PRODUCT GUIDE

October 1998

EPROMs

Part Number	Organization	Speeds	Description	Availability
Battery-Voltage™ **(2.7V to 3.6V)**				
AT27BV256	32K x 8	70-150 ns	256K-bit, 2.7-Volt to 3.6-Volt EPROM	Now
AT27BV512	64K x 8	70-150 ns	512K-bit, 2.7-Volt to 3.6-Volt EPROM	Now
AT27BV010	128K x 8	90-150 ns	1M-bit, 2.7-Volt to 3.6-Volt EPROM	Now
AT27BV1024	64K x 16	90-150 ns	1M-bit, 2.7-Volt to 3.6-Volt EPROM	Now
AT27BV020	256K x 8	90-150 ns	2M-bit, 2.7-Volt to 3.6-Volt EPROM	Now
AT27BV040	512K x 8	120-150 ns	4M-bit, 2.7-Volt to 3.6-Volt EPROM	Now
AT27BV4096	256K x 16	120-150 ns	4M-bit, 2.7-Volt to 3.6-Volt EPROM	Now
AT27BV400	512K x 8 / 256K x 16	150 ns	4M-bit, Byte-Selectable 2.7-Volt to 3.6-Volt EPROM	Nov 98
AT27BV800	1M x 8 / 512K x 16	150 ns	8M-bit, Byte-Selectable 2.7-Volt to 3.6-Volt EPROM	Nov 98
Low-Voltage (3.0 to 3.6V)				
AT27LV256A	32K x 8	55-150 ns	256K-bit, 3-Volt EPROM	Now
AT27LV512A	64K x 8	70-150 ns	512K-bit, 3-Volt EPROM	Now
AT27LV520	64K x 8	90 ns	512K-bit, Latched 3-Volt EPROM	Now
AT27LV010A	128K x 8	70-150 ns	1M-bit, 3-Volt EPROM	Now
AT27LV1026	2 x 32K x 16	35-55 ns	1M-bit, Interleaved 3-Volt EPROM	Now
AT27LV020A	256K x 8	90-150 ns	2M-bit, 3-Volt EPROM	Now
AT27LV040A	512K x 8	90-150 ns	4M-bit, 3-Volt EPROM	Now
Standard Voltage (5.0V)				
AT27C256R	32K x 8	45-150 ns	256K-bit, 5-Volt EPROM	Now
AT27C512R	64K x 8	45-150 ns	512K-bit, 5-Volt EPROM	Now
AT27C516	32K x 16	45-100 ns	512K-bit, 5-Volt EPROM	Now
AT27C520	64K x 8	70, 90 ns	512K-bit, Latched 5-Volt EPROM	Now
AT27C010,L	128K x 8	45-150 ns	1M-bit, 5-Volt EPROM Standard & Low-Power	Now
AT27C1024	64K x 16	45-150 ns	1M-bit, 5-Volt EPROM	Now
AT27C020	256K x 8	55-150 ns	2M-bit, 5-Volt EPROM	Now
AT27C2048	128K x 16	55-150 ns	2M-bit, 5-Volt EPROM	Now
AT27C040	512K x 8	70-150 ns	4M-bit, 5-Volt EPROM	Now
AT27C4096	256K x 16	55-150 ns	4M-bit, 5-Volt EPROM	Now
AT27C400	512K x 8 / 256K x 16	70-150 ns	4M-bit, Byte-Selectable 5-Volt EPROM	Nov 98
AT27C080	1M x 8	90-150 ns	8M-bit, 5-Volt EPROM	Now
AT27C800	1M x 8 / 512K x 16	100-150 ns	8M-bit, Byte-Selectable 5-Volt EPROM	Now

Atmel Corporation • 2325 Orchard Parkway • San Jose, CA 95131
TEL: (408) 441-0311 • FAX: (408) 487-2600

DataFlash®

Part Number	Speed	Density	Description	Availability
Battery-Voltage **(2.7V to 3.6V)**				
AT45DB011	13 MHz	1M bit	2.7-Volt Only Serial Interface Flash with One 264-Byte SRAM Buffer	Now
AT45DB021	5 MHz	2M bit	2.7-Volt Only Serial-Interface Flash with Two 264-Byte SRAM Buffers	Now
AT45DB041	5 MHz	4M bit	2.7-Volt Only Serial-Interface Flash with Two 264-Byte SRAM Buffers	Now
AT45DB080	2 MHz	8M bit	2.7-Volt Only Sequential Access Parallel I/O Flash with Two 264-Byte SRAM Buffers	Now
AT45DB081	10 MHz	8M bit	2.7-Volt Only Serial-Interface Flash with Two 264-Byte SRAM Buffers	Now
AT45DB161	13 MHz	16M bit	2.7-Volt Only Serial-Interface Flash with Two 528-Byte SRAM Buffers	Now
AT45DB321	13 MHz	32M bit	2.7-Volt Only Serial Interface Flash with Two 528-Byte SRAM Buffers	4Q98
Standard Voltage (5.0V)				
AT45D011	15 MHz	1M bit	5.0-Volt Only Serial Interface Flash with One 264-Byte SRAM Buffer	Now
AT45D021	10 MHz	2M bit	5.0-Volt Only Serial-Interface Flash with Two 264-Byte SRAM Buffers	Now
AT45D041	10 MHz	4M bit	5.0-Volt Only Serial-Interface Flash with Two 264-Byte SRAM Buffers	Now
AT45D081	10 MHz	8M bit	5.0-Volt Only Serial-Interface Flash with Two 264-Byte SRAM Buffers	Now
AT45D161	15 MHz	16M bit	5.0-Volt Only Serial-Interface Flash with Two 528-Byte SRAM Buffers	Now
AT45D321	15 MHz	32M bit	2.7-Volt Only Serial Interface Flash with Two 528-Byte SRAM Buffers	4Q98

Flash

Part Number	Organization	Speeds	Description	Availability
Lithium ***Battery-Voltage*** **(2.5V to 3.0V)**				
AT49LBV010	128K x 8	120-200 ns	1M-bit, 2.5-Volt Read and 2.5-Volt Byte-Write Flash	Now
AT49LBV020	256K x 8	120-200 ns	2M-bit, 2.5-Volt Read and 2.5-Volt Byte-Write Flash	Now
AT49LBV040	512K x 8	120-200 ns	4M-bit, 2.5-Volt Read and 2.5-Volt Byte-Write Flash	Now
AT49LBV080	1M x 8	120-200 ns	8M-bit, 2.5-Volt Read and 2.5-Volt Byte-Write Flash	Now
AT49LBV080T	1M x 8	120-200 ns	8M-bit, 2.5-Volt Read and 2.5-Volt Byte-Write Flash (Top Boot)	Now
AT49LBV008	1M x 8	120-200 ns	8M-bit, 2.5-Volt Read and 2.5-Volt Byte-Write Flash	Now
AT49LBV008T	1M x 8	120-200 ns	8M-bit, 2.5-Volt Read and 2.5-Volt Byte-Write Flash (Top Boot)	Now
Battery-Voltage **(2.7V to 3.6V)**				
AT29BV010A	128K x 8	200-250 ns	1M-bit, 2.7-Volt Read and 2.7-Volt Write Sectored Flash	Now
AT29BV020	256K x 8	250 ns	2M-bit, 2.7-Volt Read and 2.7-Volt Write Sectored Flash	Now
AT29BV040A	512K x 8	250 ns	4M-bit, 2.7-Volt Read and 2.7-Volt Write Sectored Flash	Now
AT49BV512	64K x 8	120-150 ns	512K-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Flash	Now
AT49BV010	128K x 8	120-150 ns	1M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Flash	Now
AT49HBV010	128K x 8	90-150 ns	1M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Flash (High-Speed)	Now
AT49BV001	128K x 8	70-120 ns	1M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash	4Q98
AT49BV001N	128K x 8	70-120 ns	1M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash	4Q98
AT49BV001T	128K x 8	70-120 ns	1M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49BV020	256K x 8	90-150 ns	2M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Flash	Now
AT49BV002	256K x 8	70-120 ns	2M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash	Now
AT49BV002N	256K x 8	70-120 ns	2M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash	Now
AT49BV002T	256K x 8	70-120 ns	2M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49BV2048	128K x 16	120-150 ns	2M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Flash	Now

