16M X 32 Bits (64MB) 80-Pin Uniform Sector Flash SIMM (3V Only)

FEATURES

- Maximum Access Time of 70ns
- TTL compatible inputs and outputs
- Single 3.3V±0.3V power supply
- JEDEC standard
- Tin (option “T”) or gold (option “G”) edge connectors
- Power on reset options:
  - Power on reset circuitry on-board (Option “R”)
  - $\overline{RST}$ tied to pin 7 (Option “S”)
  - $\overline{RST}$ tied to V_{CC} (Option “V”)
- Am29LV033C flash memory components
- Minimum 1,000,000 write cycles per sector

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	NC	30	NC	57	DQ_{13}
4	$\overline{OE}$	31	A_{21}	58	DQ_{12}
5	$\overline{WE}_0$	32	A_{20}	59	DQ_{11}
6	$\overline{WE}_1$	33	A_{19}	60	DQ_{10}
7	NC/$\overline{RST}$	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	NC
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	$\overline{CE}_3$	48	A_4	75	PD_3
22	$\overline{CE}_2$	49	A_3	76	PD_4
23	$\overline{CE}_1$	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	$\overline{WE}_3$	80	V_{SS}
27	DQ_{30}	54	V_{SS}		

GENERAL DESCRIPTION

The SiliconTech SL29640-70(T/G)4(R/S/V) is a 16M x 32 bits flash Single In-line Memory Module (SIMM). The module consists of sixteen 4M x 8 bits CMOS flash memory in 63-ball FBGA packages mounted on an 80-pin glass epoxy substrate. Decoupling capacitors of 0.1µF are mounted for the flash memory.

The module has a maximum access time of 70ns. The module uses a single 3.3V power supply.

Option “T” provides tin edge connectors and option “G” provides gold edge connectors.

Option “R” provides power-on reset circuitry on-board. Option “S” provides system control of power on reset by tieing the reset signals to Pin 7. Option “V” has $\overline{RST}$ tied to V_{CC}.

The module is intended for mounting into 80-pin edge connector sockets made with the same lead as the module (tin or gold).

The module uses the standard programming algorithms specified in the JEDEC standard for single power-supply flash components. The module uses Am29LV033C flash memory components.

Pin Functions

Pin Symbol	Pin Function
A_0-A_{21}	Address Inputs
DQ_0-DQ_{31}	Data In/Out
$\overline{CE}_0$-$\overline{CE}_3$	Chip Enable
$\overline{WE}_0$-$\overline{WE}_3$	Write Enable
$\overline{OE}$	Output Enable
PD_1-PD_7	Presence Detect
$\overline{RST}$	Reset
V_{CC}	Power
V_{SS}	Ground
NC	No Connection

Presence Detect Pins*

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

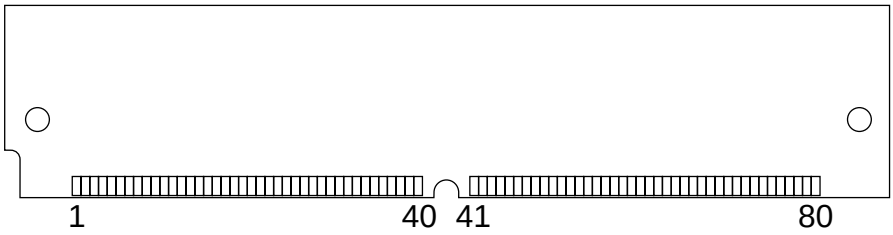
* These Presence Detects are based on the sequence of existing Presence Detects defined in JEDEC Standard No. 21-C Page 4.4.7-3. Pin Connection Changing Available.

(Continued)

† “Advanced” indicates that this product is in Design Engineering and may or may not be moved into production. Parameters may change.

