ADVANCED COMPONENTS PACKAGING

1 Gigabit Synchronous DRAM

DPSD128ME8XKY5

PRELIMINARY

DESCRIPTION:

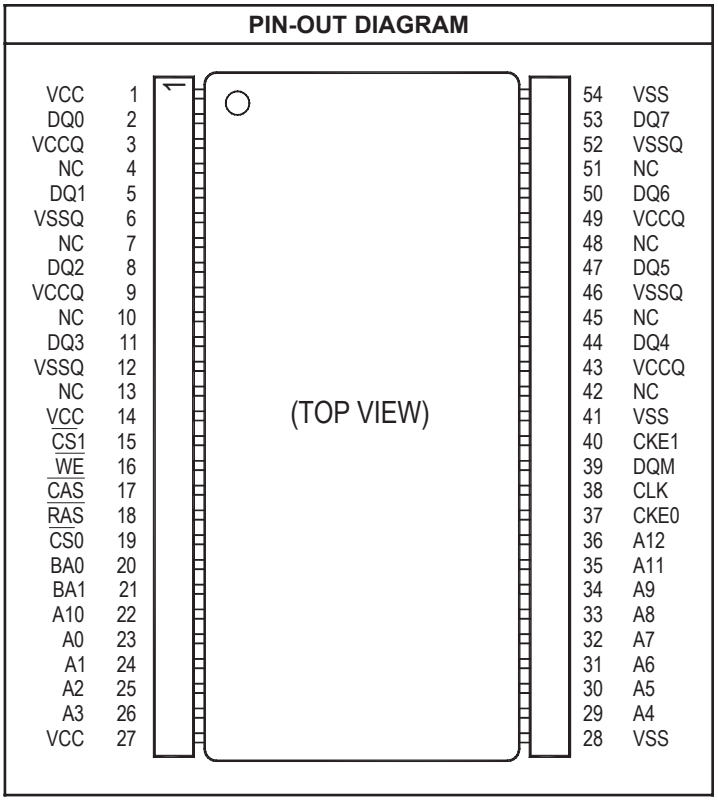
The Memory Stack™ series is a family of interchangeable memory devices. The 1 Gigabit SDRAM assembly utilizes the space saving LP-Stack™ technology to increase memory density. This stack is constructed with two 512Mb (64M x 8) SDRAMs.

This 1Gb LP-Stack™ has been designed to fit in the same footprint as the 512Mb (64M x 8) SDRAM TSOPII monolithic. This stack allows for system upgrade without electrical or mechanical redesign, providing an alternative low cost memory solution.

FEATURES:

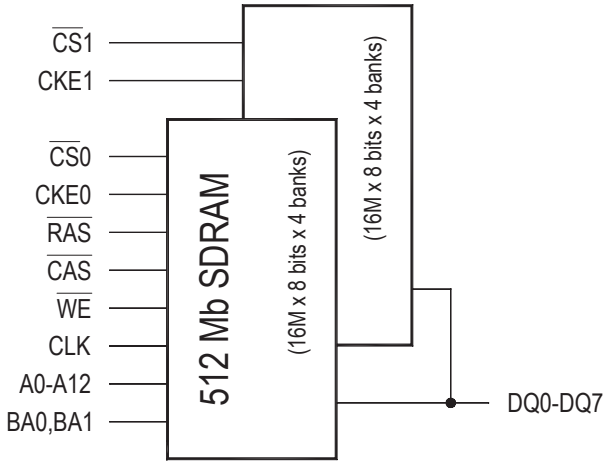
- Electrical characteristics meet semiconductor manufacturers' datasheets
- Memory organization:
  (2) 512Mb Memory devices. Each device arranged as 64M x 8 bits (16M x 8 bits x 4 banks)
- Memory stack organization:
  128M x 8 bits (32M x 8 bits x 4 banks)
- JEDEC approved, 2 Rank stack pinout and footprint (with 2 CSs and 2 CKEs)
- Optimized for RDIMMs
- IPC-A-610, class 2, manufacturing standards
- Lead free manufacturing process
- Package: 54-Pin TSOPII stack

