ADVANCED COMPONENTS PACKAGING

1 Gigabit Synchronous DRAM

DPSD128MX8XKY5

DESCRIPTION:

The Memory Stack™ series is a family of interchangeable memory modules. The 1 Gigabit SDRAM is a member of this family which utilizes the space saving LP-Stack™ TSOP stacking technology. The modules are constructed with two 64 Meg x 8 SDRAMs.

This 1 Gigabit LP-Stack™ module, DPSD128MX8XKY5, has been designed to fit the same footprint as the 64 Meg x 8 SDRAM TSOP monolithics and 512 Megabit based family of LP-Stack.™ modules. This allows system upgrade without electrical or mechanical redesign, providing an immediate and low cost memory solution.

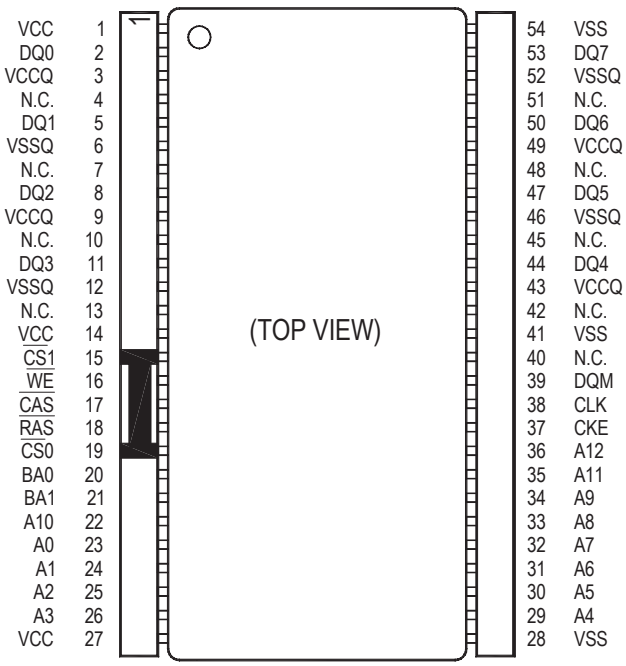
FEATURES:

- Configuration: 128 Meg x 8 bit
  (2 Banks x 16M x 4 Bit x 8 Banks)
- JEDEC Approved Footprint and Pinout
- IPC-A-610 Manufacturing Standards
- Assemble per DPAC Application Note 53A001-00
- Package: 54-Pin LP-Stack™

The Following Features are not affected by LP Stack™ and are provided as reference only. Refer to memory OEM Device specification for details:

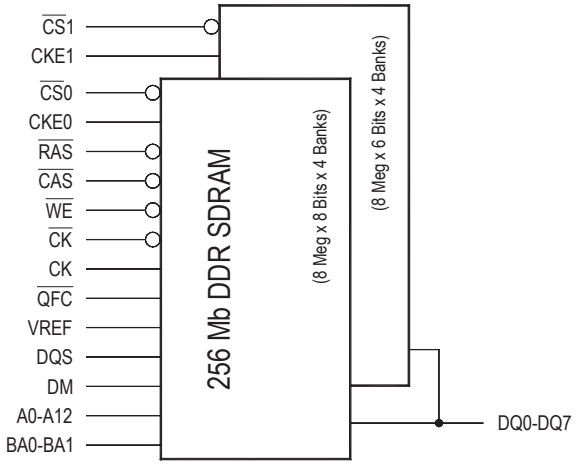
- Clock Frequency is determined by OEM memory device used.
- 3.3 Volt DQ Supply
- LVTTL Compatible I/O
- Four Bank Operation
- Programmable Burst Type, Burst Length, and CAS Latency
- Refresh: 8192 Cycles / 64ms
- Refresh Types: Auto and Self

PINOUT DIAGRAM



PIN NAMES	
A0-A12	Row Address: RA0-RA12 Column Address: CA0-CA9, A11, A12
BA0, BA1	Bank Select Address
DQ0-DQ7	Data In/Data Out
$\overline{CAS}$	Column Address Strobe
$\overline{RAS}$	Row Address Strobe
$\overline{WE}$	Data Write Enable
DQM	Data Input/Output Mask
CKE	Clock Enables
CLK	System Clock
$\overline{CS0}$ - $\overline{CS1}$	Chip Selects
V_{DD}/V_{SS}	Power Supply/Ground
V_{DDQ}/V_{SSQ}	Data Output Power/Ground
N.C.	No Connect