Flash (Continued)

Part Number	Organization	Speeds	Description	Availability
AT49BV2048A	128K x 16	150-200 ns	2M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash	Now
AT49BV040	512K x 8	120-150 ns	4M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Flash	Now
AT49BV040T	512K x 8	150-200 ns	4M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49BV004	512K x 8	120-200 ns	4M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash	4Q98
AT49BV004T	512K x 8	120-200 ns	4M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash (Top Boot)	4Q98
AT49BV4096	256K x 16	120-150 ns	4M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Flash	Now
AT49BV4096A	256K x 16	120-200 ns	4M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash	Now
AT49BV4096AT	256K x 16	120-200 ns	4M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49BV080	1M x 8	120-150 ns	8M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Flash	Now
AT49BV080T	1M x 8	120-150 ns	8M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Flash (Top Boot)	Now
AT49BV008	1M x 8	120-150 ns	8M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Flash	Now
AT49BV8192	512K x 16	120-150 ns	8M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Flash	Now
AT49BV8192A	512K x 16	120-200 ns	8M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash	Now
AT49BV8192AT	512K x 16	120-200 ns	8M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49BV8192T	512K x 16	120-150 ns	8M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Flash (Top Boot)	Now
AT49BV1604	1M x 16	120-150 ns	16M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash	Now
AT49BV1604T	1M x 16	90,120 ns	16M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49BV1614	2M x 8	90,120 ns	16M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash	Now
AT49BV1614T	2M x 8	90,120 ns	16M-bit, 2.7-Volt Read and 2.7-Volt Byte-Write Sectored Flash (Top Boot)	Now
Low-Voltage (3.0V to 3.6V)				
AT29LV256	32K x 8	150-250 ns	256K-bit, 3-Volt Read and 3-Volt Write Sectored Flash	Now
AT29LV512	64K x 8	150-250 ns	512K-bit, 3-Volt Read and 3-Volt Write Sectored Flash	Now
AT29LV010A	128K x 8	150-250 ns	1M-bit, 3-Volt Read and 3-Volt Write Sectored Flash	Now
AT29LV1024	64K x 16	150-250 ns	1M-bit, 3-Volt Read and 3-Volt Write Sectored Flash	Now
AT29LV020	256K x 8	200-250 ns	2M-bit, 3-Volt Read and 3-Volt Write Sectored Flash	Now
AT29LV040A	512K x 8	200-250 ns	4M-bit, 3-Volt Read and 3-Volt Write Sectored Flash	Now
AT49LV512	64K x 8	90-120 ns	512K-bit, 3-Volt Read and 2.7-Volt Byte-Write Flash	Now
AT49LV010	128K x 8	120-150 ns	1M-bit, 3-Volt Read and 3-Volt Byte-Write Flash	Now
AT49HLV010	128K x 8	90 ns	1M-bit, 3-Volt Read and 3-Volt Byte-Write Flash (High-Speed)	Now
AT49LV001	128K x 8	55-120 ns	1M-bit, 3-Volt Read and 3-Volt Byte-Write Sectored Flash	4Q98
AT49LV001N	128K x 8	55-120 ns	1M-bit, 3-Volt Read and 3-Volt Byte-Write Sectored Flash	4Q98
AT49LV001T	128K x 8	55-90 ns	1M-bit, 3-Volt Read and 2.7-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49LV020	256K x 8	90-150 ns	2M-bit, 3-Volt Read and 3-Volt Byte-Write Flash	Now
AT49LV002	256K x 8	55-120 ns	2M-bit, 3-Volt Read and 3-Volt Byte-Write Sectored Flash	Now
AT49LV002N	256K x 8	55-120 ns	2M-bit, 3-Volt Read and 3-Volt Byte-Write Sectored Flash	Now
AT49LV002T	256K x 8	55-90 ns	2M-bit, 3-Volt Read and 2.7-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49LV2048	128K x 16	120-150 ns	2M-bit, 3-Volt Read and 3-Volt Byte-Write Flash	Now
AT49LV040	512K x 8	90-150 ns	4M-bit, 3-Volt Read and 3-Volt Byte-Write Flash	Now
AT49LV040T	512K x 8	120-200 ns	4M-bit, 3-Volt Read and 3-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49LV4096	256K x 16	120-150 ns	4M-bit, 3-Volt Read and 3-Volt Byte-Write Flash	Now
AT49LV080	1M x 8	120-150 ns	8M-bit, 3-Volt Read and 3-Volt Byte-Write Flash	Now

Flash (Continued)

