

DESCRIPTION:

The LP-Stack™ series is a family of interchangeable memory modules. The 128 Megabit SDRAM is a member of this family which utilizes the new and innovative space saving TSOP stacking technology. The modules are constructed with 16 Meg x 4 SDRAMs.

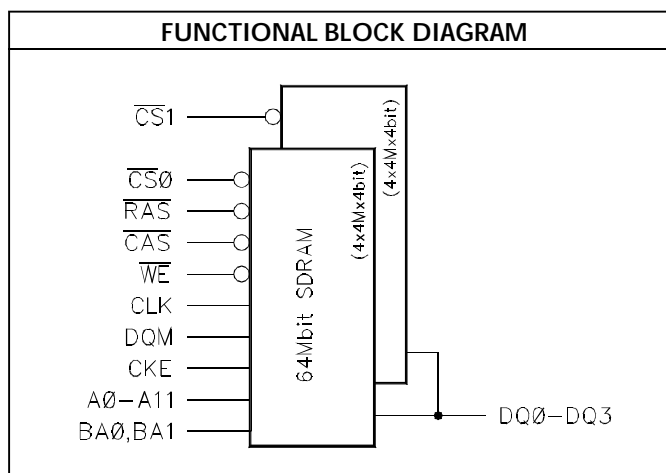
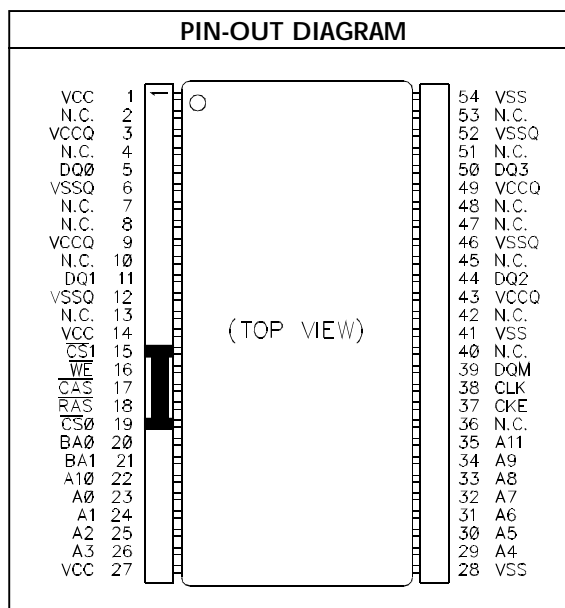
This 64 Megabit based LP-Stack™ module, the DP32MX4RY5 has been designed to fit in the same footprint as the 16 Meg x 4 SDRAM TSOP monolithic and 64 Megabit SDRAM based family of LP-Stack™ modules. This allows the memory board designer to upgrade the memory in their products without redesigning the memory board, thus saving time and money.

FEATURES:

- Configuration Available:
32 Meg x 4 (2 Banks of 4M x 4 x 4 bits)
- Clock Frequency:
66^[1], 83^[1], 100, 125^[2], 133^[2] 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

