

MOS Memories

Static RAMs

Memory Size (bit)	Type No.	Memory Composition (Word × bit)	Access Time max. (ns)	Cycle Time min. (ns)	Supply Voltage (V)	Power Consumption max. (mW)		Package		Process	Remarks
						Operating	Stand-by	No.	No.		
64K	MN4464-08LL	8,192 × 8	80 200	80 200	4.5 ~ 5.5 3.2 ~ 4.5	165	0.055	DIP028-P-0600A	M11	Peripheral CMOS	
	MN4464M-08LL						0.055	DIP028-P-0300	M17		
	MN4464S-08LL						0.055	SOP028-P-0425	M25		
	MN4464T-08LL						0.055	TSOP032-P-0815.3	M41		
	MN4464TR-08LL						0.055	TSOP032-P-0815.3R	M42		
256K	MN44256-10LL	32,768 × 8	100	100	4.5 ~ 5.5	165	0.22	DIP028-P-0600A	M11	Peripheral CMOS	
	MN44256S-10LL						0.22	SOP028-P-0425	M25		
	MN44256T-10LL						0.22	TSOP032-P-0815.3	M41		
	MN44256TR-10LL						0.22	TSOP032-P-0815.3R	M42		

Mask ROMs

Memory Size (bit)	Type No.	Memory Composition (Word × bit)	Access Time max. (ns)	Cycle Time min. (ns)	Supply Voltage (V)	Power Consumption max. (mW)		Package		Process	Remarks
						Operating	Stand-by	No.	No.		
1M	MN231001	131,072 × 8	150	150	5	550	165	28-DIP(b)	M20	NMOS	Address bank function
	MN231002	16,384 × 8 × 8	200	200		550	165				
	MN231003	131,072 × 8	150	150		550	165	32-DIP	M21		
2M	MN232000	262,144 × 8 /131,072 × 16	200	200	5	220	1.1	40-DIP(b)	M22	CMOS	
	MN232001	262,144 × 8	150	150		550	165	32-DIP	M21	NMOS	
	MN232002	262,144 × 8	150	150		550	165	32-DIP	M21	NMOS	
4M	MN234000	524,288 × 8 /262,144 × 16	200	200	5	220	1.1	40-DIP(b)	M22	CMOS	8/16-bit mode switchable
	MN234000F		64-QFP(a)	M38							
	MN234001		40-DIP(b)	M22				NMOS			
	MN234001F	64-QFP(a)	M38								
	MN234002	524,288 × 8	200	200	5	220	1.1	32-DIP	M21	CMOS	8-bit mode
MN234003	32-DIP	M21									
8M	MN238000	1,048,576 × 8 /524,288 × 16	200	200	5	330	1.1	42-DIP	M23	CMOS	8/16-bit mode switchable
	MN238000F							64-QFP(a)	M38		
	MN238000S							SOP-44D	M37		
	MN238002	1,048,576 × 8	200	200	5	330	1.1	32-DIP	M21	CMOS	8-bit mode
	MN23812	1,048,576 × 8	120	120				330	0.55		
MN23813	1,048,576 × 8	120	120	5	330	0.55	32-DIP	M21	CMOS	8-bit mode	
16M	▲MN231610	2,097,152 × 8	150	150	5	330	0.55	42-DIP	M23	CMOS	8/16-bit mode switchable
	▲MN231610S	1,048,576 × 16						SOP-44D	M37		

▲ Under development

Serial EEPROMs

Memory Size (bits)	Type No.	Construction	Operating Voltage (V)		Package	Method	Remarks
			Read	Program			
512	MN6310	512 × 1	2.6 ~ 3.5	5.0 ± 5% 21 ± 0.5	8-SOP/DIP	Bit sequential method	3V single power supply is available
1K	MN63111	64 × 16 or 128 × 8	2.0* ~ 5.5	2.5* ~ 5.5	8-SOP/DIP	3 wire bus method	93C46 Compatible
	MN63121	64 × 16	2.0* ~ 5.5	2.5* ~ 5.5	8-SOP/DIP	Serial port direct connection type	M6M80011 Compatible
	MN63131	64 × 16	2.0* ~ 5.5	2.5* ~ 5.5	8-SOP/DIP	IIC bus method	24C01 Compatible
2K	MN61113	2K × 1	2.6 ~ 3.5	3.0 ~ 3.5	8-SOP/DIP	Bit sequential method	
	MN6311	2K × 1	2.6 ~ 3.5	3.0 ~ 3.5	8-SOP/DIP		
	MN63112	128 × 16 or 256 × 8	2.0* ~ 5.5	2.5* ~ 5.5	8-SOP/DIP	3 wire bus method	93C56 Compatible
	MN63122	128 × 16	2.0* ~ 5.5	2.5* ~ 5.5	8-SOP/DIP	Serial port direct connection type	M6M80021 Compatible
4K	MN63132	128 × 16	2.0* ~ 5.5	2.5* ~ 5.5	8-SOP/DIP	IIC bus method	24C02 Compatible
	MN63124	256 × 16	2.0* ~ 5.5	2.5* ~ 5.5	8-SOP/DIP	Serial port direct connection type	M6M80041 Compatible

*: Tentative