

**ADVANCED INFORMATION**

**DESCRIPTION:**

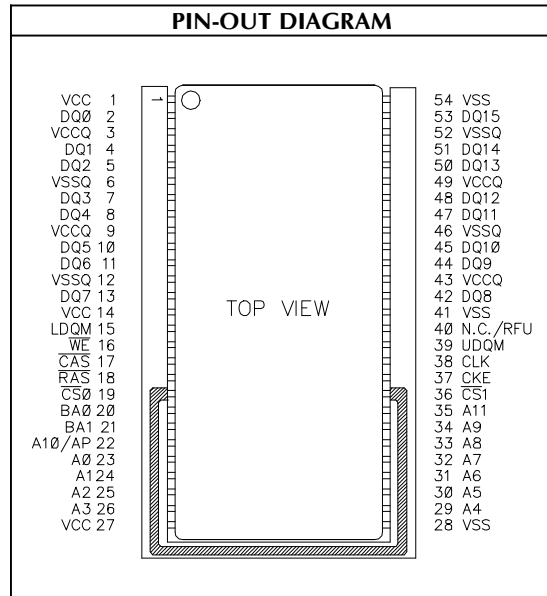
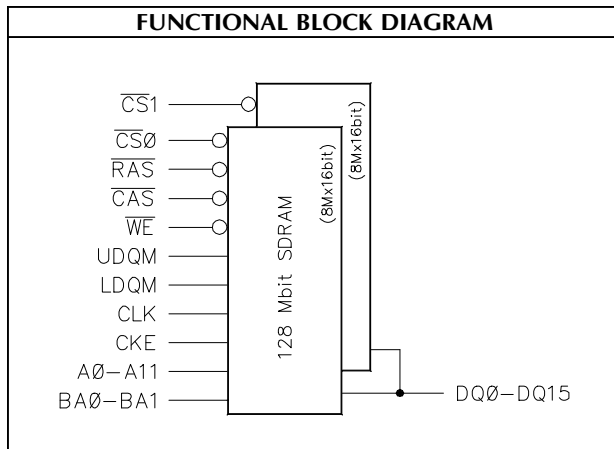
The *M-Densus* series is a family of interchangeable memory modules. The 256 Megabit SDRAM is a member of this family which utilizes the new and innovative space saving TSOP stacking technology. The modules are constructed with 8 Meg x 16 SDRAMs.

This 128 Megabit based *M-Densus* module, the DPSD16MX16TY5 has been designed to fit in the same footprint as the 8 Meg x 16 SDRAM TSOP monolithic and 128 Megabit SDRAM based family of *M-Densus* modules. This allows the memory board designer to upgrade the memory in their products without redesigning the memory board, thus saving time and money.

**FEATURES:**

- Configuration Available:  
16 Meg x 16 bit (with two Chip Selects)
- Clock Frequency:  
66<sup>[1]</sup>, 83<sup>[1]</sup>, 100, 125<sup>[2]</sup>, 133<sup>[2]</sup> MHz (max.)
- PC100 and PC133 Compatible
- 3.3V Supply
- LVTTTL Compatible I/O
- Four Bank Operation
- Programmable Burst Type, Burst Length, and CAS Latency
- 4096 Cycles / 64 ms
- Auto and Self Refresh
- Package: TSOP Leadless Stack

NOTES: [1] Available in Industrial Temperature Ranges Only.  
[2] Available in Commercial Temperature Range Only.



PIN NAMES	
A0 - A11	Row Address: A0 - A11 Column Address: A0 - A8
BA0, BA1	Bank Select Address
DQ0 - DQ15	Data In / Data Out
$\overline{CAS}$	Column Address Strobes
$\overline{RAS}$	Row Address Enables
$\overline{WE}$	Data Write Enable
UDQM, LDQM	Upper & Lower Data Input/Output Mask
CKE	Clock Enable
CLK	System Clock
$\overline{CS0}$ - $\overline{CS1}$	Chip Selects
Vcc/Vss	Power Supply/Ground
Vccq/Vssq	Data Output Power/Ground
N.C./RFU	No Connect Reserved for Future Use

