1M X 32 Bits Flash Memory Module (5V Supply; 5V/12V Program)

FEATURES

- Maximum Access Time of 70ns
- TTL compatible inputs and outputs
- 5V V_{CC} and 12V or 5V V_{PP}
- JEDEC standard—except for no x8 operations; x16 only
- Tin (option “T”) or gold (option “G”) edge connectors
- System control of power on reset: $\overline{RST}$ tied to pin 7 (Option “S”; this option is not JEDEC standard)
- Intel Part Number E28F016SV-070 flash memory components

GENERAL DESCRIPTION

SiliconTech’s SL29041-70(T/G)A8SI is a 1M x 32 bits flash memory module. The module consists of two 1M x 16 bits CMOS flash memory in 56-pin TSOP-I packages mounted on an 80-pin glass epoxy substrate. Decoupling capacitors of 0.1µF are mounted for the flash memory.

The SL29041-70(T/G)A8SI is a 80-pin flash memory module with a maximum access time of 70ns and 5V power supply and 5V/12V programming. Option “T” provides tin edge connectors and option “G” provides gold edge connectors. Option “S” provides system control of power on reset by tieing the reset signals to Pin 7.

The SL29041-70(T/G)A8SI is intended for mounting into 80-pin edge connector sockets. The module uses the standard programming algorithms for Intel E28F016SV flash memory component and is backward compatible to the 28F016SA flash memory component.

PIN CONFIGURATION

Pin Symbols

Pin	Symbol	Pin	Symbol	Pin	Symbol
1	V_{SS}	28	DQ_{31}	55	DQ_{15}
2	V_{CC}	29	$\overline{WE}_2$	56	DQ_{14}
3	V_{PP}	30	NC	57	DQ_{13}
4	$\overline{OE}$	31	NC	58	DQ_{12}
5	$\overline{WE}_0$	32	NC	59	DQ_{11}
6	NC	33	A_{19}	60	DQ_{10}
7	$\overline{RST}$	34	A_{18}	61	DQ_9
8	DQ_{16}	35	A_{17}	62	DQ_8
9	DQ_{17}	36	A_{16}	63	DQ_7
10	DQ_{18}	37	A_{15}	64	DQ_6
11	DQ_{19}	38	A_{14}	65	DQ_5
12	DQ_{20}	39	A_{13}	66	DQ_4
13	DQ_{21}	40	A_{12}	67	DQ_3
14	DQ_{22}	41	A_{11}	68	DQ_2
15	DQ_{23}	42	A_{10}	69	DQ_1
16	DQ_{24}	43	A_9	70	DQ_0
17	DQ_{25}	44	A_8	71	V_{PP}
18	DQ_{26}	45	A_7	72	V_{CC}
19	DQ_{27}	46	A_6	73	PD_1
20	DQ_{28}	47	A_5	74	PD_2
21	NC	48	A_4	75	PD_3
22	NC	49	A_3	76	PD_4
23	NC	50	A_2	77	PD_5
24	$\overline{CE}_0$	51	A_1	78	PD_6
25	V_{SS}	52	A_0	79	PD_7
26	DQ_{29}	53	NC	80	V_{SS}
27	DQ_{30}	54	V_{SS}		

Pin Functions

Pin Symbol	Pin Function
A_0-A_{19}	Address Inputs
DQ_0-DQ_{31}	Data In/Out
$\overline{CE}_0$	Chip Enable
$\overline{WE}_0$, $\overline{WE}_2$	Write Enable
$\overline{OE}$	Output Enable
PD_1-PD_7	Presence Detect
$\overline{RST}$	Reset
V_{CC}	Power (+5V)
V_{PP}	Programming (+5V / +12V)
V_{SS}	Ground
NC	No Connection

Presence Detect Pins*

(Optional)

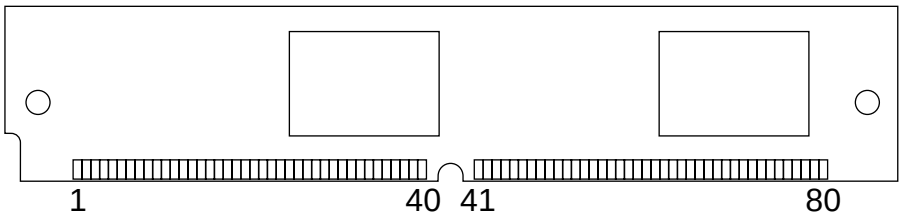
Pin Name	Signal
PD_1	NC
PD_2	V_{SS}
PD_3	NC
PD_4	V_{SS}
PD_5	NC
PD_6	NC
PD_7	V_{SS}

* Pin Connection Changing Available

(Continued)

