Say hello to a new level of performance: the Spartan™-II family now includes devices with more than 200,000 system gates. You get 100,000 system gates for under $10, at speeds of 200 MHz and beyond, giving you design flexibility that's hard to beat. These low-powered, 2.5V devices feature I/Os that operate at up to 3.3V with full 5V tolerance. Spartan-II devices also feature multiple delay locked loops, on-chip RAM (block and distributed), and versatile I/O technology that supports over 16 high-performance interface standards. You get all this in an FPGA that offers unlimited reprogrammability, and can even be upgraded in the field, remotely, over any network.

Robust Feature Set

- Flexible on-chip distributed and block memory
- Four digital delay-locked loops for efficient chip-level/board-level clock management
- Select I/O™ Technology for interfacing with all major bus standards such as HSTL, GTL, SSTL, and so on
- Full PCI compliance
- System speeds over 200 MHz
- Power management

Extensive Design Support

- Complete suite of design tools
- Extensive core support
- Compile designs in minutes

Advantages over ASICs

- No costly NRE charges
- No time consuming vector generation needed
- All devices are 100% tested by Xilinx
- Field upgradeable (remotely upgradeable, using Xilinx Online technology)
- No lengthy prototype or production lead times
- Priced aggressively against comparable ASICs

See www.xilinx.com for more information.

FPGA Product Selection Matrix

		DENSITY							FEATURES						
DEVICES	KEY FEATURES	Logic Cells	Maximum Logic Gates	Typical System Gate Range	Max. RAM Bits	CLB Matrix	CLBs	Flip-Flops	Max. I/O	Output Drive (mA)	PCI Compliant	1.8 Volt	2.5 Volt	3.3 Volt	5.0 Volt
XCS05	Spartan Family: High Volume ASIC Replacement/ High Performance/ SelectRAM Memory	238	3K	2K-5K	3K	10x10	100	360	77	12	Y	–	–	–	X
XCS10		466	5K	3K-10K	6K	14x14	196	616	112	12	Y	–	–	–	X
XCS20		950	10K	7K-20K	13K	20x20	400	1120	160	12	Y	–	–	–	X
XCS30		1368	13K	10K-30K	18K	24x24	576	1536	192	12	Y	–	–	–	X
XCS40		1862	20K	13K-40K	25K	28x28	784	2016	205	12	Y	–	–	–	X
XCS05XL	Spartan-XL Family: High Volume ASIC Replacement/ High Performance/ SelectRAM Memory	238	3K	2K-5K	3K	10x10	100	360	77	12/24	Y	–	–	X	*
XCS10XL		466	5K	3K-10K	6K	14x14	196	616	112	12/24	Y	–	–	X	*
XCS20XL		950	10K	7K-20K	13K	20x20	400	1120	160	12/24	Y	–	–	X	*
XCS30XL		1368	13K	10K-30K	18K	24x24	576	1536	192	12/24	Y	–	–	X	*
XCS40XL		1862	20K	13K-40K	25K	28x28	784	2016	224	12/24	Y	–	–	X	*
XC2S15	Spartan-II Family: High Volume BlockRAM Distributed RAM SelectI/O 4 DLLs	432	5K	5K-15K	22K	8x12	96	384	86	2/24	Y	–	X	I/O	*
XC2S30		972	12K	12K-30K	36K	12x18	216	864	132	2/24	Y	–	X	I/O	*
XC2S50		1728	21K	21K-50K	56K	16x24	384	1536	176	2/24	Y	–	X	I/O	*
XC2S100		2700	32K	32K-100K	78K	20x30	600	2400	196	2/24	Y	–	X	I/O	*
XC2S150		3888	47K	47K-150K	102K	24x36	864	3456	260	2/24	Y	–	X	I/O	*
XC2S200		5292	64K	64K-200K	130K	28x42	1,176	4704	284	2/24	Y	–	X	I/O	*

* I/Os are tolerant
X = Core and I/O voltage
I/Os = I/O voltage supported