Part Number	Organization	Speeds	Description	Availability
AT49LV080T	1M x 8	120-150 ns	8M-bit, 3-Volt Read and 3-Volt Byte-Write Flash (Top Boot)	Now
AT49LV008	1M x 8	120-150 ns	8M-bit, 3-Volt Read and 3-Volt Byte-Write Flash	Now
AT49LV008T	1M x 8	110,120ns	8M-bit, 3-volt Read and 3-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49LV8192	512K x 16	120-150 ns	8M-bit, 3-Volt Read and 3-Volt Byte-Write Flash	Now
AT49LV8192T	512K x 16	120-150 ns	8M-bit, 3-Volt Read and 3-Volt Byte-Write Flash (Top Boot)	Now
Standard Voltage (5.0V)				
AT29C256	32K x 8	70-150 ns	256K-bit, 5-Volt Read and 5-Volt Write Sectored Flash	Now
AT29C257	32K x 8	70-150 ns	256K-bit, 5-Volt Read and 5-Volt Write Sectored Flash	Now
AT29C512	64K x 8	70-150 ns	512K-bit, 5-Volt Read and 5-Volt Write Sectored Flash	Now
AT29C010A	128K x 8	70-150 ns	1M-bit, 5-Volt Read and 5-Volt Write Sectored Flash	Now
AT29C1024	64K x 16	70-150 ns	1M-bit, 5-Volt Read and 5-Volt Write Sectored Flash	Now
AT29C020	256K x 8	90-150 ns	2M-bit, 5-Volt Read and 5-Volt Write Sectored Flash	Now
AT29C040A	512K x 8	100-200 ns	4M-bit, 5-Volt Read and 5-Volt Write Sectored Flash	Now
AT49F512	64K x 8	55-90 ns	512K-bit, 5-Volt Read and 5-Volt Byte-Write Flash	Now
AT49F010	128K x 8	70-120 ns	1M-bit, 5-Volt Read and 5-Volt Byte-Write Flash	Now
AT49HF010	128K x 8	45-55 ns	1M-bit, 5-Volt Read and 5-Volt Byte-Write Flash (High-Speed)	Now
AT49F001	128K x 8	55-120 ns	1M-bit, 5-volt Read and 5-Volt Byte-Write Sectored Flash	4Q98
AT49F001N	128K x 8	55-120 ns	1M-bit, 5-volt Read and 5-Volt Byte-Write Sectored Flash	4Q98
AT49F001T	128K x 8	55-90 ns	1M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49F1024	64K x 16	55-90 ns	1M-bit, 5-Volt Read and 5-Volt Byte-Write Flash	Now
AT49F1025	64K x 16	55-90 ns	1M-bit, 5-Volt Read and 5-Volt Byte-Write Flash	Now
AT49F020	256K x 8	55-120 ns	2M-bit, 5-Volt Read and 5-Volt Byte-Write Flash	Now
AT49F002	256K x 8	50-120 ns	2M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash	Now
AT49F002N	256K x 8	50-120 ns	2M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash	Now
AT49F002T	256K x 8	50-70 ns	2M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash	Now
AT49F2048	128K x 16	70-120 ns	2M-bit, 5-Volt Read and 5-Volt Byte-Write Flash	Now
AT49F2048A	128K x 16	70-120 ns	2M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash	Now
AT49F040	512K x 8	70-150 ns	4M-bit, 5-Volt Read and 5-Volt Byte-Write Flash	Now
AT49F040T	512K x 8	90-150 ns	4M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49F004	512K x 8	70-120 ns	4M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash	4Q98
AT49F004T	512K x 8	70-120 ns	4M-bit, 5-volt Read and 5-Volt Byte-Write Sectored Flash (Top Boot)	4Q98
AT49F4096	256K x 16	90-120 ns	4M-bit, 5-Volt Read and 5-Volt Byte-Write Flash	Now
AT49F4096A	256K x 16	70-120 ns	4M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash	Now
AT49F4096AT	256K x 16	70-120 ns	4M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49F080	1M x 8	90-150 ns	8M-bit, 5-Volt Read and 5-Volt Byte-Write Flash	Now
AT49F080T	1M x 8	90-150 ns	8M-bit, 5-Volt Read and 5-Volt Byte-Write Flash (Top Boot)	Now
AT49F008	1M x 8	90,120,150 ns	8M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash	Now
AT49F008T	1M x 8	90,120,150 ns	8M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49F8192	512K x 16	90,120 ns	8M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash	Now
AT49F8192A	512K x 16	70-120 ns	8M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash	Now
AT49F8192AT	512K x 16	70-120 ns	8M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash (Top Boot)	Now

Flash (Continued)

Part Number	Organization	Speeds	Description	Availability
AT49F8192T	512K x 16	90, 120 ns	8M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49F1604	1M x 16	70, 90 ns	16M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash	Now
AT49F1604T	1M x 16	70, 90 ns	16M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash (Top Boot)	Now
AT49F1614	2M x 8	70, 90 ns	16M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash	Now
AT49F1614T	2M x 8	70, 90 ns	16M-bit, 5-Volt Read and 5-Volt Byte-Write Sectored Flash (Top Boot)	Now

Flash Memory Cards

Part Number	Organization	V_{CC}	Description	Availability
AT5FC001	1M byte	5-Volt	PCMCIA Compatible Flash Memory Card	Now
AT5FC002	2M byte	5-Volt	PCMCIA Compatible Flash Memory Card	Now
AT5FC004	4M byte	5-Volt	PCMCIA Compatible Flash Memory Card	Now
AT5FC008	8M byte	5-Volt	PCMCIA Compatible Flash Memory Card	Now

Gate Arrays/Embedded Arrays

Device Name	Gates	Pins	Description	Availability
ATL18 Series	4.8M	Up to 1200	0.18-Micron CMOS Gate Array/Embedded Array, 1.8-Volt Operation, 30 Versions with Various Pin & Gate Counts, Memory, Megacells	1H2000
ATL25 Series	Up to 7.3M	Up to 1038	0.25-Micron CMOS Gate Array/Embedded Array, 1.0 to 2.5-Volt Operation, 23 Versions with Various Pin & Gate Counts, Memory, Megacells	1Q99
ATL25/EE Series	Up to 7.3M	Up to 1038	0.25-Micron CMOS Embedded Array Combining Logic and EE Memory, 2.5-Volt Operation, Various Gate Counts, Megacells and Memory Configuration. Up to 4M-bit EE Memory	1H2000
ATL25/Flash Series	Up to 7.3M	Up to 1038	0.25-Micron CMOS Embedded Array Combining CMOS Logic and Flash Memory, 2.5-Volt Operation. Various Gate Counts, Megacells and Memory Configuration. Up to 64M-bit Flash Memory	2H99
ATL35 Series	Up to 3.7M	Up to 976	0.35-Micron CMOS Gate Array/Embedded Array, 1.0-Volt to 3.3-Volt Operation, 23 Versions with Various Pin & Gate Counts, Memory, Megacells	Now
ATL35/EE Series	Up to 3.7M	Up to 976	0.35-Micron Embedded Array combining CMOS Logic and EE Memory, 2.5-Volt Operation, Various Gate Counts, Megacells, and Memory Configurations. Up to 1M-bit EE Memory	1H99
ATL35/Flash Series	Up to 3.7M	Up to 976	0.35-Micron Embedded Array Combining CMOS Logic and Flash Memory, 2.0 and 3.3-Volt Operation, Various Gate Counts, Megacells and Memory Configurations. Up to 32M-bit Flash Memory	1Q99
ATL50 Series	Up to 590K	Up to 480	0.5-Micron CMOS Gate Array/Embedded Array, 2.0-Volt & 3.3-Volt Voltage Operation, 16 Versions with Various Pin & Gate Counts, Memory, Megacells	Now
ATL50/EE Series	Up to 1.9M	Up to 684	0.5-Micron Embedded Array Combining CMOS Logic with EE and Flash Memory, 2.0 and 3.3-Volt Operation, Various Gate Counts, Megacells and Memory Configurations. Up to 1M-bit Flash Memory and 64K-bit EE Memory	Now
ATLS60 Series	Up to 88K	Up to 256	0.6-Micron CMOS Gate Array/Embedded Array, 3.3-Volt & 5.0-Volt Operation, Staggered Row Bond Pads, 8 Versions with Various Pin & Gate Counts, Memory, Megacells	Now
ATL60 Series	Up to 590K	Up to 480	0.6-Micron CMOS Gate Array/Embedded Array, 3.3-Volt & 5.0-Volt Operation, 16 Versions with Various Pin & Gate Counts, Memory, Megacells	Now
Megacells			ARM7TDMI™, AVR® (8-bit RISC), OakDSPCore™, LodeDSPCore™, Ethernet MAC, USB Cores, PCI Cores, plus others	Now
Memory			Flash, EEPROM, SRAM, ROM, Dual Port SRAM, FIFO and CAM	Now
I/O Interfaces			CMOS, TTL, LVDS, PCI, USB, SCSI, LVD SCSI, PLL	Now

