DATARAM
Accelerating Innovation

DVM21S1T8/4G

4GB - 260-Pin 1Rx8 Unbuffered Non-ECC DDR4 SODIMM

Identification
DVM21S1T8/4G 512Mx64
4GB 1Rx8 PC4-2133P-S15

Performance Range
Clock / Module Speed / CL-t$_{RCD}$ –t$_{RP}$
1067 MHz / PC4-2133 / 16-16-16
1067 MHz / PC4-2133 / 15-15-15
933 MHz / PC4-1866 / 14-14-14
933 MHz / PC4-1866 / 13-13-13
800 MHz / PC4-1600 / 12-12-12
800 MHz / PC4-1600 / 11-11-11
667 MHz / PC4-1600 / 10-10-10
667 MHz / PC4-1600 / 9-9-9

Features

260-pin JEDEC-compliant DIMM, 69.60 mm wide by 30.00 mm high
Operating Voltage: VDD/VDDQ = 1.2V (1.14V to 1.26V)
VPP = 2.5V (2.375V to 2.75V)
VDDSPD = 2.25V to 2.75V
I/O Type: 1.2 V signaling
On-board I^{2}C temperature sensor with integrated Serial Presence-Detect (SPD) EEPROM
Data Transfer Rate: 17.0 Gigabytes/sec
Data Bursts: 8 and burst chop 4 mode
ZQ Calibration for Output Driver and On-Die Termination (ODT)
Programmable ODT / Dynamic ODT during Writes
Programmable CAS Latency: 9, 10, 11, 12, 13, 14, 15 and 16
Bi-directional Differential Data Strobe signals
Per DRAM Addressability is supported
Write CRC is supported at all speed grades
DBI (Data Bus Inversion) is supported(x8 only)
CA parity (Command/Address Parity) mode is supported
16 internal banks
SDRAM Addressing (Row/Col/BG/BA): 15/10/2/2
Fully RoHS Compliant

Description

DVM21S1T8/4G is an Unbuffered 512Mx64 small –outline memory module, which conforms to JEDEC's DDR4-2133, PC4-2133 standard. The assembly is Single-Rank, comprised eight 512Mbx8 DDR4-2133 SDRAMs.

One EEPROM is used for Serial Presence Detect and a combination register/PLL, with Address and Command Parity, is also used.

Both output driver strength and input termination impedance are programmable to maintain signal integrity on the I/O signals in a Fly-by topology.
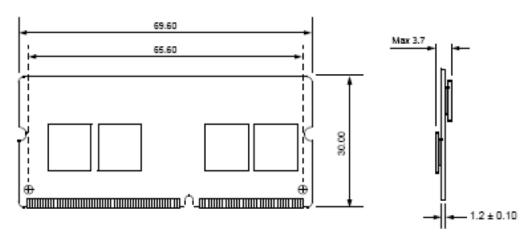
A thermal sensor accurately monitors the DIMM module and can prevent exceeding the maximum operating temperature of 95C.

Notes

Tolerances on all dimensions except where otherwise indicated are ±.13 (.005).

All dimensions are expressed in millimeters [inches]

Units : Millimeters