

512Kx32 FLASH

FEATURES

- 512Kx32, 2x512Kx32 and 4x512Kx32 Densities
- Based on AMDs - AM29LV004T Flash Device
- Fast Read Access Time - 80ns
- 3V Only Reprogramming
- Flexible, Sector Architecture
 - One 16Kbyte, two 8Kbyte, one 32Kbyte and seven 64Kbyte sectors
 - Any combination of sectors can be erased
 - Supports full chip erase
- Embedded Erase Algorithms
 - Automatically preprograms and erases the chip or specified sector
- Embedded Program Algorithms
 - Automatically writes and verifies data at specified address
- Data Polling and Toggle Bit feature for detection of program or erase cycle completion
- Low Power Dissipation
 - 20mA per Device Active Current
 - 10µA per Device CMOS Standby Current
- Typical Endurance >100,000 Cycles
- Single 3.3V ± 10% Supply
- CMOS and TTL Compatible Inputs and Outputs
- Commercial and Industrial Temperature Range
- Package
 - 80 Pin SIMM (JEDEC)

DESCRIPTION

The EDI7F33512, EDI7F233512 and EDI7F433512 are organized as 512Kx32 and 2x512Kx32 and 4x512Kx32 respectively. The modules are based on AMD's AM29LV004T - 512Kx8 Flash Device in TSOP packages which are mounted on an FR4 substrate.

The modules offer access times between 80 and 120ns allowing for operation of high-speed microprocessors without wait states.

*This product is subject to change without notice.

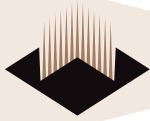
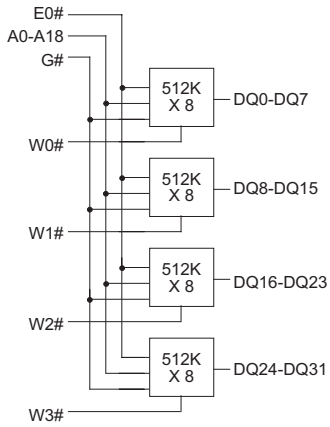
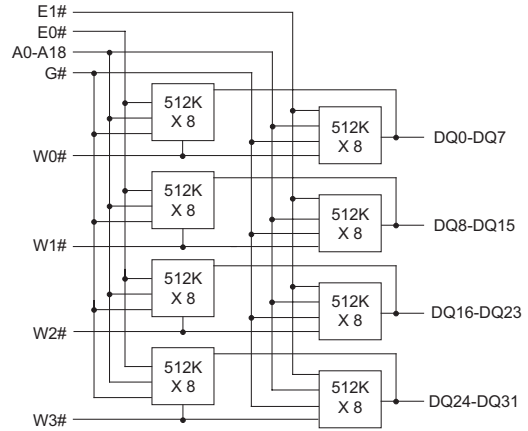


FIG. 1 BLOCK DIAGRAMS

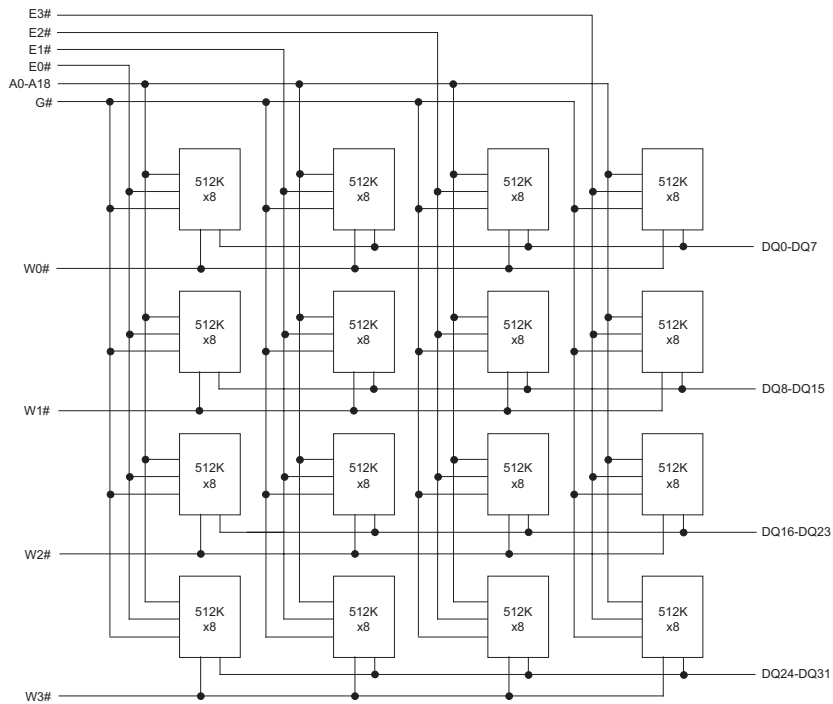
EDI7F33512V-BNC: 512Kx32 80 PIN SIMM



EDI7F233512V-BNC: 2x512Kx32 80 PIN SIMM



EDI7F433512V-BNC: 4x512Kx32 80 PIN SIMM





CAPACITANCE

(f=1.0MHz, V_{IN} = V_{CC} or V_{SS})