Cell-Based ICs

Part Number	Description	Availability
ATC50	0.5-Micron 3-Layer Metal CMOS, 3.3V Operation, Digital, Analog, Memory, Macrocells	Now
ATC50/EE	0.5-Micron 3-Layer Metal CMOS with Embedded EEPROM, 3.3-Volt Operation	Now
ATC35	0.35-Micron 3/5-Layer Metal CMOS 3.3-Volt Operation, Digital, Analog, Memory, Megacells	Now
ATC35/EE	0.35-Micron 3/5-Layer Metal CMOS with Embedded EEPROM, 3.3-Volt Operation	1H99
ATC35/Flash	0.35-Micron 3/5-Layer Metal CMOS with embedded Flash, 3.3-Volt Operation	1H99
ATC25	0.25-Micron 3/5-Layer Metal CMOS, 2.5-Volt Operation, Digital, Analog, Memory, Macrocells	1H99
ATC25/EE	0.25-Micron 3/5-Layer Metal CMOS with Embedded EEPROM, 2.5-Volt Operation	1H2000
ATC25/Flash	0.25-Micron 3/5-Layer Metal CMOS with Embedded Flash, 2.5-Volt Operation	1H2000
ATC18	0.18-Micron 3/5-Layer Metal CMOS, 1.8-Volt Operation, Digital, Analog, Memory, Macrocells	2H99
Macrocells	ARM/Thumb™, AVR®, OakDSPCore™, Ethernet MAC, AT8051, AT8237, AT8251, AT8254, AT8255, AT8259, AT82530, AT14818,AT16450, RAM, Dual-port RAM, ROM, Flash, EEPROM, PCI, SPI, USB, Codec, A/D, D/A, OpAmp, Comp., Osc., etc.	Now

PLDs

Part Number	Packages	Speeds	Description	Availability
5-Volt Electrically Erasable				
ATF16V8B	20-pin	10-25 ns	8 FFs, 8 I/O Pins, Standard-Power	Now
ATF16V8BQ/BQL	20-pin	10-25 ns	8 FFs, 8 I/O Pins, Quarter-Power, Low-Power	Now
ATF16V8C	20-pin	5-7.5 ns	8 FFs, 8 I/O Pins, Standard-Power	Now
ATF16V8CZ	20-pin	12-15 ns	8 FFs, 8 I/O Pins, Zero-Power	Now
ATF20V8B	24, 28-pin	7.5-25 ns	8 FFs, 8 I/O Pins, Standard-Power	Now
ATF20V8BQ/BQL	24, 28-pin	10-25 ns	8 FFs, 8 I/O Pins, Quarter-Power, Low-Power	Now
ATF20V8C	24, 28-pin	5-7 ns	8 FFs, 8 I/O Pins, Standard-Power	1H99
ATF20V8CZ	24, 28-pin	12-15 ns	8 FFs, 8 I/O Pins, Zero-Power	1H99
ATF22V10B	24, 28-pin	15-25 ns	10 FFs, 10 I/O Pins, Standard-Power	Now
ATF22V10BQ/BQL	24, 28-pin	15-25 ns	10 FFs, 10 I/O Pins, Quarter-Power, Low-Power	Now
ATF22V10C	24, 28-pin	5-10 ns	10 FFs, 10 I/O Pins, Standard-Power	Now
ATF22V10CZ	24, 28-pin	12-15 ns	10 FFs, 10 I/O Pins, Zero-Power	Now
ATF750C/CL	24, 28-pin	7.5-25 ns	20 FFs, 10 I/O Pins, Standard & Low-Power	4Q98
ATF2500C/CL	40, 44-pin	20-25 ns	48 FFs, 24 I/O Pins, Standard & Low-Power	3Q99
ATFV2500CQ/CQL	40, 44-pin	20-25 ns	48 FFs, 24 I/O Pins, Quarter-Power, Low-Power	3Q99
ATF1500/L	44-pin	7.5-25 ns	32 Macrocell, Standard & Low-Power	Now
ATF1500A/AL	44-pin	7.5-25 ns	32 Macrocell, Standard & Low-Power	Now
ATF1502AS/L	44-pin	7.5-25 ns	32 Macrocell w/ISP, Standard & Low-Power	1Q99
ATF1504AS/L	44, 68, 84, 100-pin	7.5-25 ns	64 Macrocell w/ISP, Standard & Low-Power	Now
ATF1508AS/L	68, 84, 100, 160-pin	7.5-25 ns	128 Macrocell w/ISP, Standard & Low-Power	Now
ATF1516AS/L	160, 192, 208-pin	10-25 ns	256 Macrocell w/ISP, Standard & Low-Power	2Q99

PLDs (Continued)

Part Number	Packages	Speeds	Description	Availability
Low-Voltage (3.0V) Electrically Erasable				
ATF16LV8C	20-pin	10-15 ns	8 FFs, 8 I/O Pins, Low-Voltage	Now
ATF16LV8CZ	20-pin	15-25 ns	8 FFs, 8 I/O Pins, Low-Voltage, Zero-Power	TBA
AT22LV10/L	24, 28-pin	20-30 ns	10 FFs, 10 I/O Pins, Low-Voltage & Low-Power (EPROM-based)	Now
ATF750LVC/LVCL	24, 28-pin	10-25 ns	20 FFs, 10 I/O Pins, Low-Voltage & Low-Power	4Q98
ATF1500ABV	44-pin	12-15 ns	32 FFs, 32 I/O Pins, Low-Voltage	Now
ATF1500ABVL	44-pin	25 ns	32 FFs, 32 I/O Pins, Low-Voltage & Low-Power	TBA
ATF22LV10C	24, 28-pin	10-15 ns	10 FFs, 10 I/O Pins, Low-Voltage	Now
ATF22LV10CZ	24, 28-pin	15-25 ns	10 FFs, 10 I/O Pins, Low-Voltage, Zero-Power	Now
5-Volt EPROM-Based				
ATV750/L	24, 28-pin	20-25 ns	20 FFs, 10 I/O Pins, Standard & Low-Power	Now
ATV750B/BL	24, 28-pin	7.5-25 ns	20 FFs, 10 I/O Pins, Standard & Low-Power	Now
ATV2500H/L	40, 44-pin	25-35 ns	48 FFs, 24 I/O Pins, Standard & Low-Power	Now
ATV2500B/BL	44-pin	12-20 ns	48 FFs, 24 I/O Pins, Standard & Low-Power	Now
ATV2500BQ/BQL	40, 44-pin	20-25 ns	48 FFs, 24 I/O Pins, Quarter-Power, Low-Power	Now

PLD Tools - Software and Hardware

Part Number	Description	Availability
ATDS1100PC	Atmel – Synario Entry (Includes ABEL, Schematic Entry, Simulation)	Now
ATDS1120PC	Atmel – Synario Verilog Simulation	Now
ATDS1130PC	Atmel – Synario VHDL Synthesis	Now
ATDS1150PC	Atmel – ISP Kit	Now
ATDS1160PC	Atmel – ISP Programming Board	Now
ATDS1161PC	Atmel – 44-pin PLCC Adaptor Board	Now
ATDS1162PC	Atmel – 44-pin TQFP Adaptor Board	Now
ATDS1163PC	Atmel – 68-pin PLCC Adaptor Board	Now
ATDS1164PC	Atmel – 100-pin PQFP Adaptor Board	Now
ATDS1165PC	Atmel – 100-pin TQFP Adaptor Board	Now
ATDS1166PC	Atmel – 160-pin PQFP Adaptor Board	Now