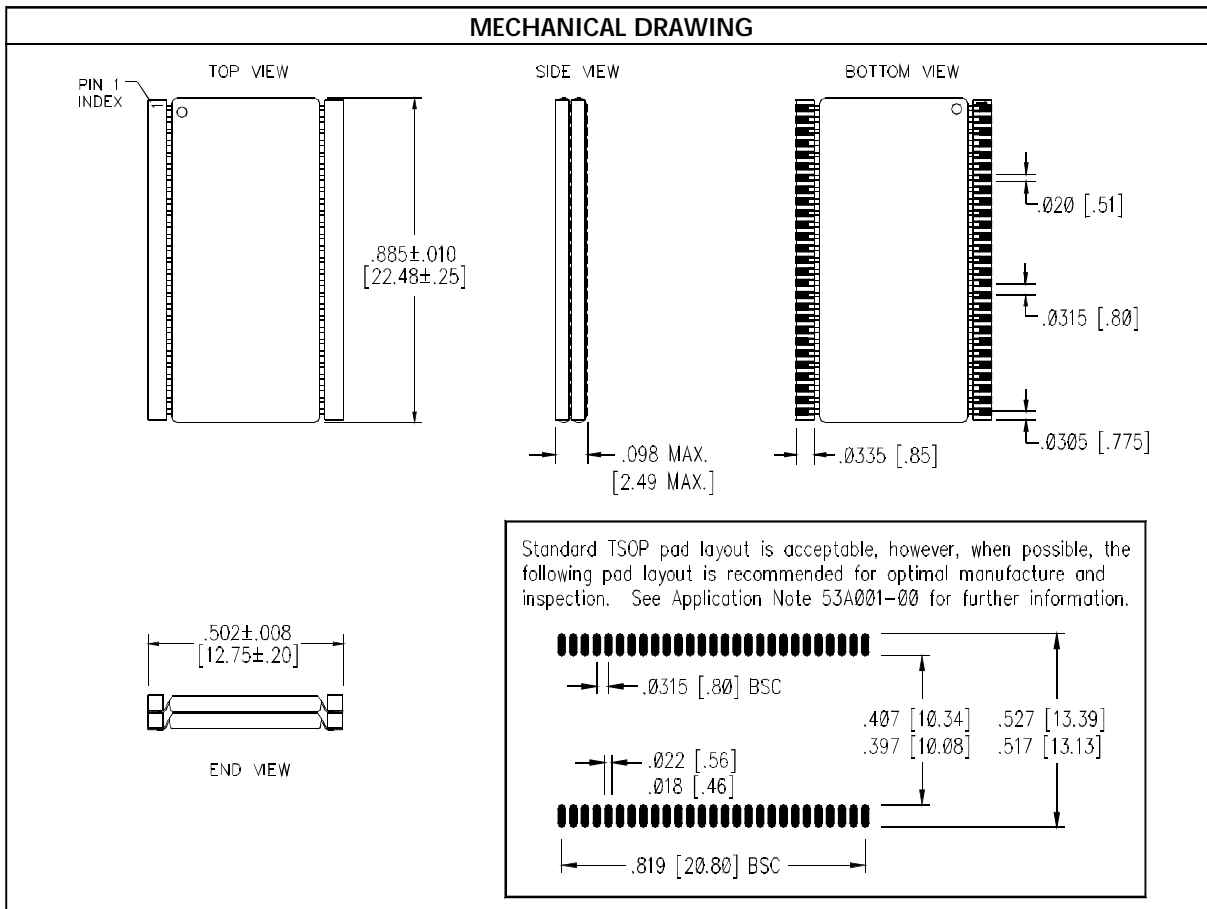
NOTES: [1] Available in Military and Industrial Temperature Ranges Only.
[2] Available in Commercial Temperature Range Only.

PIN NAMES	
A0 - A11	Row Address: A0 - A11 Column Address: A0 - A9
BA0, BA1	Bank Select Address
DQ0 - DQ3	Data In / Data Out
CAS	Column Address Strobe
RAS	Row Address Enables
WE	Data Write Enable
DQM	Data Input/Output Mask
CKE	Clock Enable
CLK	System Clock
CS0-CS1	Chip Selects
V _{CC} /V _{SS}	Power Supply/Ground
V _{CCQ} /V _{SSQ}	Data Output Power/Ground
N.C.	No Connect



PART NUMBER DESCRIPTION														
DP	SD	32M	X	4	R	Y5	-	DP	-	XX	XX	X	X	
PREFIX	TYPE	MEMORY DEPTH	DESIG	MEMORY WIDTH	DESIG	PACKAGE		SUPPLIER		MEMORY	SPEED	CL	GRADE	
														Blank Commercial Temperature
														I Industrial Temperature
														M Military Temperature
														2 CAS LATENCY 2
														15 [1] 15ns (66MHz) [1]
														12 [1] 12ns (83MHz) [1]
														10 10ns (100MHz)
														00 [2] 8ns (125MHz) [2]
														75 [2] 7.5ns (133MHz) [2]
														P1 PC100
														MANUFACTURER CODE [3]
														SUPPLIER CODE [3]
														STACKABLE TSOP
														64 MEGABIT LVTTL BASED
														MEMORY MODULE WITHOUT SUPPORT LOGIC
														SYNCHRONOUS DRAM

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 [2] Available in Commercial Temperature Range Only.
 [3] Contact your sales representative for supplier and manufacturer codes.



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