

### 128Kx32 CMOS

### High Speed

### Static RAM Module

T-46-23-14

### Features

The EDI8M32128C is a high speed, high performance, four megabit density Static RAM module organized as 128Kx32 bits. The module contains four 128Kx8 SRAMs in a Ceramic Pin Grid Array Package.

Four Chip Enables and Write Enables are provided to independently enable each of the four bytes. Reading or writing can be executed on an individual byte or any combination of bytes through proper use of the chip and write enables.

Fully asynchronous circuitry is used, requiring no clocks or refreshing for operation and providing equal access and cycle times for ease of use.

The EDI8M32128C is offered in a 66 lead PGA package which enables 4 megabits of memory to be placed in one square inch of space.

The device is available for both military and commercial applications.

128Kx32 bit CMOS Static Random Access Memory Module

- Fast Access Times: 20, 25, 35, 45, and 55ns
- Individual Byte Selects
- Output Enable Function
- TTL Compatible Inputs and Outputs
- Fully Static, No Clocks

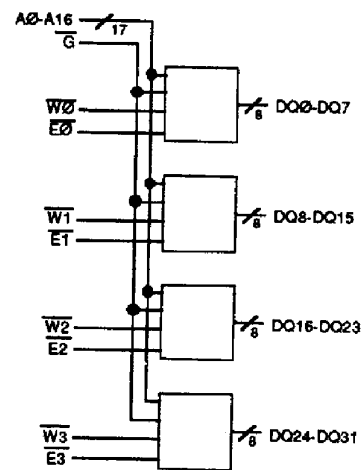
66 Lead Pin Grid Array Package, 1.1 in. sq. No. 168

- Multiple Ground Pins for Maximum Noise Immunity

Single +5V ( $\pm 10\%$ ) Supply Operation

### Pin Configuration and Block Diagram

DQ8	1	•	W1	12	•	DQ15	23	•	34	DQ24	•	45	VCC	•	56	DQ31
DQ9	2	•	E1	13	•	DQ14	24	•	35	DQ25	•	46	E3	•	57	DQ30
DQ10	3	•	VSS	14	•	DQ13	25	•	36	DQ26	•	47	W3	•	58	DQ29
A15	4	•	DQ11	15	•	DQ12	26	•	37	A4	•	48	DQ27	•	59	DQ28
A1	5	•	A11	16	•	G	27	•	38	A3	•	49	A7	•	60	A10
A16	6	•	A12	17	•	NC	28	•	39	NC	•	50	A6	•	61	A9
A0	7	•	A2	18	•	W0	29	•	40	A14	•	51	A5	•	62	A8
NC	8	•	VCC	19	•	DQ7	30	•	41	A13	•	52	W2	•	63	DQ23
DQ0	9	•	E0	20	•	DQ6	31	•	42	DQ16	•	53	E2	•	64	DQ22
DQ1	10	•	NC	21	•	DQ5	32	•	43	DQ17	•	54	VSS	•	65	DQ21
DQ2	11	•	DQ3	22	•	DQ4	33	•	44	DQ18	•	55	DQ19	•	66	DQ20



### Pin Names

A0-A16	Address Inputs
E0-E3	Chip Enables
W0-W3	Write Enables
G	Output Enable
DQ0-DQ31	Common Data Input/Output
VCC	Power (+5V $\pm 10\%$ )
VSS	Ground
NC	No Connection

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Commercial and Military

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## **Ordering Information**

### **Military**

<b>Part No.</b>	<b>Speed ns</b>	<b>Leads</b>	<b>Package Style</b>	<b>No.</b>
EDI8M32128C20GB	20	66	PGA	168
EDI8M32128C25GB	25	66	PGA	168
EDI8M32128C35GB	35	66	PGA	168
EDI8M32128C45GB	45	66	PGA	168
EDI8M32128C55GB	55	66	PGA	168

### **Commercial**

<b>Part No.</b>	<b>Speed ns</b>	<b>Leads</b>	<b>Package Style</b>	<b>No.</b>
EDI8M32128C20GC	20	66	PGA	168
EDI8M32128C25GC	25	66	PGA	168
EDI8M32128C35GC	35	66	PGA	168
EDI8M32128C45GC	45	66	PGA	168
EDI8M32128C55GC	55	66	PGA	168