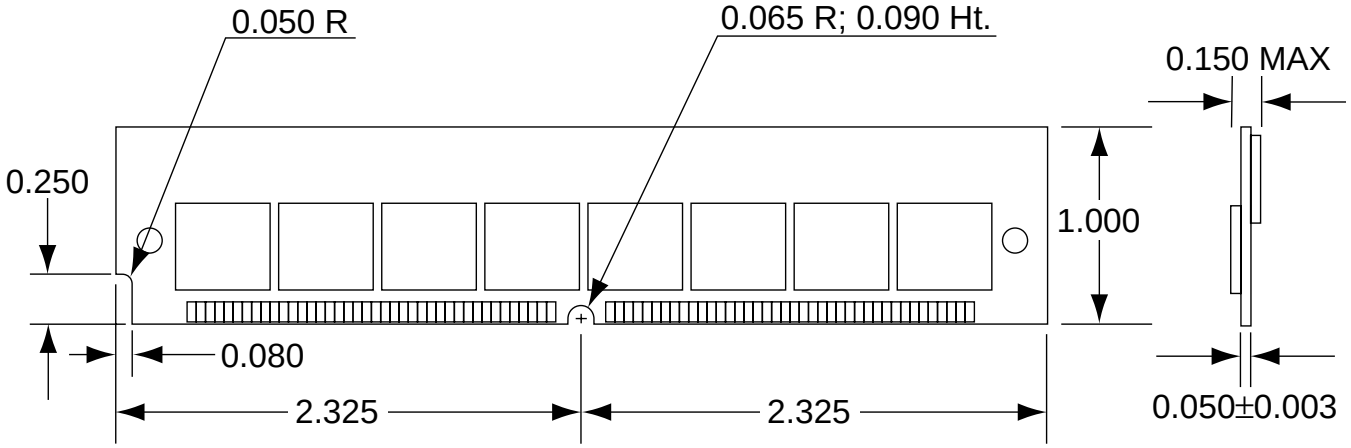
PIN CONFIGURATION *(Continued)*

Pin Locations



PACKAGE DIMENSIONS

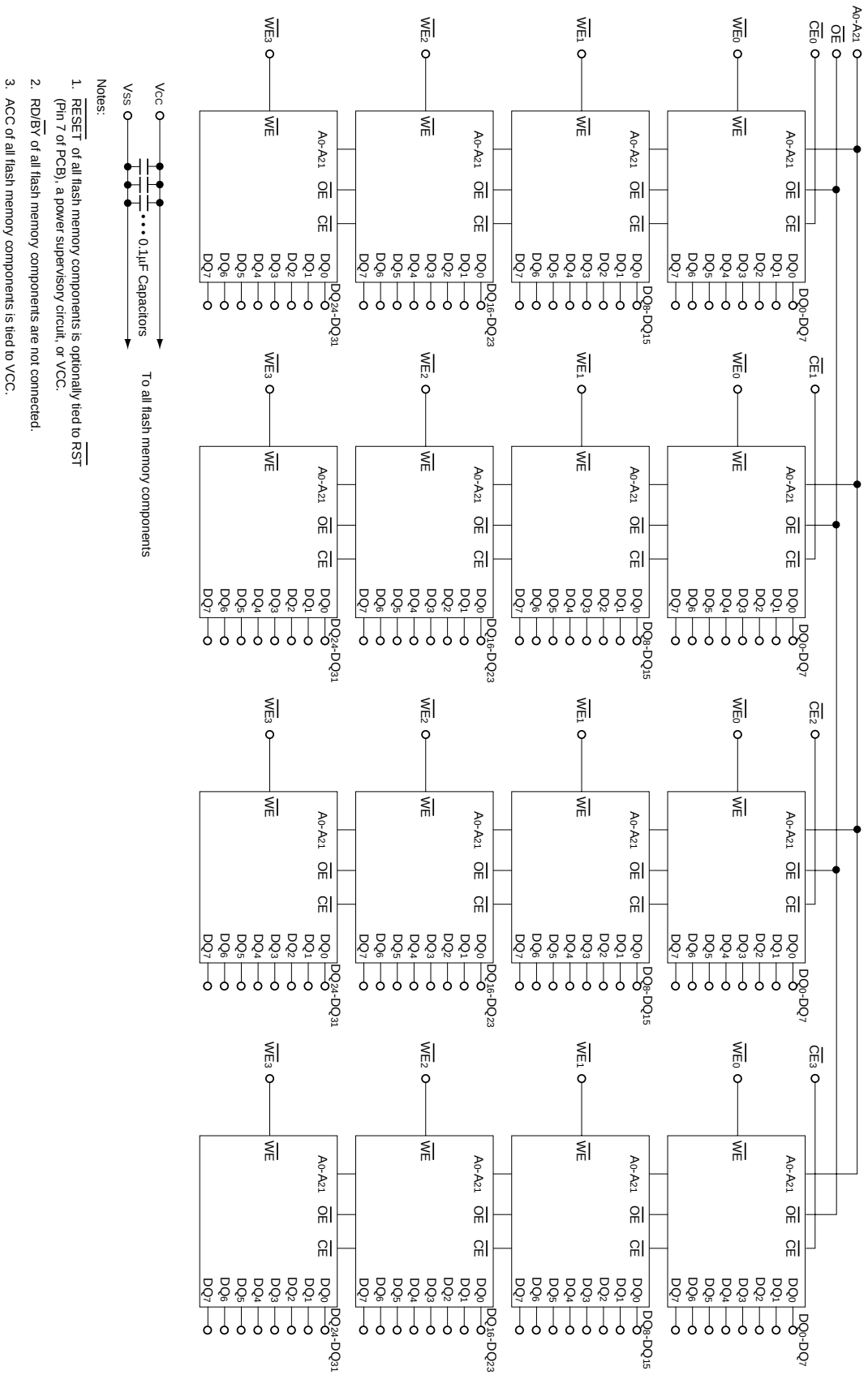
Units: Inches



TBD

TOLERANCES: ±0.005 UNLESS OTHERWISE SPECIFIED

FUNCTIONAL BLOCK DIAGRAM



Notes:

1. RESET of all flash memory components is optionally tied to RST (Pin 7 of PCB), a power supervisory circuit, or VCC.
2. RD/BY of all flash memory components are not connected.
3. ACC of all flash memory components is tied to VCC.