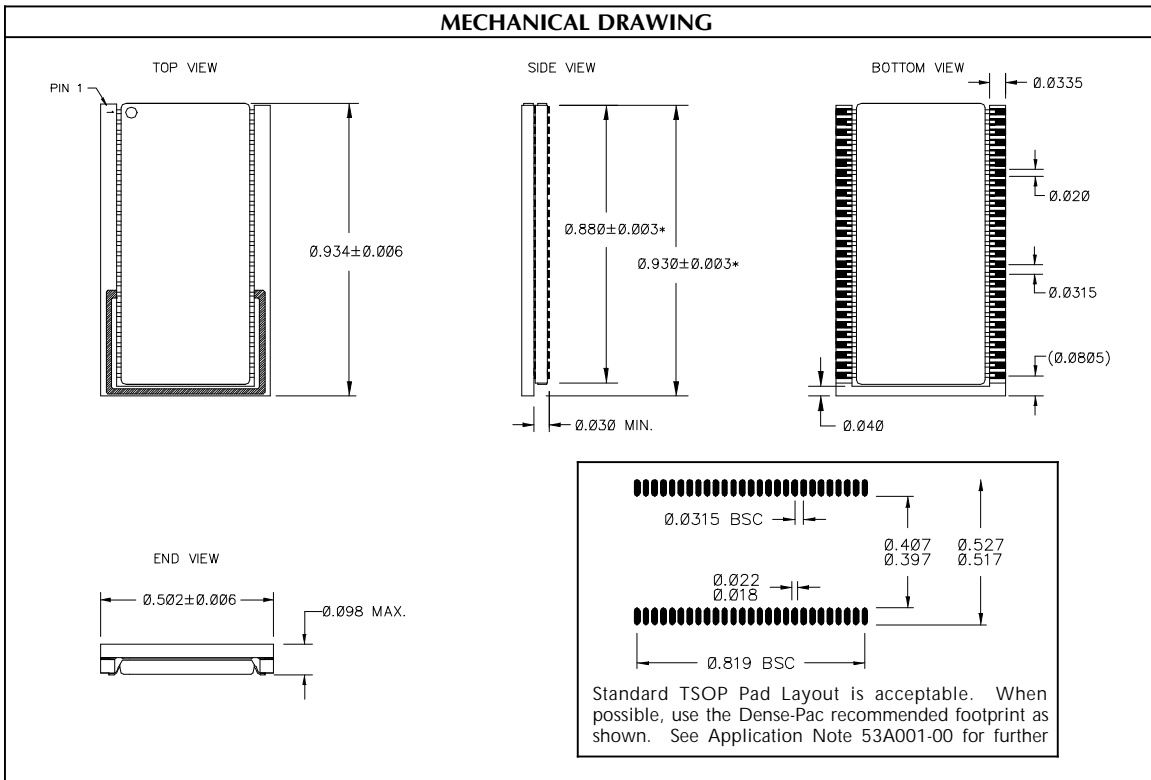
ADVANCED INFORMATION

PART NUMBER DESCRIPTION

DP	SD	16M	X	16	T	Y5	- DP -	XX	XX	X	X	
PREFIX	TYPE	MEMORY	DESIG	MEMORY	DESIG	PACKAGE	SUPPLIER	MEMORY	SPEED	CL	GRADE	
												Blank [4]
												Commercial Temperature Industrial Temperature[4]
												2 CAS LATENCY 2
												15 [1] 15ns (66MHz)[1]
												12 [1] 12ns (83MHz)[1]
												10 10ns (100MHz)
												08 [2] 8ns (125MHz)[2]
												75 [2] 7.5ns (133MHz)[2]
												P1 PC100
												MANUFACTURER CODE[3]
												SUPPLIER CODE[3]
												STACKABLE TSOP
												128 MEGABIT LVTTL BASED
												MEMORY MODULE WITHOUT SUPPORT LOGIC
												SYNCHRONOUS DRAM

- NOTES: [1] Available in Industrial Temperature Ranges Only. See Note 4.  
 [2] Available in Commercial Temperature Range Only.  
 [3] Contact your sales representative for supplier and manufacturer codes.  
 [4] Delivery of all industrial temperature ranges are subject to availability of screened components.

MECHANICAL DRAWING



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