FPGA Serial Configuration EEPROM

Part Number	Memory Size	Description	Availability
Standard Voltage (5.0V)			
AT17C65	65,536 x 1	65K-bit FPGA Configuration EEPROM	Now
AT17C65A	65,536 x 1	65K-bit FPGA Configuration EEPROM, Altera pinout	Now
AT17C128	131,072 x 1	128K-bit FPGA Configuration EEPROM	Now
AT17C256	262,144 x 1	256K-bit FPGA Configuration EEPROM	Now
AT17C256A	262,144 x 1	256K-bit FPGA Configuration EEPROM, Altera pinout	Now
AT17C512	524,288 x 1	512K-bit FPGA Configuration EEPROM	Now
AT17C512A	524,288 x 1	512K-bit FPGA Configuration EEPROM, Altera pinout	Now
AT17C010	1,048,576 x 1	1M-bit FPGA Configuration EEPROM	Now
AT17C010A	1,048,576 x 1	1M-bit FPGA Configuration EEPROM, Altera pinout	Now
Low-Voltage (3.3V)			
AT17LV65	65,536 x 1	65K-bit FPGA Configuration EEPROM, 3.3-Volt	Now
AT17LV65A	65,536 x 1	65K-bit FPGA Configuration EEPROM, 3.3-Volt, Altera pinout	Now
AT17LV128	131,072 x 1	128K-bit FPGA Configuration EEPROM, 3.3-Volt	Now
AT17LV256	262,144 x 1	256K-bit FPGA Configuration EEPROM, 3.3-Volt	Now
AT17LV256A	262,144 x 1	256K-bit FPGA Configuration EEPROM, 3.3-Volt, Altera pinout	Now
AT17LV512	524,288 x 1	512K-bit FPGA Configuration EEPROM, 3.3-Volt	Now
AT17LV512A	524,288 x 1	512K-bit FPGA Configuration EEPROM, 3.3-Volt, Altera pinout	Now
AT17LV010	1,048,576 x 1	1M-bit FPGA Configuration EEPROM, 3.3-Volt	Now
AT17LV010A	1,048,576 x 1	1M-bit FPGA Configuration EEPROM, 3.3-Volt, Altera pinout	Now

FPGAs - AT6000

Part Number	Registers	Usable Gates	Frequency	Description	Availability
Standard Voltage (5.0V)					
AT6002	1,024	6K	350 MHz	96 I/O Pins, 5-Volt, Very Low Power	Now
AT6003	1,600	9K	350 MHz	120 I/O Pins, 5-Volt, Very Low Power	Now
AT6005	3,136	15K	350 MHz	140 I/O Pins, 5-Volt, Very Low Power	Now
AT6010	6,400	30K	350 MHz	204 I/O Pins, 5-Volt, Very Low Power	Now
Low-Voltage (3.3V)					
AT6002LV	1,024	6K	250 MHz	96 I/O Pins, 3.3-Volt, Very Low Power	Now
AT6003LV	1,600	9K	250 MHz	120 I/O Pins, 3.3-Volt, Very Low Power	Now
AT6005LV	3,136	15K	250 MHz	140 I/O Pins, 3.3-Volt, Very Low Power	Now
AT6010LV	6,400	30K	250 MHz	204 I/O Pins, 3.3-Volt, Very Low Power	Now

FPGAs - AT40K

Part Number	Registers	Usable Gates	Frequency	RAM	Description	Availability
Standard Voltage (5.0V)						
AT40K05	256	5K-10K	250 MHz	2,048	128 I/O Pins, 5-Volt, Very Low Power	Now
AT40K10	576	10K-20K	250 MHz	4,096	192 I/O Pins, 5-Volt, Very Low Power	Now
AT40K20	1,024	20K-30K	250 MHz	8,192	256 I/O Pins, 5-Volt, Very Low Power	Now
AT40K30	1,600	30K-40K	250 MHz	12,800	320 I/O Pins, 5-Volt, Very Low Power	4Q98
AT40K40	2,304	40K-50K	250 MHz	18,432	384 I/O Pins, 5-Volt, Very Low Power	Now
Low-Voltage (3.3V)						
AT40K05LV	256	5K-10K	250 MHz	2,048	128 I/O Pins, 3.3-Volt, Very Low Power	Now
AT40K10LV	576	10K-20K	250 MHz	4,096	192 I/O Pins, 3.3-Volt, Very Low Power	Now
AT40K20LV	1,024	20K-30K	250 MHz	8,192	256 I/O Pins, 3.3-Volt, Very Low Power	Now
AT40K30LV	1,600	30K-40K	250 MHz	12,800	320 I/O Pins, 3.3-Volt, Very Low Power	4Q98
AT40K40LV	2,304	40K-50K	250 MHz	18,432	384 I/O Pins, 3.3-Volt, Very Low Power	Now

FPGA Design Development Software

FPGA design tools are available across a broad range of CAE tool vendors and PC and workstation platforms. Design methods supported include: schematic capture, logic synthesis (VHDL and Verilog), PLD entry, (ABEL and CUPL), and automatic component generation of hard macros for user-parametrized structured logic (arithmetic elements, counters, registers, encoders, decoders, and other common functions). Refer to current Configurable Logic Data Book.

CAE Tool Support:

Cadence, Everest, Exemplar, Mentor, OrCAD, Synopsys, Synario, Veribest, Verilog, ViewLogic.

Platform Support:

PC (Windows 3.1, 95, NT), SUN Workstations, HP Workstations.

AT89 Series (8-bit Microcontrollers)

Part Number	Memory Size	Description	Availability
AT80F51	4K x 8	80C31 Microcontroller with 4K ROM replacement	Now
AT80F52	8K x 8	80C32 Microcontroller with 8K ROM replacement	Now
AT87F51	4K x 8	80C31 Microcontroller with 4K OTP QuickFlash	Now
AT87F52	8K x 8	80C32 Microcontroller with 8K OTP QuickFlash	Now
AT89C51	4K x 8	80C31 Microcontroller with 4K bytes Flash	Now
AT89LV51	4K x 8	2.7-Volt, 80C31 Microcontroller with 4K bytes Flash	Now
AT89C52	8K x 8	80C32 Microcontroller with 8K bytes Flash	Now
AT89LV52	8K x 8	2.7-Volt, 80C32 Microcontroller with 8K bytes Flash	Now
AT89C1051U	1K x 8	80C31 Microcontroller with 1K bytes Flash, 20-Pin Package	Now
AT89C2051	2K x 8	80C31 Microcontroller with 2K bytes Flash, 20-Pin Package	Now
AT89C4051	4K x 8	80C31 Microcontroller with 4K bytes Flash, 20-Pin Package	Now
AT89S8252	8K x 8	In-System Programmable Microcontroller with 8K bytes Flash and 2K bytes EEPROM	Now
AT89LS8252	8K x 8	Low-Voltage, In-System Programmable Microcontroller with 8K bytes Flash and 2K bytes EEPROM	Now
AT89S53	12K x 8	In-System Programmable Microcontroller with 12K bytes Flash	Now
AT89LS53	12K x 8	Low-Voltage, In-System Programmable Microcontroller with 12K bytes Flash	Now
AT89C55	20K x 8	80C32 Microcontroller with 20K bytes Flash	Now
AT89LV55	20K x 8	2.7-Volt, 80C32 Microcontroller with 20K bytes Flash	Now

AT91 Series (16/32-bit Microcontrollers)

