span>										
XC40110XV	75-200	110K	220K	9,728	4,096	8,704	448	131.1K	2,488	XC1704L
XC40150XV	100-300	150K	300K	12,312	5,184	11,520	448	165.9K	3,373	XC1704L
XC40200XV	130-400	200K	400K	16,758	7,056	15,456	448	225.8K	4,551	XC1704L & XC17512L
XC40250XV	160-500	250K	500K	20,102	8,464	18,400	448	270.9K	5,434	XC1704L & XC1702L
<b>Spartan Family - 5 Volt and 3.3 Volt (XL)</b> <span style="float: right;">Advanced .5µm &amp; .35µm (XL) Process</span>										
XCS05/XL	2-5	3K	5K	238	100	360	80	3.2K	54	XC17S05 (XL)
XCS10/XL	3-10	5K	10K	466	196	616	112	6.3K	95	XC17S10 (XL)
XCS20/XL	7-20	10K	20K	950	400	1,120	160	12.8K	179	XC17S20 (XL)
XCS30/XL	10-30	13K	30K	1,368	576	1,536	192	18.4K	249	XC17S30 (XL)
XCS40/XL	13-40	20K	40K	1,862	784	2,016	224	25.1K	330	XC17S40 (XL)
<b>Virtex Family - 2.5 Volt</b>										
XCV50	20-50	20K	50K	1,728	384	1,536	180	57K	559	XC1701L
XCV100	30-100	30K	100K	2,700	600	2,400	180	79K	781	XC1701L
XCV150	45-150	45K	150K	3,888	864	3,456	260	104K	1,041	XC1701L
XCV200	60-200	60K	200K	5,292	1,176	4,704	284	133K	1,336	XC1702L
XCV300	80-300	80K	300K	6,912	1,536	6,144	316	164K	1,752	XC1702L
XCV400	130-400	130K	400K	10,800	2,400	9,600	404	236K	2,546	XC1704L
XCV600	185-600	185K	600K	15,552	3,456	13,824	500	319K	3,608	XC1704L
XCV800	250-800	250K	800K	21,168	4,704	18,816	512	416K	4,715	XC1704L & XC1701L
XCV1000	330-1M	330K	1M	27,648	6,144	24,576	612	524K	6,128	XC1704L & XC1702L

QPRO™ High-Reliability QML Products	Usable Gates (K)	Logic Gates (k)	System Gates (k) (see note 1)	Logic Cells (see note 2)	Total CLBs	Total Flip-Flop	Max. I/O	Max. RAM Bits (k)	Config. Memory (k Bits)	XC/QX SPROM Req.
<b>XQ4000EX Family - 5 Volt</b> <span style="float: right;">.5µm Triple Layer Metal Process</span>										
XQ4005E	3-9	5	9	466	196	616	112	6.3	9.5	XC17256D
XQ4010E	7-20	10	20	950	400	1,120	160	12.8	178	XC17256D
XQ4013E	10-30	13	30	1,368	576	1,536	192	18.4	248	XC17256D
XQ4025E	15-45	25	45	2,432	1,024	2,560	256	32.7	422	XC17256Dx2
XQ4028EX	18-50	28	50	2,432	1,024	2,560	256	32.7	422	XC17256Dx2
<b>XC4000XL Family - 3.3 Volt</b> <span style="float: right;">Advanced .35µm Five Layer Metal Process</span>										
XQ4013XL	10-30	13	30	1,368	576	1,536	192	18.4	393	XQ1701L
XQ4036XL	22-65	36	65	3,078	1,296	3,168	288	41.5	833	XQ1701L
XQ4062XL	40-130	62	130	5,472	2,304	5,376	384	73.8	1,434	XQ1701Lx2
XQ4085XL	55-180	85	180	7,448	3,136	7,168	448	100.4	1,925	XQ1701Lx2
<b>Virtex Family - 2.5 Volt</b> <span style="float: right;">.25µm Five Layer Metal Process</span>										
XQV100	30-100	30	100	2,700	600	2,400	180	79	781	XQ1701L
XQV300	80-300	80	300	6,912	1,536	6,144	316	164	1,751	XQ1701Lx2 or XQ1704L
XQV600	185-600	185	600	15,552	3,456	13,824	500	319	3,608	
XQV1000	330-1M	330	1M	27,648	6,144	24,576	512	524	6,128	

	Macrocells	Max. I/O	Pin-to-Pin Delay (ns)
XC9536	36	34	5
XC9572	72	72	7.5
XC95108	108	108	7.5
XC95144	144	133	7.5
XC95216	216	166	10
XC95288	288	192	10
<b>XC9500XL Family - 3.3 Volt CPLDs</b>			
XC9536XL	36	36	4
XC9572XL	72	72	5
XC95144XL	144	117	5
XC95288XL	288	192	6
<b>XC9500XV Family - 3.3 Volt CPLDs</b>			
XC9536XV	36	36	3.5
XC9572XV	72	72	4
XC95144XV	144	117	4
XC95288XV	288	192	5

	Speed Grade Options	
	Slowest	Fastest
XC4000EX	-4	-2
XC4000XLA	-09	-07
XC4000XV	-09	-07
Virtex	-4	-6
Spartan	-3	-4
SpartanXL	-4	-5
XQ4005X	-4	-4
XQ4000XL	-3	-3

Serial PROM Package Options										
	Density	PD8	S08	VO8	PC20	SO20	PC44	VQ44	3 Volt	5 Volt
XC1736E	36K	Y	Y	Y	Y					Y
XC1765E (EL)	65K	Y	Y	Y	Y				Y (EL)	Y
XC17128E (EL)	128K	Y		Y	Y				Y (EL)	Y
XC17256E (EL)	256K	Y		Y	Y				Y (EL)	Y
XC17512L	512K	Y			Y	Y			Y	
XC1701	1M	Y			Y	Y				Y
XC/XQ1701L	1M	Y			Y	Y			Y	
XC1702L	2M						Y	Y	Y	
XC1704L	4M						Y	Y	Y	
XC17S05	54K	Y		Y						Y
XC17S05XL	55K	Y		Y					Y	
XC17S10	95K	Y		Y						Y
XC17S10XL	96K	Y		Y					Y	
XC17S20	178K	Y		Y						Y
XC17S20XL	179K	Y		Y					Y	
XC17S30	248K	Y		Y						Y
XC17S30XL	249K	Y		Y					Y	
XC17S40	329K	Y				Y				Y
XC17S40XL	331K	Y				Y			Y	

QPRO Serial PROM Package Options				
	Density	DD8	CC44	SO20
XC17256D	256K	Y	-	-
XQ1701L	1M	-	Y	Y
XQ1704L	4M	-	Y	Y

- Notes:**
- System Gates include 20-30% of CLBs used as RAM
  - A Logic Cell is defined as a 4 input LUT and a Register

**Ordering Information for FPGAs / CPLDs**



