

2Mb – continued

Mfr.	Pins	Description	Vcc = 5V±	Mfrs. List No.	Order Code	Price Each				
						1+	10+	100+	250+	500+
27C020	FCH	32	2Mb (256K 8) CMOS PROM – 150ns Access, 12.75V VPP	10%	NM27C020Q150	283-770				
27C2001	ST	32	2Mb (256K 8) CMOS OTP PROM – 100ns Access, 12.75V VPP	10%	M27C2001-10B1	333-8101				
27C2001	ST	32	2Mb (256K 8) CMOS EPROM – 100ns Access, 12.75V VPP	10%	M27C2001-10F1	702-523				
27C2001	ST	32	2Mb (256K 8) CMOS OTP PROM – 120ns Access, 12.75V VPP (PLCC)	10%	M27C2001-12C1	SMD 597-399				
27C2001	ST	32	2Mb (256K 8) CMOS EPROM – 120ns Access, 12.75V VPP	10%	M27C2001-12F1	445-241				
27C2001	ST	32	2Mb (256K 8) CMOS EPROM – 120ns Access, 12.75V VPP (IND TEMP)	10%	M27C2001-12F6	702-559				
27C2001	ST	32	2Mb (256K 8) CMOS OTP PROM – 150ns Access, 12.75V VPP (PLCC)	10%	M27C2001-15C1	SMD 302-5184				
27C2001	ST	32	2Mb (256K 8) CMOS EPROM – 150ns Access, 12.75V VPP	10%	M27C2001-15F1	460-059				
27C2001	ST	32	2Mb (256K 8) CMOS EPROM – 150ns Access, 12.75V VPP	5%	M27C2001-15XF1	246-104				
27C2001	ST	32	2Mb (256K 8) CMOS EPROM – 80ns Access, 12.75V VPP	5%	M27C2001-80XF1	597-417				
27C2001	NEC	32	2Mb (256K 8) CMOS EPROM – 150ns Access, 12.75V VPP	10%	UPD27C2001D15	395-237				
27C2048	AMD	40	2Mb (128K 16) CMOS OTP PROM – 150ns Access, 12.75V VPP	10%	AM27C2048-150PC	671-265				
27C2048	AMD	40	2Mb (128K 16) CMOS EPROM – 200ns Access, 12.75V VPP	10%	AM27C2048-200DC	671-277†				

4Mb

27C040	AMD	32	4Mb (512K 8) CMOS EPROM – 90ns Access, 12.75V VPP	10%	AM27C040-90DC	671-162				
27C040	AMD	32	4Mb (512K 8) CMOS EPROM – 120ns Access, 12.5V VPP	10%	AM27C040-120DC	703-266				
27C040	AMD	32	4Mb (512K 8) CMOS OTP PROM – 120ns Access, 12.5V VPP (PLCC)	10%	AM27C040-120JC	SMD 787-498				
27C040	AMD	32	4Mb (512K 8) CMOS OTP PROM – 120ns Access, 12.75V VPP	10%	AM27C040-120PC	562-981				
27C040	AMD	32	4Mb (512K 8) CMOS EPROM – 150ns Access, 12.75V VPP	10%	AM27C040-150DC	562-830				
27C040	AMD	32	4Mb (512K 8) CMOS OTP PROM – 150ns Access, 12.75V VPP	10%	AM27C040-150PC	671-150				
27C040	AMD	32	4Mb (512K 8) CMOS EPROM – 200ns Access, 12.75V VPP	10%	AM27C040-200DC	203-324				
27C040	FCH	32	4Mb (512K 8) CMOS OTP PROM – 120ns Access, 12.75V VPP	10%	NM27C040N120	283-782				
27C040	FCH	32	4Mb (512K 8) CMOS OTP PROM – 150ns Access, 12.75V VPP	10%	NM27C040N150	283-794				
27C040	FCH	32	4Mb (512K 8) CMOS EPROM – 120ns Access, 12.75V VPP	10%	NM27C040Q120	283-800				
27C040	FCH	40	4Mb (256K 16) CMOS EPROM – 120ns Access, 12.75V VPP	10%	NM27C240Q120	283-836				
27C040	FCH	32	4Mb (512K 8) CMOS EPROM – 150ns Access, 12.75V VPP	10%	NM27C040Q150	270-878				
27C4000	MXIC	32	4Mb (512K 8) CMOS EPROM – 90ns Access, 12.5V VPP	10%	MX27C4000DC90	563-456†				
27C4001	ST	32	4Mb (512K 8) CMOS OTP PROM – 100ns Access, 12.75V VPP (PLCC)	10%	M27C4001-10C1	SMD 302-5196				
27C4001	ST	32	4Mb (512K 8) CMOS EPROM – 100ns Access, 12.75V VPP	10%	M27C4001-10F1	702-535				
27C4001	ST	32	4Mb (512K 8) CMOS OTP PROM – 120ns Access, 12.75V VPP	10%	M27C4001-12B1	333-8137				
27C4001	ST	32	4Mb (512K 8) CMOS OTP PROM – 120ns Access, 12.75V VPP (PLCC)	10%	M27C4001-12C1	SMD 597-478				
27C4001	ST	32	4Mb (512K 8) CMOS EPROM – 120ns Access, 12.75V VPP	10%	M27C4001-12F1	445-253				
27C4001	ST	32	4Mb (512K 8) CMOS EPROM – 150ns Access, 12.75V VPP	10%	M27C4001-15F1	445-370				
27C4001	ST	32	4Mb (512K 8) CMOS EPROM – 70ns Access, 12.75V VPP	5%	M27C4001-70XF1	597-480†				
27C4002	ST	44	4Mb (256K 16) CMOS OTP PROM – 100ns Access, 12.75V VPP (PLCC)	10%	M27C4002-10C1	SMD 302-5202				
27C4002	ST	40	4Mb (256K 16) CMOS EPROM – 100ns Access, 12.75V VPP	10%	M27C4002-10F1	688-599				
27C4002	ST	44	4Mb (256K 16) CMOS OTP PROM – 120ns Access, 12.75V VPP (PLCC)	10%	M27C4002-12C1	SMD 302-5214				
27C4002	ST	40	4Mb (256K 16) CMOS EPROM – 120ns Access, 12.75V VPP	10%	M27C4002-12F1	702-729				
27C4002	ST	40	4Mb (256K 16) CMOS EPROM – 80ns Access, 12.75V VPP	5%	M27C4002-80XF1	597-491				
27C4096	AMD	40	4Mb (256K 16) CMOS EPROM – 150ns Access, 12.75V VPP	10%	AM27C4096-150DC	671-332†				
27C4096	AMD	44	4Mb (256K 16) CMOS OTP PROM – 150ns Access, 12.75V VPP (PLCC)	10%	AM27C4096-150JC	SMD 671-344†				
27C4096	HIT	40	4Mb (256K 16) CMOS EPROM – 150ns Access, 12.5V VPP	10%	HN27C4096G15	459-355†				
27C4096	MXIC	40	4Mb (256K 16) CMOS EPROM – 120ns Access, 12.5V VPP	10%	MX27C4096DC12	271-597†				