FUNCTIONAL BLOCK DIAGRAM



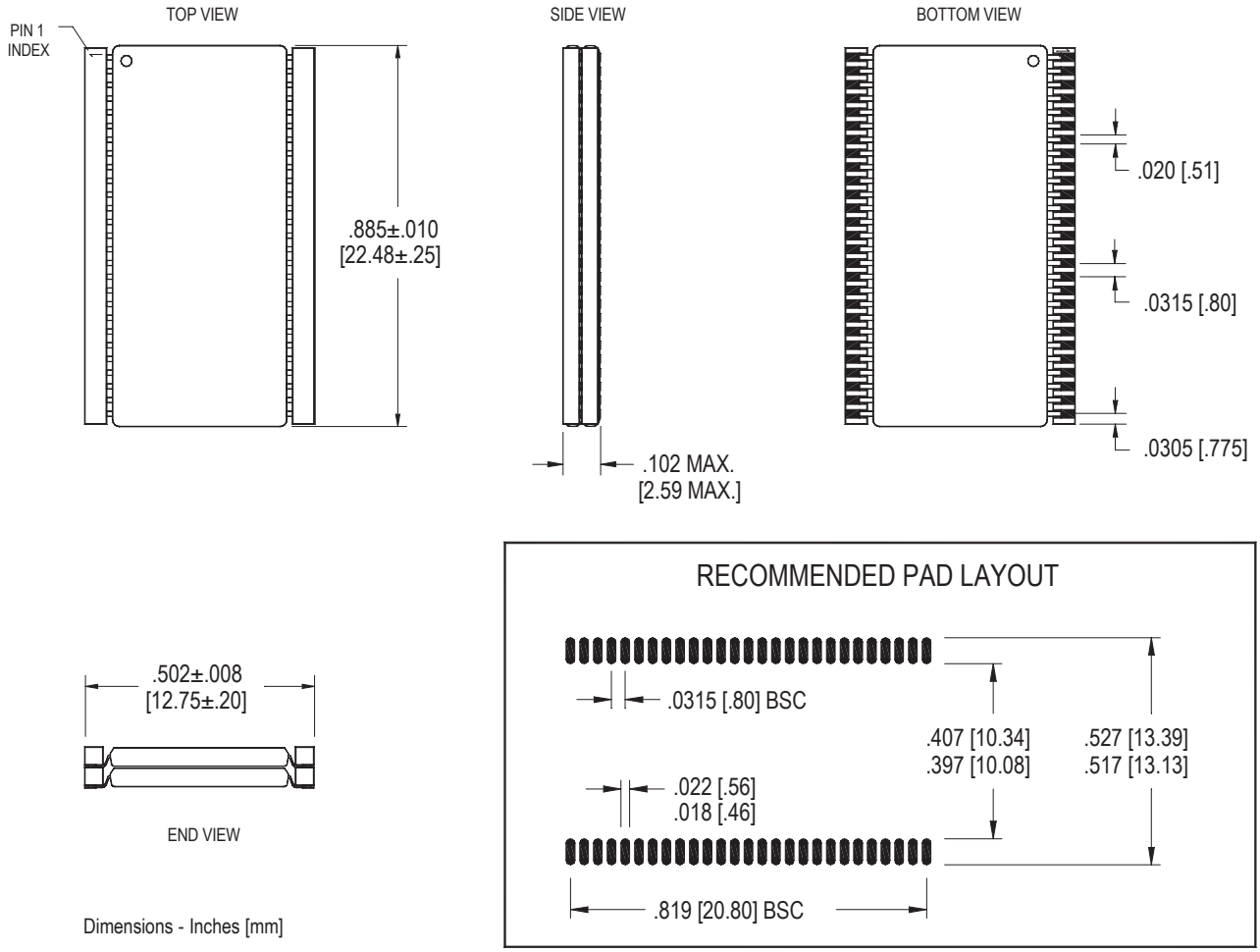
ORDERING INFORMATION

DP	SD	128M	X	8	XK	Y5	-	DP	-	XX	XXX	X
PREFIX	TYPE	MEMORY DEPTH	DESIG	MEMORY WIDTH	DESIG	PACKAGE		SUPPLIER		MEMORY	SPEED	GRADE

- GRADE: Blank — Commercial Temperature
- SPEED: 75 — 7.5ns (133MHz); P12 — PC100 CAS LATENCY 2; P13 — PC100 CAS LATENCY 3
- MEMORY: MANUFACTURER CODE [1]
- SUPPLIER: SUPPLIER CODE [1]
- PACKAGE: STACKABLE TSOP
- DESIG: 512 MEGABIT LVTTL BASED
- MEMORY WIDTH: MEMORY MODULE WITHOUT SUPPORT LOGIC
- TYPE: SYNCHRONOUS DRAM

NOTE: [1] Contact your sales representative for supplier and manufacturer codes.

MECHANICAL DIAGRAM



DPAC Technologies Products & Services for the Integration Age
7321 Lincoln Way, Garden Grove, CA 92841 **Tel** 714 898 0007 **Fax** 714 897 1772
www.dpactech.com Nasdaq: DPAC