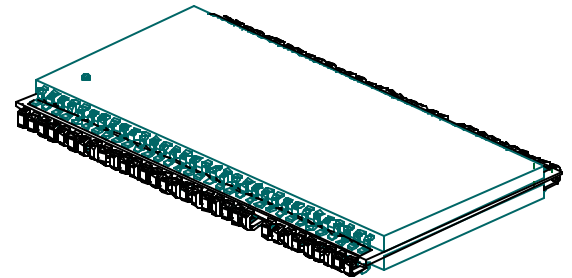
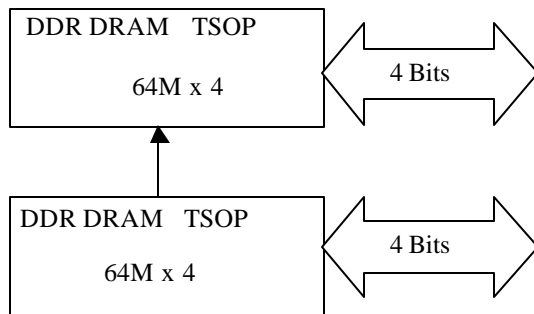


*Irvine Sensors Corporation*  
Microelectronics Products Division

## 512Mbit (64M x 8) DDR DRAM Memory Stack

### Features:

- ❑ Low Profile: same PCB footprint as a monolithic TSOP
  - ❑ Provides a cost-effective emulation of a 512 Mbit DDR DRAM by using 2 low cost 256Mbit DDR DRAMs.
- ❑ 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 DDR DRAM memory stack provides a cost-effective interim alternative to the monolithic 512 Mbit DDR DRAM. Boards can be designed to accept either the monolithic 512Mbit TSOP or the 512Mbit stack interchangeably. This allows for switching between the stack and the monolithic TSOP depending on market economics without a board redesign. When the monolithic 512Mbit TSOP becomes more cost effective than the 256Mbit based stack, no modification to the board design is required. Base design uses Samsung K4H560438 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:

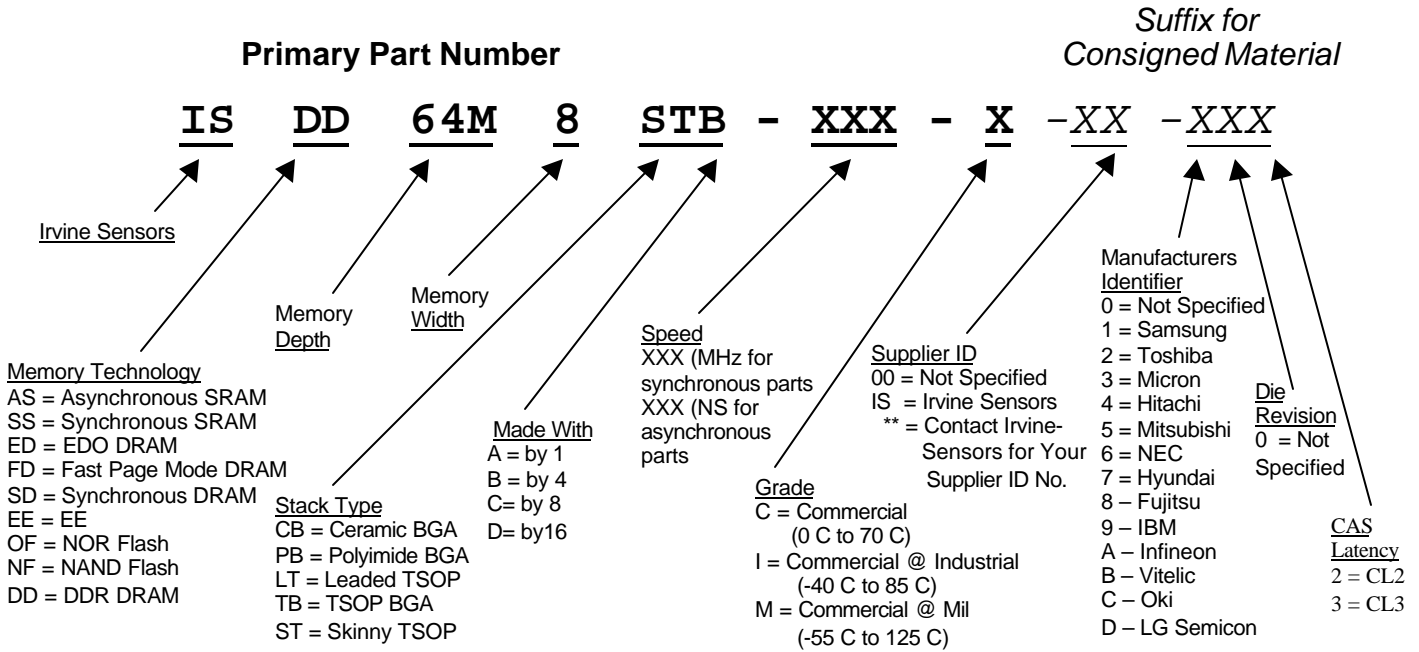
**Phone 1-714-435-8291 Fax 1-714-444-8764 E-mail [mpdsales@irvine-sensors.com](mailto:mpdsales@irvine-sensors.com)**

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Microelectronics Products Division

MPD PART NUMBERING SYSTEM



Pin Names

Pin #	Name	Name	Pin #
1	Vdd	Vss	66
2	DQ0	DQ7	65
3	Vddq	Vssq	64
4	NC	NC	63
5	DQ1	DQ6	62
6	Vssq	Vddq	61
7	NC	NC	60
8	DQ2	DQ5	59
9	Vddq	Vssq	58
10	NC	NC	57
11	DQ3	DQ4	56
12	Vssq	Vddq	55
13	NC	NC	54
14	NC	NC	53
15	Vddq	Vssq	52
16	NC	DQS	51
17	NC	NC	50
18	Vdd	Vref	49
19	NC	Vss	48
20	NC	DM	47
21	WE	CK	46
22	CAS	CK	45
23	RAS	CKE	44
24	CS	NC	43
25	NC	A12	42
26	BA0	A11	41
27	BA1	A9	40
28	AP/A10	A8	39
29	A0	A7	38
30	A1	A6	37
31	A2	A5	36
32	A3	A4	35
33	Vdd	Vss	34

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