Part Number	Processor	Description	Availability
AT91M40100	ARM7TDMI®	General Purpose, 16/32-bit RISC Microcontroller with 1K bytes RAM, 100-lead TQFP package	4Q98
AT91M40400	ARM7TDMI	General Purpose, 16/32-bit RISC Microcontroller with 4K bytes RAM, 100-lead TQFP package	Now
AT91M4040x	ARM7TDMI	General Purpose, 16/32-bit RISC Microcontroller with 4K bytes RAM and up to 2M-bit ROM, 100-lead TQFP package	Now

AT91 Series Development Tools

Part Number	Description	Availability
AT91SDT	ARM Software Development ToolKit	Now
AT91DB01	AT91 Development Board	Now
AT91EICE	ARM Embedded ICE Box	Now
AT91EB01	AT91 Evaluation Board	4Q98

AT90 Series AVR® (8-bit Microcontrollers)

Part Number	Processor	Description	Availability
AT90S1200	AVR	AVR RISC, In-System Programmable Microcontroller with 1K byte FLASH and 64 bytes EEPROM; 20-pin PDIP, 20-pin SOIC and 20-pin SSOP packages	Now
AT90S2313	AVR	AVR RISC, In-System Programmable Microcontroller with 2K bytes FLASH,128 bytes SRAM, 128 bytes EEPROM and UART; 20-pin PDIP and 20-pin SOIC packages	Now
AT90S2323	AVR	AVR RISC, In-System Programmable Microcontroller with 2K bytes FLASH,128 bytes SRAM and 128 bytes EEPROM; 8-pin PDIP and 8-pin SOIC packages	Now
AT90LS2323	AVR	Low-Voltage, AVR RISC, In-System Programmable Microcontroller with 2K bytes FLASH, 128 bytes SRAM and 128 bytes EEPROM; 8-pin PDIP and 8-pin SOIC packages	Now
AT90S2343	AVR	AVR RISC, In-System Programmable Microcontroller with 2K bytes FLASH, 128 bytes SRAM and 128 bytes EEPROM; 8-pin PDIP and 8-pin SOIC packages	Now
AT90LS2343	AVR	Low-Voltage, AVR RISC, In-System Programmable Microcontroller with 2K bytes FLASH, 128 bytes SRAM and 128 bytes EEPROM; 8-pin PDIP and 8-pin SOIC packages	Now
AT90S2333	AVR	AVR RISC, In-System Programmable Microcontroller with 2K bytes FLASH, 128 bytes SRAM, 128 bytes EEPROM, UART, 6 Channel 10-Bit ADC; 28-pin PDIP, 28-pin SOIC, 32-pin TQFP packages	4Q98
AT90LS2333	AVR	Low-Voltage, AVR RISC, In-System Programmable Microcontroller with 2K bytes FLASH, 128 bytes SRAM, 128 bytes EEPROM, UART, 6 Channel 10-Bit ADC; 28-pin PDIP, 28-pin SOIC, 32-pin TQFP packages	4Q98
AT90S4414	AVR	AVR RISC, In-System Programmable Microcontroller with 4K bytes FLASH, 256 bytes SRAM, 256 bytes EEPROM, UART; 40-pin PDIP, 44-pin PLCC and 44-pin TQFP packages	Now
AT90S4433	AVR	AVR RISC, In-System Programmable Microcontroller with 4K bytes FLASH, 128 bytes SRAM, 256 bytes EEPROM, UART, 6 Channel 10-Bit ADC; 28-pin PDIP, 28-pin SOIC packages. 32-pin TQFP packages	4Q98
AT90LS4433	AVR	Low-Voltage, AVR RISC, In-System Programmable Microcontroller with 4K bytes FLASH, 128 bytes SRAM, 256 bytes EEPROM, UART, 6 Channel 10-Bit ADC; 28-pin PDIP, 28-pin SOIC, 32-pin TQFP packages	4Q98
AT90S4434	AVR	AVR RISC, In-System Programmable Microcontroller with 4K bytes FLASH, 256 bytes SRAM, 256 bytes EEPROM, UART, 8 Channel 10-Bit ADC; 40-pin PDIP, 44-pin PLCC and 44-pin TQFP packages	4Q98
AT90LS4434	AVR	Low-Voltage, AVR RISC, In-System Programmable Microcontroller with 4K bytes FLASH, 256 bytes SRAM, 256 bytes EEPROM, UART, 8 Channel 10-Bit ADC; 40-pin PDIP, 44-pin PLCC, 44-pin TQFP packages	4Q98
AT90S8515	AVR	AVR RISC, In-System Programmable Microcontroller with 8K bytes FLASH, 512 bytes SRAM, 512 bytes EEPROM, UART; 40-pin PDIP, 44-pin PLCC, 44-pin TQFP packages	Now
AT90S8535	AVR	AVR RISC, In-System Programmable Microcontroller with 8K bytes FLASH, 512 bytes SRAM, 512 bytes EEPROM, UART, 8 Channel 10-Bit ADC; 40-pin PDIP, 44-pin PLCC, 44-pin TQFP packages	Now
AT90LS8535	AVR	Low-Voltage, AVR RISC, In-System Programmable Microcontroller with 8K bytes FLASH 512 bytes SRAM, 512 bytes EEPROM, UART, 8 Channel 10-Bit ADC; 40-pin PDIP, 44-pin PLCC, 44-pin TQFP packages	Now

ATmega Series AVR FLASH Microcontrollers

Part Number	Processor	Description	Availability
ATmega603	AVR	AVR RISC, In-System Programmable Microcontroller with 64K bytes FLASH, 4K bytes SRAM, 2K bytes EEPROM, UART, RTC, 8 Channel, 10-Bit ADC; 64-pin TQFP package	4Q98
ATmega603L	AVR	Low-voltage, AVR RISC, In-System Programmable Microcontroller with 64K bytes FLASH, 4K bytes SRAM, 2K bytes EEPROM, UART, RTC, 8 Channel, 10-Bit ADC; 64-pin TQFP package	4Q98
ATmega103	AVR	AVR RISC, In-System Programmable Microcontroller with 64K bytes FLASH, 4K bytes SRAM, 2K bytes EEPROM, UART, RTC, 8 Channel, 10-Bit ADC; 64-pin TQFP package	Now
ATmega103L	AVR	Low-voltage, AVR RISC, In-System Programmable Microcontroller with 64K bytes FLASH, 4K bytes SRAM, 2K bytes EEPROM, UART, RTC, 8 Channel, 10-Bit ADC; 64-pin TQFP package	Now

AT90/ATmega Series AVR Development Tools

Part Number	Description	Availability
ATMCU00100	AT89S/AT90S FLASH MCU Starter Kit	Now
ATSTK200	Enhanced AT89S/AT90S Flash MCU Starter Kit	Now
ATSTK300	megaAVR Starter kit with Application Builder Software	Now
AT90ICEPRO	In-Circuit Emulation System for AVR AT90S Microcontrollers	Now
ATmegaICE	In-Circuit Emulation System for megaAVR Microcontrollers	Now
ATasicICE	In-Circuit Emulation System for Embedded AVR Core Development	Now
AT90STDPOD	AT90ICEPRO Standard Pod Replacement Kit	Now
AT90ADCPOD	AT90ICEPRO Analog Replacement Kit	Now
ATmegaPOD	ATmegaICE Pod Replacement Kit	Now

