



# commodore mos technology HMOS

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Preliminary

24256 STATIC READ ONLY MEMORY (32768x8)

## 24256 STATIC READ ONLY MEMORY (32768x8)

### DESCRIPTION

The 24256 high performance read only memory is organized 32768 words by 8 bits. This ROM is designed to be compatible with all microprocessor and similar applications where high performance, large bit storage and simple interfacing are important design considerations.

The 24256 operates from a single 5 volts supply. It features fully static operation requiring no clock.

The chip enable input ( $CE/\bar{CE}$ ) provides a "power down" feature to reduce chip current to less than 12 mA. A mask-programmable chip select/output enable ( $OE/\bar{OE}$ ) provides direct control of three state outputs for bus control and fast access to data.

Designed to replace equivalent EPROMS.

### ORDERING INFORMATION

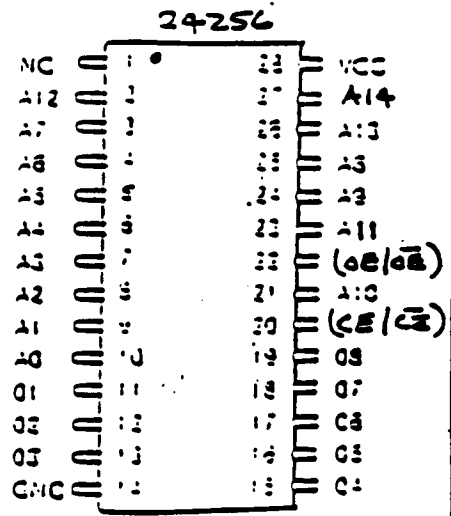
MXS 24256

FREQUENCY RANGE  
NG SUFFIX = 350 NS  
A = 300 NS  
B = 250 NS (1)

PACKAGE DESIGNATOR  
C = CERAMIC  
P = PLASTIC

(1) = 200 NS Available in 1987

### PIN CONFIGURATION



Commodore Technology, Inc.  
Commodore Semiconductor Group, Inc.

commodore  
semiconductor group



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### ABSOLUTE MAXIMUM RATINGS

### COMMENT

Ambient Temperature under Bias	0°C to +70°C
Storage Temperature	-55°C to +150°C
Supply Voltage to Ground Potential	-0.5V to +7.0V
Applied Output Voltage	-0.5V to +7.0V
Applied Input Voltage	-0.5V to +7.0V
Power Dissipation	1.0W

Stresses above those listed under "Absolute Maximum Ratings" may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these or any other conditions above those indicated in the operational sections of this specification is not implied.

### D. C. CHARACTERISTICS (TA = 0°C to +70°C, VCC = 5.0V ± 5%, unless otherwise specified)

Symbol	Parameter	Min.	Max.	Units	Test Conditions
ICC	Power Supply Operating Current		100	mA	
ISB	Power Supply Stand-by Current		12	mA	
IO	Output Leakage Current		10	µA	Chip Disabled, VO = 0 to VCC
II	Input Leakage Current		10	µA	VCC = Max. VIN = 0 to VCC
VOL	Output Low Voltage		0.4	Volts	VCC = Min. IOL = 2.1mA
VCH	Output High Voltage	2.4		Volts	VCC = Min. IOH = -400µA
VIL	Input Low Voltage	-0.5	0.8	Volts	See Note 1
VIH	Input High Voltage	2.0	VCC ± 1	Volts	

### A. C. CHARACTERISTICS (TA = 0°C to +70°C, VCC = 5.0V ± 5%, unless otherwise specified)

Symbol	Parameter	24256		24256A		24256B		Units	Test Conditions
		Min.	Max.	Min.	Max.	Min.	Max.		
tACC	Address Access Time		350		300		250	ns	See Note 2
tCE	Chip Enable Access Time		350		300		250	ns	
tOE	Output Enable Access Time		100		100		100	ns	
tOD	Output Disable Access Time		100		100		100	ns	
tOH	Output Hold Time		20		20		20	ns	

### CAPACITANCE (TA = 25°C, f = 1.0MHz, See Note 3)

Symbol	Parameter	Min.	Max.	Units	Test Conditions
CIN	Input Capacitance		8	pF	All Pins except Pin under Test Tied to AC Ground
COUT	Output Capacitance		10	pF	Test Tied to AC Ground

- Note 1: Input levels that swing more negative than -0.5V will be clamped and may cause damage to the device.
- Note 2: Loading 1 TTL = 100 pF, input transition time: 20 ns  
Timing measurement levels: input 1.5V, output 0.5V and 2.0V.
- Note 3: This parameter is periodically sampled and is not 100% tested.

