

CIR-V4DESW2416G

DDR4 DIMM 2400MHz 16GB with ECC

Description

This specification defines the electrical and mechanical requirements for 288 pin, 1.2 V (VDD), Double Data Rate, Synchronous DRAM Dual In-Line Memory Modules (DDR4 SDRAM ECC U-DIMM). This DDR4 ECC U-DIMM is intended for use as main memory when installed in PCs, laptops and other systems.

Reference design examples are included which provide an initial basis for DDR4 ECC U-DIMM designs. Modifications to these reference designs may be required to meet all system timing, signal integrity and thermal requirements for DDR4-2400 support.

All DDR4 ECC U-DIMM implementations must use simulations and lab verification to ensure proper timing requirement and signal integrity in the design.

Specifications					
Density	16GB				
Pin Count	288pin				
Туре	Unbuffered				
Dimensions	133.35mm x 31.25mm				
ECC	with ECC				
Component Config	1G x 8 bit				
Data Rate	2400MHz				
CAS Latency	17				
Voltage	1.2V				
PCB Layers	8				
Operating Temp.(TCASE)	0°C~+95°C				
Module Ranks	Dual Rank				

Features

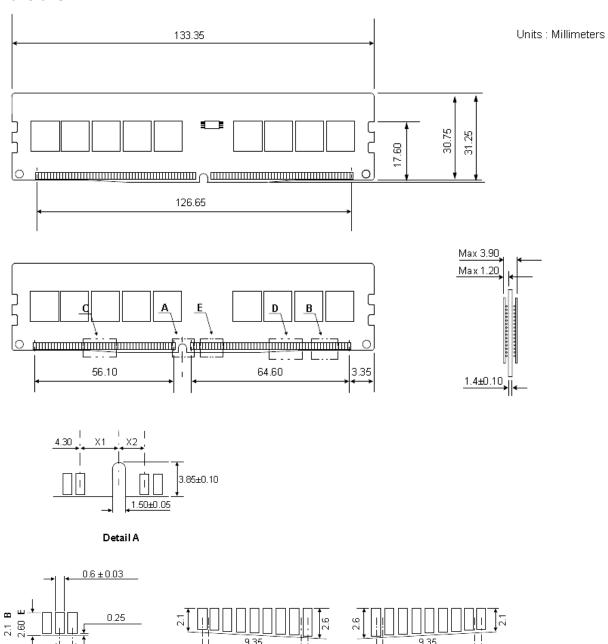
- JEDEC Standard 288-pin Dual In-Line Memory Module
- $VDD=VDDQ = 1.2V\pm0.06V$ (1.14V~1.26V)
- Programmable CAS Latency(posted CAS): 11,12,13,14,15,16,17
- Low-Power auto self-refresh (LPASR)
- SDRAMs have 16 internal banks for concurrent operation (4 Bank Group of 4banks each)
- Normal and Dynamic On-Die Termination for data, strobe and mask signals.
- Data bus inversion (DBI) for data bus
- Fixed burst chop (BC) of 4 and burst length (BL) of 8 via the MRS
- Selectable BC4 or BL8 on-the fly (OTF)
- ECC Function
- On-die VREFDQ generation and Calibration
- RoHs and Halogen free



Speed Grade

Frequency	Data	CAS Latency Support					QL (DQD (DD		
Grade	Transfer Rate	CL11	CL12	CL13	CL14	CL15	CL16	CL17	CL-tRCD-tRP
DDR4-2400	PC4-19200	1600	1600	1866	1866	2133	2133	2400	17-17-17

Package Dimensions



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Detail C

Tolerances: ± 0.25mm unless otherwise specified

Detail B,E

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Detail D