Parallel EEPROMs

Part Number	Organization	Speeds	Description	Availability
High-Speed				
AT28HC64B	8K x 8	55-120 ns	64K-bit EEPROM with 64-Byte Page & Software Data Protection	Now
AT28HC256	32K x 8	70-120 ns	256K-bit EEPROM with 64-Byte Page & Software Data Protection	Now
AT28HC256E	32K x 8	70-120 ns	256K-bit EEPROM with Extended Endurance	Now
AT28HC256F	32K x 8	70-120 ns	256K-bit EEPROM with Fast Write	Now
Battery-Voltage **(2.7V to 3.6V)**				
AT28BV16	2K x 8	200-250 ns	16K-bit EEPROM, 2.7-Volt	Now
AT28BV64	8K x 8	200-250 ns	64K-bit EEPROM, 2.7-Volt	Now
AT28LV010	128K x 8	200-250 ns	1M-bit EEPROM with 128-Byte Page & Software Data Protection, 3.0-Volt	Now
AT28BV64B	8K x 8	200-250 ns	64K-bit EEPROM with 64-Byte Page & Software Data Protection, 2.7-Volt	Now
AT28BV256	32K x 8	200-250 ns	256K-bit EEPROM with 64-Byte Page & Software Data Protection, 2.7-Volt	Now
Standard Voltage (5.0V)				
AT28C16	2K x 8	150 ns	16K-bit EEPROM	Now
AT28C16E	2K x 8	150 ns	16K-bit EEPROM with Extended Endurance & Fast Write	Now
AT28C17	2K x 8	150 ns	16K-bit EEPROM with Ready/Busy	Now
AT28C17E	2K x 8	150 ns	16K-bit EEPROM with Ready/Busy & Extended Endurance & Fast Write	Now
AT28C64	8K x 8	120-250 ns	64K-bit EEPROM	Now
AT28C64E	8K x 8	120-250 ns	64K-bit EEPROM with Extended Endurance & Fast Write	Now
AT28C64X	8K x 8	120-250 ns	64K-bit EEPROM without Ready/Busy	Now
AT28C64B	8K x 8	150-250 ns	64K-bit EEPROM with 64-Byte Page & Software Data Protection	Now
AT28C256	32K x 8	150-250 ns	256K-bit EEPROM with 64-Byte Page & Software Data Protection	Now
AT28C256E	32K x 8	150-250 ns	256K-bit EEPROM with Extended Endurance	Now
AT28C256F	32K x 8	150-250 ns	256K-bit EEPROM with Fast Write	Now
AT28C010	128K x 8	120-250 ns	1M-bit EEPROM with 128-Byte Page & Software Data Protection	Now
AT28C010E	128K x 8	120-250 ns	1M-bit EEPROM with 128-Byte Page & Extended Endurance & Software Data Protection	Now
AT28C040	512K x 8	200-250 ns	4M-bit EEPROM with 256-Byte Page & Software Data Protection	Now

Parallel EEPROM Die Product

Part Number	V_{CC}	Device T_{AA}	Package Configuration
AT28BV16-W	2.7 - 3.6V	250 ns	Die
AT28BV16-DWF	2.7 - 3.6V	250 ns	Wafer
AT28BV64-W	2.7 - 3.6V	250 ns	Die
AT28BV64-DWF	2.7 - 3.6V	250 ns	Wafer
AT28BV64B-W	2.7 - 3.6V	250 ns	Die
AT28BV64B-DWF	2.7 - 3.6V	250 ns	Wafer
AT28BV256-W	2.7 - 3.6V	250 ns	Die
AT28BV256-DWF	2.7 - 3.6V	250 ns	Wafer
AT28LV010-W	3.0 - 3.6V	250 ns	Die
AT28LV010-DWF	3.0 - 3.6V	250 ns	Wafer
AT28C16-W	4.5 - 5.5V	200 ns	Die
AT28C16-DWF	4.5 - 5.5V	200 ns	Wafer
AT28C64-W	4.5 - 5.5V	200 ns	Die
AT28C64-DWF	4.5 - 5.5V	200 ns	Wafer
AT28C64B-W	4.5 - 5.5V	200 ns	Die
AT28C64B-DWF	4.5 - 5.5V	200 ns	Wafer
AT28HC64B-W	4.5 - 5.5V	120 ns	Die
AT28HC64B-DWF	4.5 - 5.5V	120 ns	Wafer
AT28C256-W	4.5 - 5.5V	200 ns	Die
AT28C256-DWF	4.5 - 5.5V	200 ns	Wafer
AT28HC256-W	4.5 - 5.5V	120 ns	Die
AT28HC256-DWF	4.5 - 5.5V	120 ns	Wafer
AT28C010-W	4.5 - 5.5V	200 ns	Die
AT28C010-DWF	4.5 - 5.5V	200 ns	Wafer

Secure ICs for Smart Cards - Memory

Part Number	Memory Size	Description	Availability
AT88SC101	1024 x 1	1K-bit Serial EEPROM with Security, 1 Memory Zone, 1024 Bits	Now
AT88SC102	1024 x 1	1K-bit Serial EEPROM with Security, 2 Memory Zones, 512 Bits Each	Now
AT88SC1003	1024 x 1	1K-bit Serial EEPROM with Security, 3 Memory Zones, 256 + 256 + 512 Bits	1Q99
AT88SC153	192 x 8	1.5K-bit Serial EEPROM with Security and Authentication, 3 Memory Zones, 512 Bits Each	1Q99
AT88SC1601	15,872 x 1	16K-bit Serial EEPROM with Security, 1 Memory Zone, 15,872 Bits	Now
AT88SC1604	15,968 x 1	16K-bit Serial EEPROM with Security, 3 Memory Zones, 4096 Bits Each, and 1 Memory Zone, 3680 Bits	Now
AT88SC1608	2048 x 8	16K-bit Serial EEPROM with Security and Authentication, 8 Memory Zones, 2048 Bits Each, and 1 Configuration Zone, 1024 Bits	Now

Secure ICs for Smart Cards - Microcontrollers

Part Number	Flash	EEPROM	RAM Bytes	T = 0 Hardware	Power Supply	Availability
AT89SC168	16K Bytes	8K Bytes	256 Bytes	Yes	5.0V	Now
AT89SC168A	16K Bytes	8K Bytes	512 Bytes	No	2.7 - 5.5V	Now
AT89SC1616A	16K Bytes	16K Bytes	512 Bytes	No	2.7 - 5.5V	Now
AT89SC248A	24K Bytes	8K Bytes	512 Bytes	No	2.7 - 5.5V	Now

Secure ICs for Smart Cards - Cryptocontrollers

Part Number	Program Memory	User Memory Flash/EEPROM	RAM Bytes	Power Supply	Crypto Engine	RF Interface	Availability
AT90SC1616C	16K Flash	16K Bytes	1K Bytes	2.7 - 5.5V	Yes	No	4Q98
AT90SC3232C	32K Flash	32K Bytes	1K Bytes	2.7 - 5.5V	Yes	No	4Q98
AT90SC3232CR	32K ROM	32K Bytes	1K Bytes	2.7 - 5.5V	Yes	No	4Q98
AT90SC3232CRF	32K ROM	32K Bytes	1K Bytes	2.7 - 5.5V	Yes	Yes	4Q98

Secure ICs for Smart Cards - Contactless (RFID)

Part Number	EEPROM Memory	Features	Availability
AT88RF256	256 x 1	Read/Write RFID Transponder with Passwords and Data Locking	4Q98
AT88RF8714	2K x 8	Contactless Card IC with AVR Microprocessor, 8K Bytes ROM, 256 Bytes SRAM	4Q98
AT24RR08	1K x 8	Dual Access EEPROM: RFID and Serial	Now

