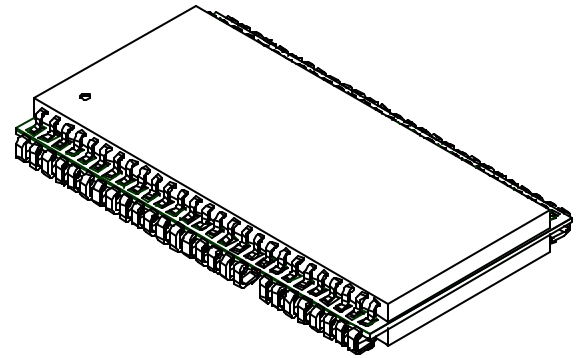
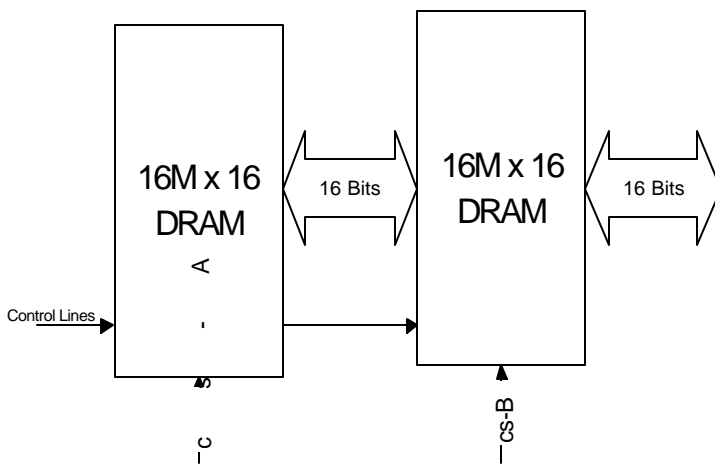


Irvine Sensors Corporation

Microelectronics Products Division

512 Mbit (32M x 16) Synchronous DRAM Memory Stack**Features:**

- Low Profile: same PCB area as a single device
- Provides a cost-effective emulation of a 512 Mbit SDRAM by using 2 low cost 256 Mbit SDRAMs.
- Low cost, economical for volume commercial applications
- JEDEC Standard 3.3V power supply



Dimensions: 0.890" L x 0.490" W x 0.100" H
(+/- 0.005" on all dimensions)

General Description

The Irvine Sensor's Microelectronics Products Division's 512 Mbit SDRAM memory stack provides a cost-effective interim alternative to the monolithic 512 Mbit SDRAM. Boards can be designed to accept either the monolithic 256Mbit TSOP or the 512Mbit stack interchangeably. This allows for a generation upgrade without a board redesign. When the monolithic 512Mbit TSOP becomes more cost effective than the 256Mbit based stack, minor modification to the board design can make it compatible with either the monolithic 512Mbit TSOP or the 1Gbit stack. Base design uses Samsung K4S561632 TSOPs but these stacks can be manufactured using customer furnished TSOPs from a variety of manufacturers.

Application note: Do not exceed 220°C when soldering part to PCB.

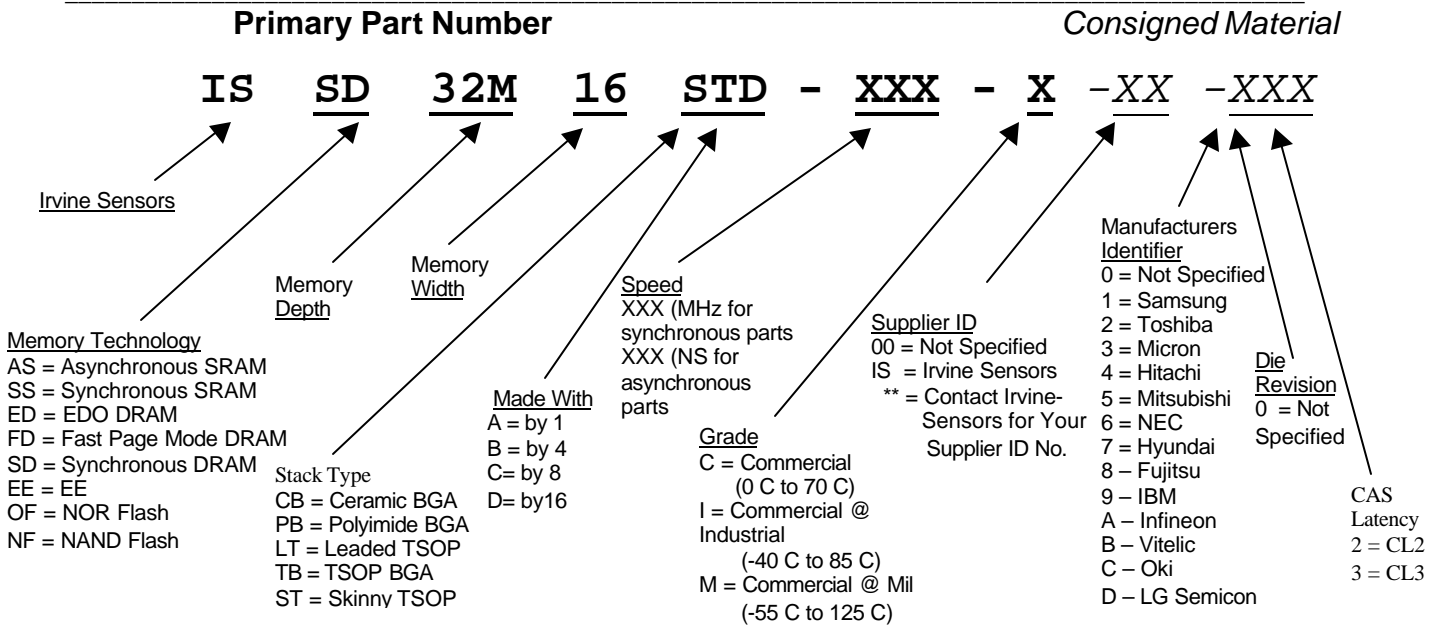
For more information contact MPD Sales:

Phone 1-714-549-8211 Fax 1-714-444-8764 E-mail mpdsales@irvine-sensors.com

Irvine Sensors Corporation, 3001 Redhill Avenue, Building 3, Costa Mesa, CA 92656-4529

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Microelectronics Products Division



Pin Numbering

Pin #	Name	Name	Pin#
1	Vcc	Vss	54
2	DQ0	DQ15	53
3	Vccq	Vssq	52
4	DQ1	DQ14	51
5	DQ2	DQ13	50
6	Vssq	Vccq	49
7	DQ3	DQ12	48
8	DQ4	DQ11	47
9	Vccq	Vssq	46
10	DQ5	DQ10	45
11	DQ6	DQ9	44
12	Vssq	Vccq	43
13	DQ7	DQ8	42
14	Vcc	Vss	41
15	LQDM	CS-B	40
16	WE	DQM	39
17	CAS	CLK	38
18	RAS	CKE	37
19	CS-A	A12	36
20	BA0	A11	35
21	BA1	A9	34
22	A10/AP	A8	33
23	A0	A7	32
24	A1	A6	31
25	A2	A5	30
26	A3	A4	29
27	Vcc	Vss	28

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