		512K	2x512K	4x512K	
Parameter	Sym	Max	Max	Max	Unit
Address Lines	CA	35	70	140	pF
Data lines	CDQ	15	30	60	pF
Chip & Write Enable Lines	CC	15	30	60	pF
Output Enable lines	CG	35	70	140	pF

PIN CONFIGURATIONS

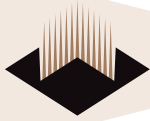
Pin	Name	Pin	Name	Pin	Name	Pin	Name
1	V _{SS}	21	*	41	A11	61	DQ9
2	V _{CC}	22	*	42	A10	62	DQ8
3	NC	23	*	43	A9	63	DQ7
4	G#	24	*	44	A8	64	DQ6
5	W0#	25	V _{SS}	45	A7	65	DQ5
6	W1#	26	DQ29	46	A6	66	DQ4
7	NC	27	DQ30	47	A5	67	DQ3
8	DQ16	28	DQ31	48	A4	68	DQ2
9	DQ17	29	W2#	49	A3	69	DQ1
10	DQ18	30	NC	50	A2	70	DQ0
11	DQ19	31	NC	51	A1	71	NC
12	DQ20	32	NC	52	AO	72	V _{CC}
13	DQ21	33	NC	53	W3#	73	PD1
14	DQ22	34	A18	54	V _{SS}	74	PD2
15	DQ23	35	A17	55	DQ15	75	PD3
16	DQ24	36	A16	56	DQ14	76	PD4
17	DQ25	37	A15	57	DQ13	77	PD5
18	DQ26	38	A14	58	DQ12	78	PD6
19	DQ27	39	A13	59	DQ11	79	PD7
20	DQ28	40	A12	60	DQ10	80	V _{SS}

*TBD

SIMM DENSITY			
Pin	2MB	4MB	8MB
21	NC	NC	E3#
22	NC	NC	E2#
23	NC	E1#	E1#
24	E0#	E0#	E0#

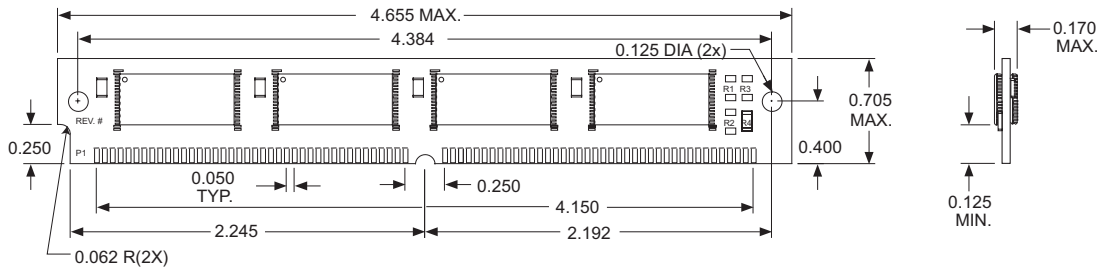
PRESENCE DETECT PIN OUT			
Pin	512K	2x512K	4x512K
PD1	V _{SS}	NC	V _{SS}
PD2	V _{SS}	NC	NC
PD3	V _{SS}	NC	Nc
PD4	NC	V _{SS}	V _{SS}

A0-A18	Address Input
E0#-E3#	Chip Enable
W0#-W3#	Write Enable
G#	Output Enable
DQ0-DQ31	Data Input/Output
P _d	Presence Detect
V _{CC}	Power 3.3V±10%
V _{SS}	Ground
NC	No Connect



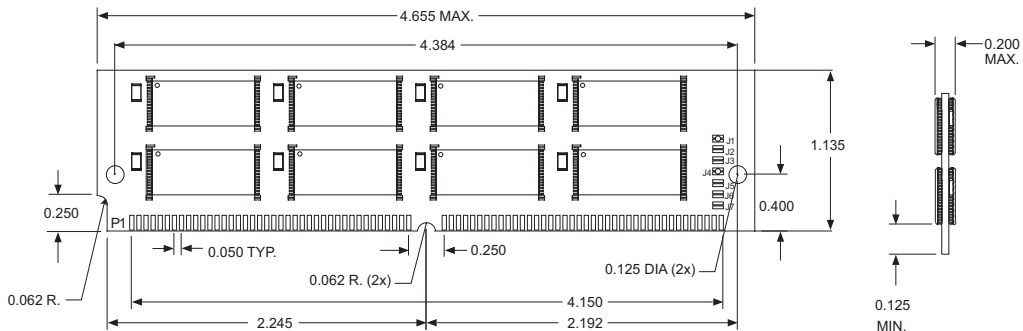
ORDERING INFORMATION

Part Number	Speed (ns)	Package
EDI7F233512V80BNC	80	367
EDI7F233512V90BNC	90	367
EDI7F233512V100BNC	100	367
EDI7F233512V120BNC	120	367



ALL DIMENSIONS ARE IN INCHES

Part Number	Speed (ns)	Package
EDI7F433512V80BNC	80	368
EDI7F433512V90BNC	90	368
EDI7F433512V100BNC	100	368
EDI7F433512V120BNC	120	368



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