

## 1Mb – continued

Mftr.	Pins	Description	VCC = 5V±	Mftrs. List No.	Order Code	Price Each				
						1+	10+	100+	250+	500+
28F101	ST	32	1Mb (128K 8) FLASH memory - 120ns Access (TSOP).....	10%	M28F101-120N1	<b>SMD 302-5354†</b>				
28F101	ST	32	1Mb (128K 8) FLASH memory - 150ns Access .....	10%	M28F101-150K1	<b>SMD 493-417†</b>				
28F101	ST	32	1Mb (128K 8) FLASH memory - 150ns Access .....	10%	M28F101-150P1	<b>493-405†</b>				
28F101	ST	32	1Mb (128K 8) FLASH memory - 150ns Access .....	10%	M28F101-150P6	<b>688-654†</b>				
<b>2Mb</b>										
28F020	AMD	32	2Mb (256K 8) FLASH memory - 90ns Access (PLCC) .....	10%	AM28F020-90JC	<b>SMD 671-540</b>				
28F020	AMD	32	2Mb (256K 8) FLASH memory - 90ns Access .....	10%	AM28F020-90PC	<b>671-551†</b>				
28F020	AMD	32	2Mb (256K 8) FLASH memory - 120ns Access .....	10%	AM28F020-120JC	<b>SMD 787-413</b>				
28F020	AMD	32	2Mb (256K 8) FLASH memory - 120ns Access .....	10%	AM28F020-120PC	<b>787-425†</b>				
28F020	AMD	32	2Mb (256K 8) FLASH memory - 150ns Access .....	10%	AM28F020-150JC	<b>SMD 703-023</b>				
28F020	AMD	32	2Mb (256K 8) FLASH memory - 150ns Access .....	10%	AM28F020-150PC	<b>703-047</b>				
28F020	AMD	32	2Mb (256K 8) FLASH memory - 150ns Access (IND TEMP) .....	10%	AM28F020-150PI	<b>671-514</b>				
28F020	AMD	32	2Mb (256K 8) FLASH memory - 200ns Access (PLCC) .....	10%	AM28F020-200JC	<b>SMD 671-526</b>				
28F020	AMD	32	2Mb (256K 8) FLASH memory - 200ns Access .....	10%	AM28F020-200PC	<b>671-538</b>				
28F020	INTEL	32	2Mb (256K 8) FLASH memory - 70ns Access .....	10%	N28F020-70	<b>SMD 631-735†</b>				
28F020	INTEL	32	2Mb (256K 8) FLASH memory - 150ns Access .....	10%	N28F020-150	<b>SMD 296-181</b>				
28F020	INTEL	32	2Mb (256K 8) FLASH memory - 150ns Access .....	10%	P28F020-150	<b>270-568</b>				
28F201	ST	32	2Mb (256K 8) FLASH memory - 70ns Access (PLCC) .....	10%	M28F201-70K1	<b>SMD 302-5378†</b>				
28F201	ST	32	2Mb (256K 8) FLASH memory - 90ns Access (PLCC) .....	10%	M28F201-90K1	<b>SMD 796-270†</b>				
28F201	ST	32	2Mb (256K 8) FLASH memory - 120ns Access (PLCC) .....	10%	M28F201-120K1	<b>SMD 796-281†</b>				
28F201	ST	32	2Mb (256K 8) FLASH memory - 120ns Access (TSOP) .....	10%	M28F201-120N1	<b>SMD 302-5366†</b>				

All types are 12V VPP and offer a minimum of 10,000 erase/program cycles.

† Available until stocks are exhausted

## SerialFlash™ Memory

SerialFlash™ Memory combines the performance features of FLASH memory with the space efficiency associated with a serial interface. It has been designed to meet the low power needs of portable battery powered products. Features include:-

- Low cost
- 1 MHz data rate
- Block lock protection
- Small package
- 32 byte sector programming
- Endurance 100,000 cycles
- 1.8V to 3.6V read and program "univolt" power supply
- 2-wire interface
- Data retention 100 years
- Low standby current, 1µA
- SPI interface

Mftr.	Pins	Description
25F008	8	8K (1K 8) Serial FLASH Memory - SPI interface.....
<b>16K</b>		
24F016	8	16K (2K 8) Serial FLASH Memory - 2-wire interface.....
25F016	8	16K (2K 8) Serial FLASH Memory -SPI interface.....
<b>32K</b>		
24F032	8	32K (4K 8) Serial FLASH Memory - 2-wire interface.....
25F032	8	32K (4K 8) Serial FLASH Memory - SPI interface.....