PIN-OUT DIAGRAM

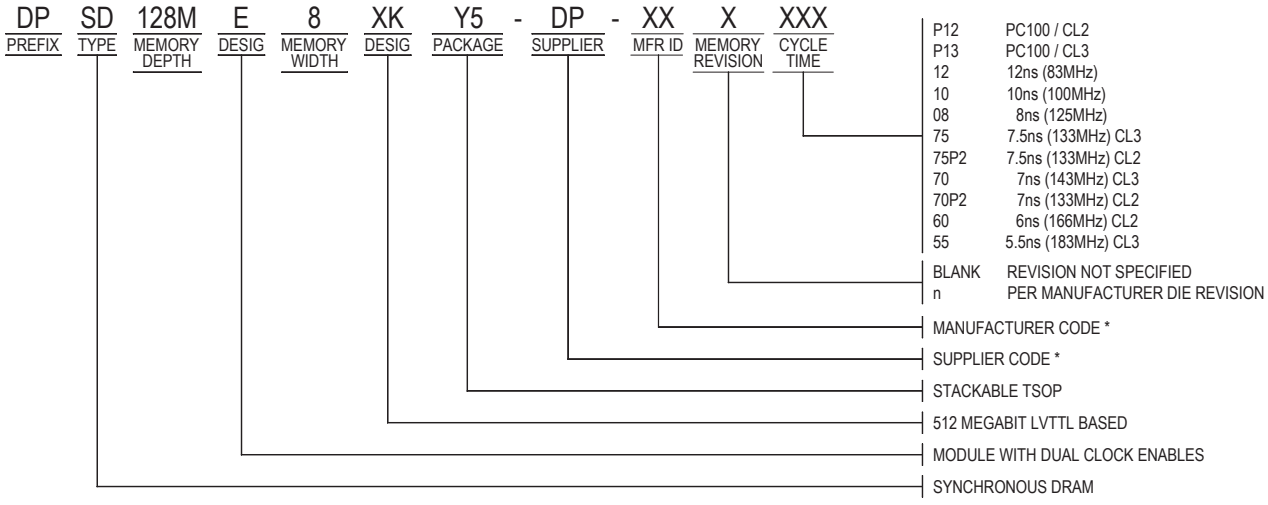


PIN NAMES	
A0-A12	Row Address: A0-A12 Column Address: A0-A9, A11
BA0, BA1	Bank Select Address
DQ0-DQ7	Data In/Data Out
$\overline{CAS}$	Column Address Strobe
$\overline{RAS}$	Row Address Strobe
$\overline{WE}$	Data Write Enable
DQM	Data Input/Output Mask
CKE0,CKE1	Clock Enables
CLK	System Clock
$\overline{CS0}$, $\overline{CS1}$	Chip Selects
V_{CC}/V_{SS}	Power Supply/Ground
V_{CCQ}/V_{SSQ}	Data Output Power/Ground
NC	No Connect

FUNCTIONAL BLOCK DIAGRAM



ORDERING INFORMATION

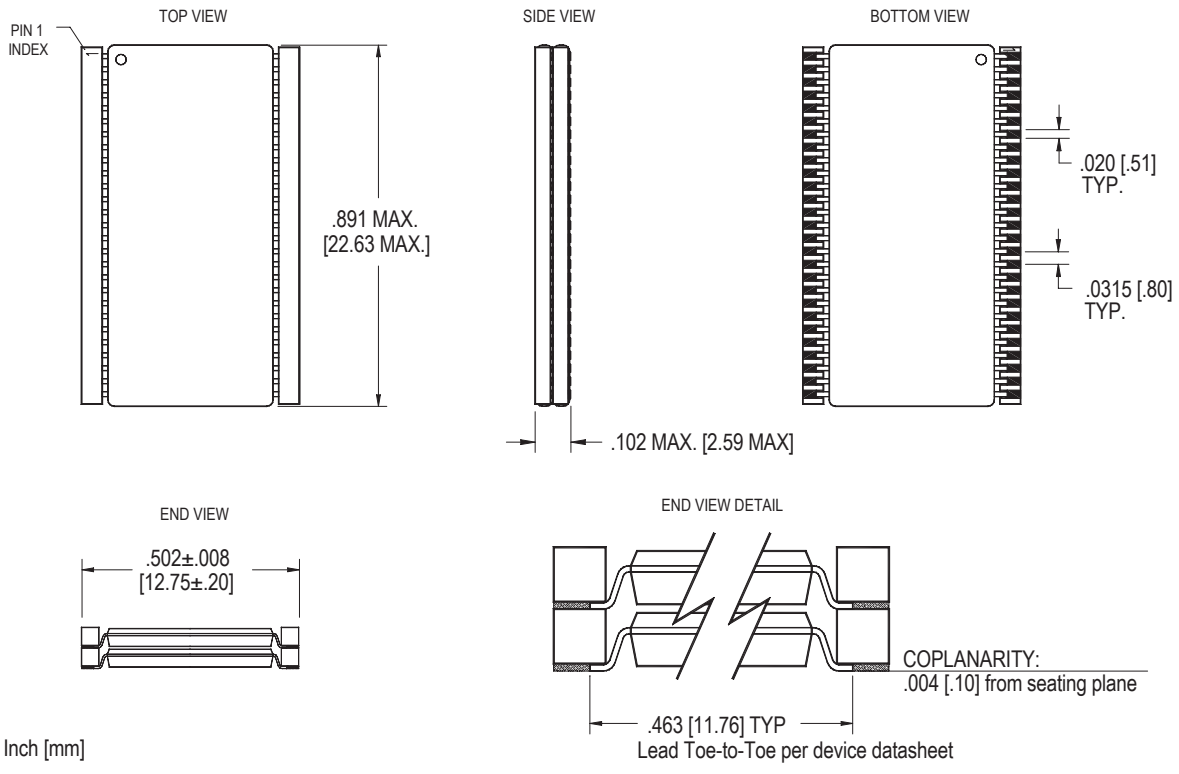


* Contact your sales representative for supplier and manufacturer codes.

NOTE:

1. AC Parameters of base memory are unchanged from device manufacturers' specifications.
2. DC Parameters may be affected by stacking. Please refer to application note 53A004-00 for further information.
3. For assembly and inspection procedures, refer to application note 53A001-00.
4. Maximum reflow temperature recommendation is 215°C.

MECHANICAL DIAGRAM



PRELIMINARY

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