

Identification

DVM29R1T4/16G 2Gx72
16GB 1Rx4 PC4-3200AA-R22

Performance Range

Clock / Module Speed / CL-t_{RCD}-t_{RP}
 1600MHz / PC4-3200 / 22-22-22
 1467Hz / PC4-2933 / 21-21-21
 1467Hz / PC4-2933 / 20-20-20
 1333Hz / PC4-2666 / 19-19-19
 1200 MHz / PC4-2400 / 18-18-18
 1200 MHz / PC4-2400 / 17-17-17
 1067MHz / PC4-2133 / 16-16-16
 1067MHz / PC4-2133 / 15-15-15
 933 Hz / PC4-1866 / 14-14-14
 933 Hz / PC4-1866 / 13-13-13
 800 Hz / PC4-1600 / 12-12-12
 800 Hz / PC4-1600 / 11-11-11
 667 MHz / PC4-1600 / 10-10-10



Features

288-pin JEDEC-compliant DIMM, 133.35 mm wide by 31.25 mm high
 Operating Voltage: VDD/VDDQ = 1.2V (1.14V to 1.26V)
 Operating Temperature (Environment, Ambient T_{OPR}) – 0 to 65 C
 Operating Temperature (DRAM T_{OPER}) – 0 to 85 C
 VPP = 2.5V (2.375V to 2.75V)
 VDDSPD = 2.25V to 2.75V
 I/O Type: 1.2 V signaling
 On-board I²C temperature sensor with integrated Serial Presence-Detect (SPD) EEPROM
 Data Transfer Rate: 25.6 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: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22
 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
 Supports ECC error correction and detection
 16 internal banks
 SDRAM Addressing (Row/Col/BG/BA): 17/10/2/2
 Fully RoHS Compliant

Description

DVM32R1T4/16G is a registered 2Gx72 memory module, which conforms to JEDEC's DDR4-3200AA, PC4-25600 standard. The assembly is Single-Rank, comprised of eighteen 2Gbx4 DDR4-3200 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]

