

## CIR-V4DASY2916G

DDR4 Registered DIMM 2933MHz 16GB

### 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.

Reference design examples are included which provide an initial basis for DDR4 R-DIMM designs. Modifications to these reference designs may be required to meet all system timing, signal integrity and thermal requirements for DDR4-2933 support.

### Specifications

Density	16GB
Pin Count	288pin
Type	Registered
Dimensions	133.35mm x 31.25mm
ECC	with ECC
Component Config	1G x 8 bit
Data Rate	2933 MHz
CAS Latency	21
Voltage	1.2V
PCB Layers	8
Operating Temp.(TCASE)	0°C~+85°C
Module Ranks	Dual Rank

### Features

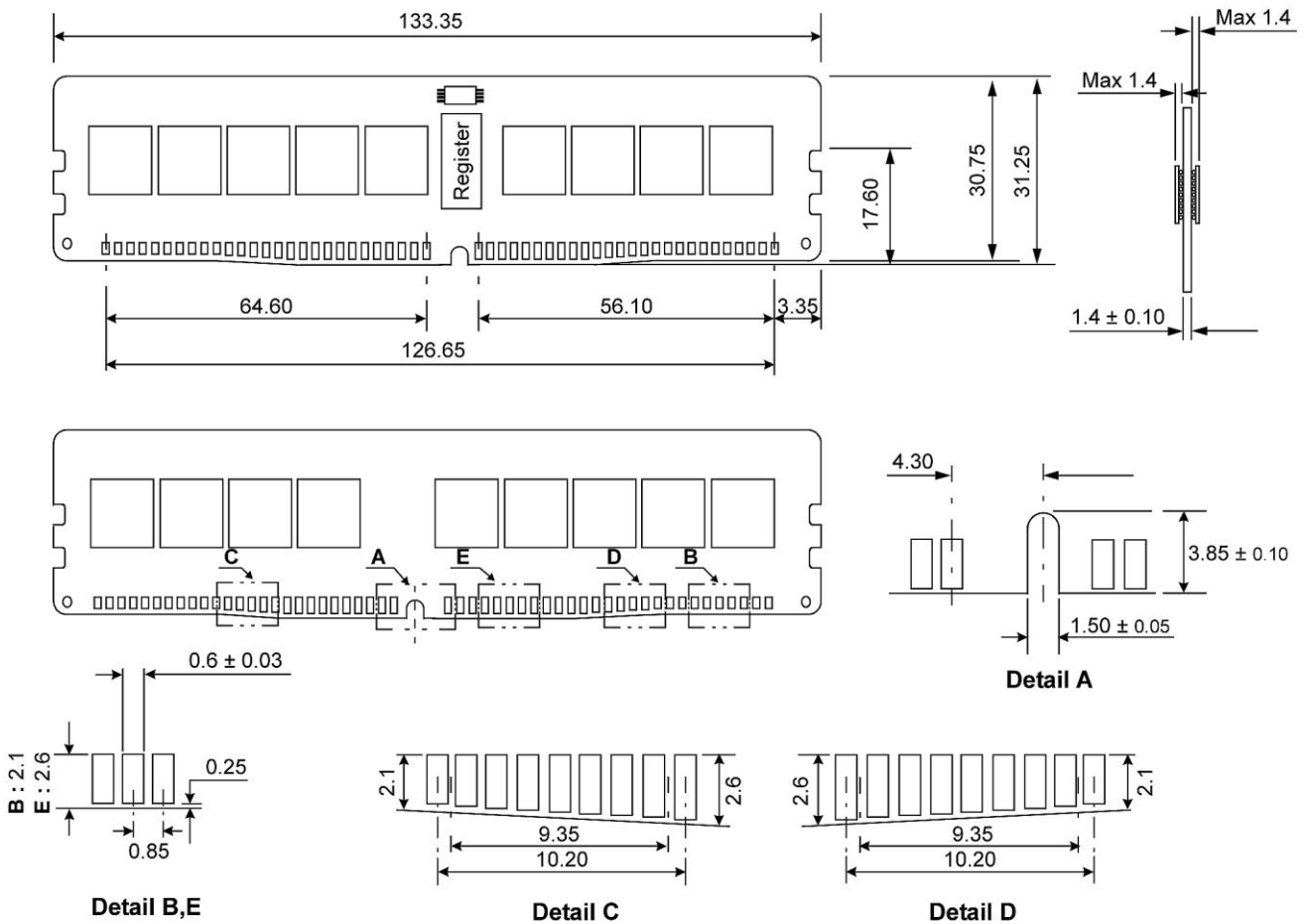
- JEDEC Standard 288-pin Registered Dual In-Line Memory Module
- Inputs and Outputs are SSTL-12 compatible
- VDD=VDDQ= 1.2 Volt (1.14V~1.26V)
- VPP=2.5 Volt (2.375V~2.75V)
- VDDSPD=2.2-3.6V
- Programmable CAS Latency: 11,12,13,14,15,16,17,18,19,20,21
- SDRAMs have 16 internal banks for concurrent operation (4 Bank Group of 4 banks 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
- Terminated control, command and address bus
- On-die VREFDQ generation and Calibration
- Temperature Sensor with SPD EEPROM
- RoHS Compliant

### Speed Grade

Frequency Grade	Data Transfer Rate	CAS Latency Support											CL-tRCD-tRP
		CL11	CL12	CL13	CL14	CL15	CL16	CL17	CL18	CL19	CL20	CL21	
DDR4-2933	PC4-23466	1600	1600	1866	1866	2133	2133	2400	2400	2666	2666	2933	21-21-21

### Package Dimensions

Unit: mm



Tolerances :  $\pm 0.15$ mm unless otherwise specified