Description

AQD-SD4U16GE32-SE is a DDR4 3200Mbps ECC SO-DIMM high-speed, memory module that use 18pcs of 1024M x 8 bits DDR4 SDRAM in FBGA package and a 4K bits serial EEPROM on a 260-pin printed circuit board. AQD-SD4U16GE32-SE is a Dual In-Line Memory Module and is intended for mounting into 260-pin edge connector sockets.

Synchronous design allows precise cycle control with the use of system clock. Data I/O transactions are possible on both edges of DQS. Range of operation frequencies, programmable latencies allow the same device to be useful for a variety of high bandwidth, high performance memory system applications.

Features

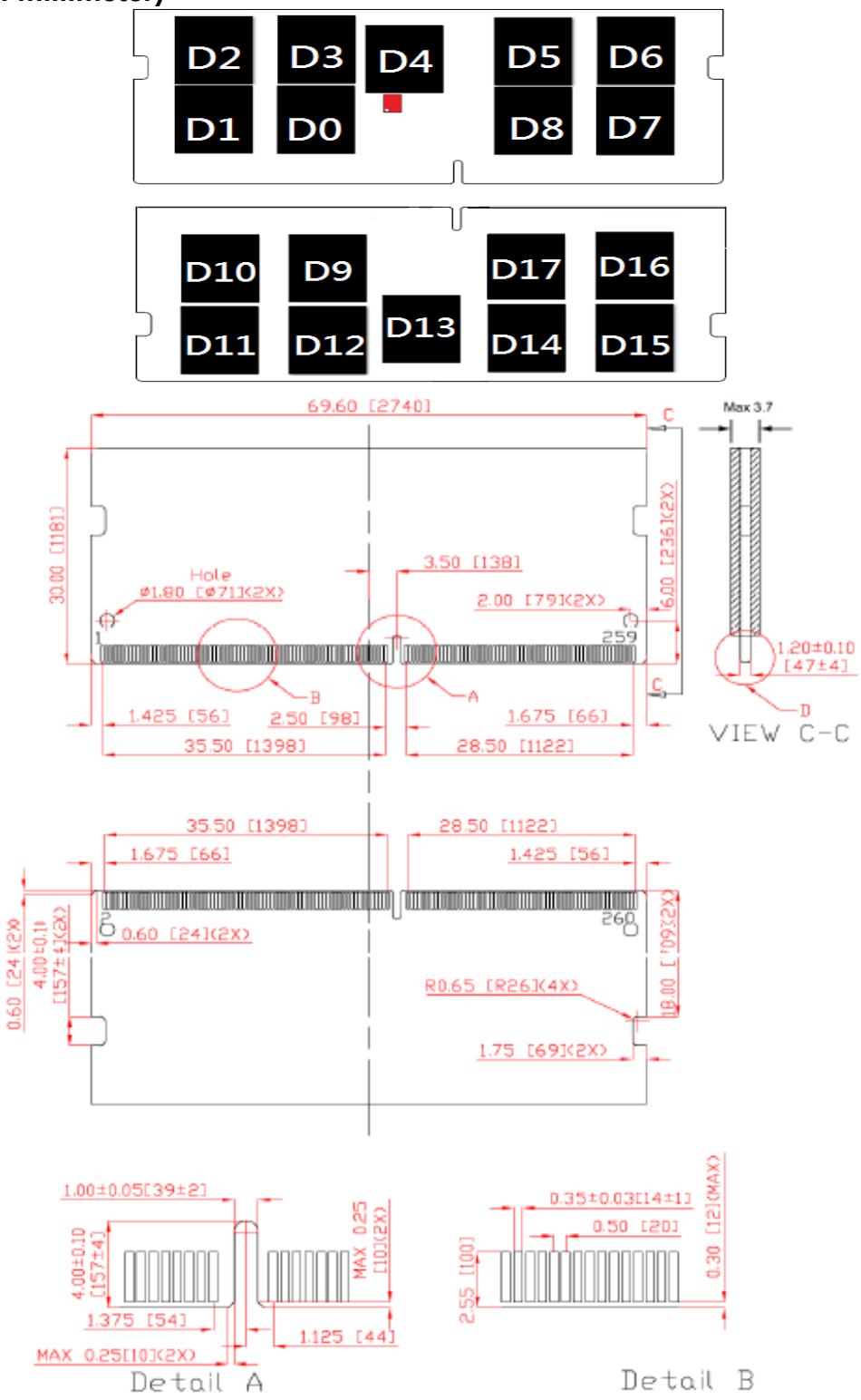
- RoHS compliant products.
- JEDEC standard 1.2V(1.14V~1.26V) Power supply
  VDDQ= 1.2V(1.14V~1.26V)
- VPP = 2.5V +0.25V / -0.125V
- Data transfer rates: PC4-3200
  Programmable CAS Latency:10~22
- 8 bit pre-fetch
- Burst Length (BL) switch on-the-fly BL8 or BC4
- Bi-directional Differential Data-Strobe
- On Die Termination, Nominal, Park, and Dynamic ODT
- Serial presence detect with EEPROM
  Asynchronous reset
  PCB edge connector treated with 30u" Gold-Plating
- Anti - sulfur resistor used

Pin Identification

Symbol	Function
A0–A17[1], BA0~BA1	Address/Bank input
DQ0~DQ63	Bi-direction data bus.
DQS0_t–DQS17_t	Data Buffer data strobes
DQS0_c–DQS17_c	Data Buffer data strobes
CK0_t, CK1_t	Register clock input
CK0_c, CK1_c	Registert clocks input
ODT0 &ODT1	On-die termination control line
CS0_n–CS3_n	DIMM Rank Select Lines input.
RAS_n[2]	Row address strobe
CAS_n[3]	Column address strobe
WE_n[4]	Write Enable
DM0~DM7	Data masks/high data strobes
VDD	Core power supply
VDDQ	I/O driver power supply
V_{REF}CA	Command/address reference supply
V_{DD}SPD	SPD EEPROM power supply
SA0~SA2	I2C serial bus address select for EEPROM
SCL	I2C serial bus clock for EEPROM
SDA	I2C serial bus data for EEPROM
VSS	Ground
RESET_n	Set DRAMs Known State
VTT	DRAM I/O termination supply
VPP	SDRAM Supply
ALERT_n	Register ALERT_n output
EVENT_n	SPD signals a thermal event has occurred
RFU	Reserved for future use

1. Address A17 is only valid for 16 Gb x4 based SDRAMs.
2. RAS_n is a multiplexed function with A16.
3. CAS_n is a multiplexed function with A15.
4. WE_n is a multiplexed function with A14.

Dimensions (Unit: millimeter)



Note:1. Tolerances on all dimensions +/-0.15mm unless otherwise specified.