Mftrs. List No.	Order Code	Price Each		
		1+	10+	100+
X25F008P	<b>787-747†</b>			
X24F016P	<b>787-784</b>			
X25F016P	<b>787-759</b>			
X24F032P	<b>787-796†</b>			
X25F032P	<b>787-760</b>			

† Available until stocks are exhausted

## Boot Block FLASH Memory

Intel's 28F001BX-T combines the cost-effectiveness of Intel standard FLASH memory with features that simplify write and allow block erase. These devices aid the system designer by combining the functions of several components into one, making blocked FLASH memory an innovative alternative to EPROM and EEPROM or battery-backed static RAM. Many new and existing designs can take advantage of the 28F001BX's integration of blocked architecture, automated electrical reprogramming and standard processor interface.

Additional features include one 8Kb Boot Block with write Lock Out, two 4Kb Parameter Blocks and one 112Kb Main Block. Available in Top Boot Sector or Bottom Boot Sector variations, DIL and PLCC packages.

Mftr.	Pins	Description	VCC = 5V±	Mftrs. List No.	Order Code	Price Each		
						1+	3+	10+
28F001	INTEL	32	1Mb (128K x 8) Top Boot Block FLASH memory – 120ns acc.....	10%	P28F001BX-T120	<b>204-420</b>		

## Boot Block FLASH Memory

A range of Boot Block FLASH devices, these memory devices are capable of programming, erasing and reading with a single 5Volt supply.

They contain a 'boot block' section of memory which resides either at the top or bottom of memory depending on the device selected.

The organisation of the memory size is related to the size of the bus width selected, the selection of either 8 or 16 bit mode made by a logic signal to a device pin.

Memory blocks can be protected from programming or erasure to prevent accidental overwriting of data.

- Features:
- Fast access time
  - Fast programming time 10µs by byte/16µs by word typical
  - Block, Multi-Block and Chip Erase
  - Multi-block Protection/Temporary Unprotection modes
  - 100,000 Program/Erase cycles
  - Electronic Signature
  - Single 5 Volt supply for Program/Erase/Read

Pins	Description	VCC = 5V±	Mftrs. List No.	Order Code	Price Each		
					1+	10+	100+
29F100	44	1Mb (128K 8, 64K 16) FLASH CMOS memory, Bottom Boot Block, 90ns acc. (SOIC).	10%	M29F100BB90M1	<b>SMD 333-5021</b>		
29F100	48	1Mb (128K 8, 64K 16) FLASH CMOS memory, Bottom Boot Block, 90ns acc. (TSOP)	10%	M29F100BB90N1	<b>SMD 333-5010</b>		
29F100	44	1Mb (128K 8, 64K 16) FLASH CMOS memory, Top Boot Block, 90ns acc. (SOIC).....	10%	M29F100BT90M1	<b>SMD 333-5045</b>		
29F100	48	1Mb (128K 8, 64K 16) FLASH CMOS memory, Top Boot Block, 90ns acc. (TSOP).....	10%	M29F100BT90N1	<b>SMD 333-5033</b>		
29F200	44	2Mb (256K 8, 128K 16) FLASH CMOS memory, Bottom Boot Block, 70ns acc. (SOIC).	10%	M29F200BB70M1	<b>SMD 333-5069†</b>		
29F200	48	2Mb (256K 8, 128K 16) FLASH CMOS memory, Top Boot Block, 70ns acc. (TSOP)....	10%	M29F200BT70N1	<b>SMD 333-5070†</b>		
29F400	44	4Mb (512K 8, 256K 16) FLASH CMOS memory, Bottom Boot Block, 90ns acc. (SOIC).	10%	M29F400BB90M1	<b>SMD 333-5124</b>		
29F400	48	4Mb (512K 8, 256K 16) FLASH CMOS memory, Bottom Boot Block, 90ns acc. (TSOP)	10%	M29F400BB90N1	<b>SMD 333-5112</b>		
29F400	44	4Mb (512K 8, 256K 16) FLASH CMOS memory, Top Boot Block, 90ns acc. (SOIC).....	10%	M29F400BT90M1	<b>SMD 333-5148</b>		
29F400	48	4Mb (512K 8, 256K 16) FLASH CMOS memory, Top Boot Block, 90ns acc. (TSOP)....	10%	M29F400BT90N1	<b>SMD 333-5136</b>		
29F800	48	8Mb (1M 8, 512K 16) FLASH CMOS memory, Bottom Boot Block, 90ns acc. (TSOP).	10%	M29F800AB90N1	<b>SMD 333-5161</b>		
29F800	48	8Mb (1M 8, 512K 16) FLASH CMOS memory, Top Boot Block, 90ns acc. (TSOP).....	10%	M29F800AT90N1	<b>SMD 333-5173</b>		

† Available until stocks are exhausted

Continued