† Available until stocks are exhausted

Note: 'NM' prefix range from Fairchild (FCH) may be supplied with 'FM' prefix.

FRAM

Ferroelectric RAM (FRAM) is a RAM-based device that uses the ferroelectric effect for a storage mechanism. This is a completely different mechanism than the one used by other non-volatile memories, which use floating gate technology. The ferroelectric effect is the ability of a material to store an electric polarisation in the absence of an applied electric field. The advantages to using this technology are that devices can be produced as pin-for-pin replacements for current memory devices but with the following new features:

- Number of write cycles increased from 100,000 to 10,000,000,000 (1 billion)
- Write speed is the same as read speed (NoDelay®)
- Higher noise immunity as the data does not have to remain stable for the usual for 10 milli-seconds write period
- New PCB design is not necessary as the new parts are 'drop-in' replacements
- Can be used as RAM with the added advantage of being non-volatile (NV-RAM), battery back-up not being required



SEM900

Serial	Mfr.	Pins	Description	Vcc = 5V +/-	Mfrs. List No.	Order Code	Price Each		
							1+	10+	100+
4K	RAM	8	4K (512 x 8) Serial FRAM memory, 400KHz bus speed	10%	FM24C04-P	344-5173			
4K	RAM	8	4K (512 x 8) Serial FRAM memory, 400KHz bus speed	10%	FM24C04-S	SMD 344-5185			
16K	RAM	8	16K (2048 x 8) Serial FRAM memory, 400KHz bus speed	10%	FM24C16-P	344-5197			
16K	RAM	8	16K (2048 x 8) Serial FRAM memory, 400KHz bus speed	10%	FM24C16-S	SMD 344-5203			
64K	RAM	8	64K (8192 x 8) Serial FRAM memory, 1MHz bus speed	10%	FM24C64-P	344-5215			
64K	RAM	8	64K (8192 x 8) Serial FRAM memory, 1MHz bus speed	10%	FM24C64-S	SMD 344-5227			
256K	RAM	20	256K (32768 x 8) Serial FRAM memory, 1MHz bus speed	10%	FM24C256-S	SMD 344-5239			
16K	RAM	8	16K (2048 x 8) Serial FRAM memory, SPI, 2.1MHz bus speed	10%	FM25C160-P	344-5240			
16K	RAM	8	16K (2048 x 8) Serial FRAM memory, SPI, 2.1MHz bus speed	10%	FM25C160-S	SMD 344-5252			
64K	RAM	8	64K (8192 x 8) Serial FRAM memory, SPI, 5.0MHz bus speed	10%	FM25640-P	344-5264			
64K	RAM	8	64K (8192 x 8) Serial FRAM memory, SPI, 5.0MHz bus speed	10%	FM25640-S	SMD 344-5276			
Parallel									
64K P	RAM	28	64K (8192 x 8) Parallel FRAM memory, 120ns acc.	10%	FM1608-120-P	344-5288			
64K P	RAM	28	64K (8192 x 8) Parallel FRAM memory, 120ns acc.	10%	FM1608-120-S	SMD 344-5290			
256K P	RAM	28	256K (32768 x 8) Parallel FRAM memory, 120ns	10%	FM1808-120-P	344-5306			
256K P	RAM	28	256K (32768 x 8) Parallel FRAM memory, 120ns	10%	FM1808-120-S	SMD 344-5318			
256K P	RAM	28	256K (32768 x 8) Parallel FRAM memory, 70ns	10%	FM1808-70-P	344-5320			
256K P	RAM	28	256K (32768 x 8) Parallel FRAM memory, 70ns	10%	FM1808-70-S	SMD 344-5331			

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