Storage Products

Part Number	Description	Package	Availability
Hard Disk Drive			
AT78C1000	Hard Disk Drive Manager (HDDM/Servo System)	128-lead TQFP	Now
AT78C1001 (Core)	HDDM Core	N/A	N/A
AT78C1002	HDDM II (HDDM plus 1M-Bit Flash)	208-lead TQFP	4Q98
Digital Video Drive			
AT78C1501	DVD-RAM Interface Controller Ultra DMA 33MB/s	144-lead TQFP	1Q99
AT78C1502	DVD-RAM Servo Controller	128-lead TQFP	4Q98
AT78C1503	DVD-RAM Read Channel 160M-Bits	64-lead TQFP	4Q98
AT78C1504	DVD-RAM Laser Power Controller	48-lead TQFP	4Q98
AT78C1505	DVD-RAM Read Pre-Amp	48-lead TQFP	4Q98
High Capacity Floppy			
AT78C1201	Full Custom Mixed Signal + Flash	128-lead TFP	1Q99

Serial EEPROMs

Part Number	Organization	V_{CC}	Description	Availability
AT24C01	128 x 8	1.8, 2.5, 2.7, 5.0 V	1K-bit, 2-Wire Bus Serial EEPROM, Non-Cascadable	Now
AT24C21	128 x 8	2.5 V	1K-bit, 2-Wire Bus Serial EEPROM, Dual Mode, Plug & Play Operation	Now
AT24C01A	128 x 8	1.8, 2.5, 2.7, 5.0 V	1K-bit, 2-Wire Bus Serial EEPROM with Full Hardware Write Protection	Now
AT24C02	256 x 8	1.8, 2.5, 2.7, 5.0 V	2K-bit, 2-Wire Bus Serial EEPROM with Full Hardware Write Protection	Now
AT24C02A	256 x 8	1.8, 2.5, 2.7, 5.0 V	2K-bit, 2-Wire Bus Serial EEPROM with Full Hardware Write Protection	Now
AT34C02	256 x 8	1.8, 2.7, 5.0 V	2K-bit, 2-Wire Serial EEPROM with Software Write Protection	Now
AT24C04	512 x 8	1.8, 2.5, 2.7, 5.0 V	4K-bit, 2-Wire Bus Serial EEPROM with Full Hardware Write Protection	Now
AT24C04A	512 x 8	1.8, 2.5, 2.7, 5.0 V	4K-bit, 2-Wire Bus Serial EEPROM with Full Hardware Write Protection	Now
AT24C08	1K x 8	1.8, 2.5, 2.7, 5.0 V	8K-bit, 2-Wire Bus Serial EEPROM	Now
AT24C08A	1K x 8	1.8, 2.5, 2.7, 5.0 V	8K-bit, 2-Wire Bus Serial EEPROM with Full Hardware Write Protection	Now
AT24C16	2K x 8	1.8, 2.5, 2.7, 5.0 V	16K-bit, 2-Wire Bus Serial EEPROM with Half Hardware Write Protection	Now
AT24C164	2K x 8	1.8, 2.5, 2.7, 5.0 V	16K-bit, 2-Wire Bus Serial EEPROM with Cascadable Feature	Now
AT24C32	4K x 8	1.8, 2.5, 2.7, 5.0 V	32K-bit, 2-Wire Bus Serial EEPROM with Cascadable Feature	Now
AT24C64	8K x 8	1.8, 2.5, 2.7, 5.0 V	64K-bit, 2-Wire Bus Serial EEPROM with Cascadable Feature	Now
AT24C128	16K x 8	1.8, 2.7, 5.0 V	128K-bit, 2-Wire Bus Serial EEPROM with Cascadable Feature	Now
AT24C256	32K x 8	1.8, 2.7, 5.0 V	256K-bit, 2-Wire Bus Serial EEPROM with Cascadable Feature	Now
AT24C512	64K x 8	1.8, 2.7, 5.0 V	512K-bit, 2-Wire Bus Serial EEPROM with Cascadable Feature	Now
AT25010	128 x 8	1.8, 2.7, 5.0 V	1K-bit, SPI Bus Serial EEPROM, SPI Mode 0 and 3	Now
AT25020	256 x 8	1.8, 2.7, 5.0 V	2K-bit, SPI Bus Serial EEPROM, SPI Mode 0 and 3	Now
AT25040	512 x 8	1.8, 2.7, 5.0 V	4K-bit, SPI Bus Serial EEPROM, SPI Mode 0 and 3	Now
AT25080	1K x 8	1.8, 2.7, 5.0 V	8K-bit, SPI Bus Serial EEPROM, SPI Mode 0 and 3	Now
AT25160	2K x 8	1.8, 2.7, 5.0 V	16K-bit, SPI Bus Serial EEPROM, SPI Mode 0 and 3	Now
AT25320	4K x 8	1.8, 2.7, 5.0 V	32K-bit, SPI Bus Serial EEPROM, SPI Mode 0 and 3	Now
AT25640	8K x 8	1.8, 2.7, 5.0 V	64K-bit, SPI Bus Serial EEPROM, SPI Mode 0 and 3	Now
AT25128	16K x 8	1.8, 2.7, 5.0 V	128K-bit, SPI Bus Serial EEPROM, SPI Mode 0 and 3	Now
AT25256	32K x 8	1.8, 2.7, 5.0 V	256K-bit, SPI Bus Serial EEPROM, SPI Mode 0 and 3	Now
AT25HP256	32K x 8	1.8, 2.7, 5.0 V	256K-bit, SPI Bus Serial EEPROM, High-Speed, Page-Write Only, SPI Mode 0 and 3	4Q98
AT25HP512	64K x 8	1.8, 2.7, 5.0 V	512K-bit, SPI Bus Serial EEPROM, High-Speed, Page-Write Only, SPI Mode 0 and 3	4Q98
AT25P1024	1M x 8	1.8, 2.7, 5.0 V	1M-bit, SPI Bus Serial EEPROM, Page-Write Only, SPI Mode 0 and 3	Now
AT93C46	64 x 16 / 128 x 8	1.8, 2.5, 2.7, 5.0 V	1K-bit, 3-Wire Bus Serial EEPROM	Now
AT93C46A	64 x 16	2.5, 2.7, 5.0 V	1K-bit, 3-Wire Bus Serial EEPROM	Now
AT93C46C	64 x 16	2.5, 2.7, 5.0 V	1K-bit, 7-Wire Bus Serial EEPROM with Schmitt Trigger Inputs	Now
AT93C56	128 x 16 / 256 x 8	2.5, 2.7, 5.0 V	2K-bit, 3-Wire Bus Serial EEPROM	Now
AT93C57	128 x 16 / 256 x 8	2.5, 2.7, 5.0 V	2K-bit, 3-Wire Bus Serial EEPROM with Special Address	Now
AT93C66	256 x 16 / 512 x 8	2.5, 2.7, 5.0 V	4K-bit, 3-Wire Bus Serial EEPROM	Now
AT59C11	64 x 16 / 128 x 8	2.5, 2.7, 5.0 V	1K-bit, 4-Wire Bus Serial EEPROM	Now
AT59C22	128 x 16 / 256 x 8	2.5, 2.7, 5.0 V	2K-bit, 4-Wire Bus Serial EEPROM	Now
AT59C13	256 x 16 / 512 x 8	2.5, 2.7, 5.0 V	4K-bit, 4-Wire Bus Serial EEPROM	Now