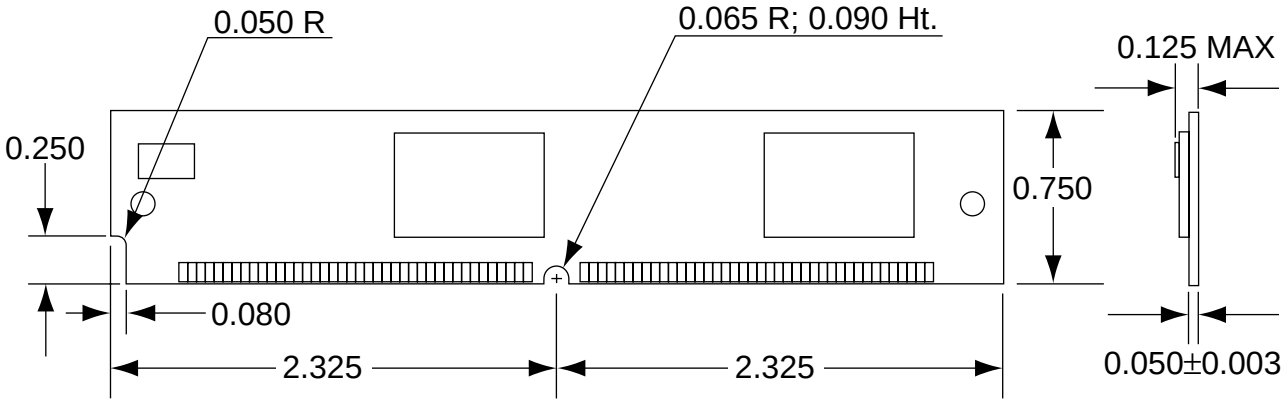
PIN CONFIGURATION (Continued)

Pin Locations



PACKAGE DIMENSIONS

Units: Inches



TOLERANCES: ±0.005 UNLESS OTHERWISE SPECIFIED

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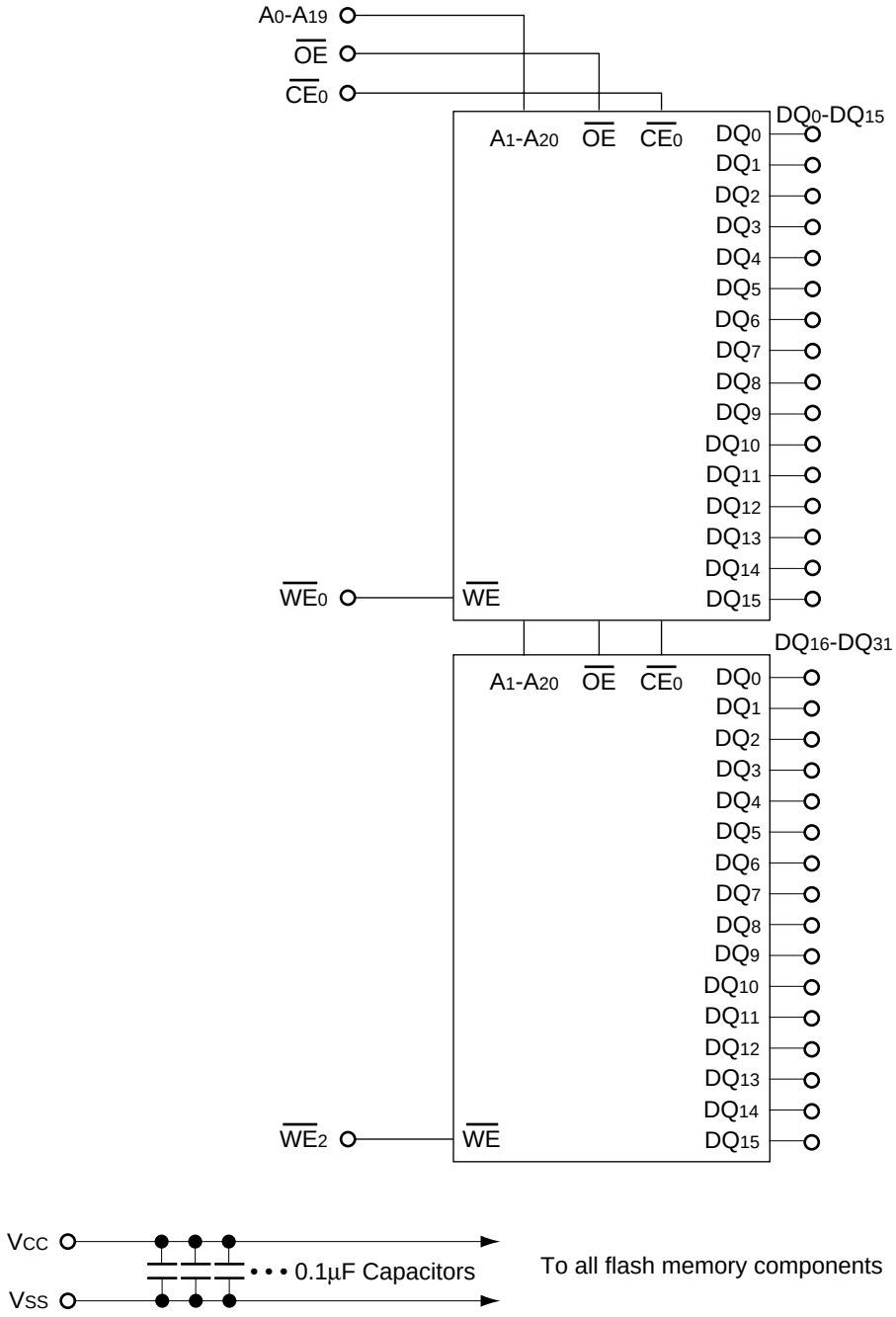
FUNCTIONAL BLOCK DIAGRAM



Notes:

1. $\overline{RP}$ of all flash memory components is tied to $\overline{RST}$ (Pin 7 of PCB).
2. A_0 and RD/$\overline{BY}$ of all flash memory components are not connected.
3. $\overline{BYTE}$ and $\overline{WP}$ of all flash memory components is tied to V_{CC}.
4. V_{PP} of all flash memory components is connected to V_{PP} of system.
5. $\overline{CE}_1$ and 3/$\overline{5}$ of all flash memory components is tied to V_{SS}.

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