

CIR-S3DUSI1604G

DDR3 DIMM 1600MHz 4GB

Description

The CIR-S3DUSI1604G is 512M words X 64 bits, 2 ranks. Unbuffered Dual In-Line Memory Module (DIMM). DDR3 SDRAMs in Fine Ball Grid Array (FBGA) packages on a 240pin glass-epoxy substrate. Provide a high performance 8 byte interface in 133.35mm width form factor of industry standard. It is suitable for easy interchange and addition.

Specifications

Density	4GB
Pin Count	240pin
Type	Unbuffered
Dimensions	133.35mm x 30.0mm
ECC	Non-ECC
Component Config	256M x 8 bit
Data Rate	1600 Mbps
CAS Latency	11
Voltage:	1.5V
PCB Layers	6
Operating Temp.(TCASE)	0°C~+85°C
Module Ranks	Dual Rank

Features

- Data rate: 1600Mbps
- 240-pin, Dual in-line memory module (DIMM)
- Power supply: VDD= 1.5V + 0.075V
- Interface: SSTL_15
- Programmable CAS Latency (CL): 6,7,8,9,10,11 support
- Fully differential clock inputs (CK, /CK) operation
- Differential Data Strobe (DQS, /DQS)
- DM masks write data-in at the both rising and falling edges of the data strobe
- BL switch on the fly
- 8banks
- 8K refresh cycles /64ms
- Dynamic On Die Termination supported
- Asynchronous RESET pin supported
- ZQ calibration supported
- TDQS (Termination Data Strobe) supported (x8 only)
- Write Levelization supported
- Refresh: Auto-Refresh, Self-Refresh
- On Die Thermal Sensor supported (JEDEC optional)
- 8 bit pre-fetch
- Lead-Free Products are RoHS compliant
- Average Refresh Period 7.8us at $0^{\circ}\text{C} \leq \text{TC} \leq 85^{\circ}\text{C}$
3.9us at $85^{\circ}\text{C} \leq \text{TC} \leq 95^{\circ}\text{C}$



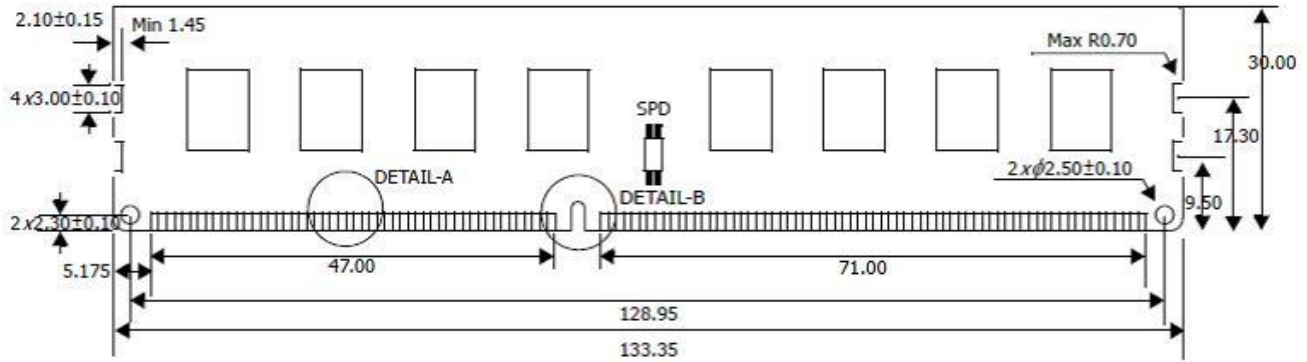
Speed Grade

Frequency Grade	Data Transfer Rate	CAS Latency Support						CL-tRCD-tRP
		CL6	CL7	CL8	CL9	CL10	CL11	
DDR3-1600	PC3-12800	800	1066	1066	1333	1333	1600	11-11-11

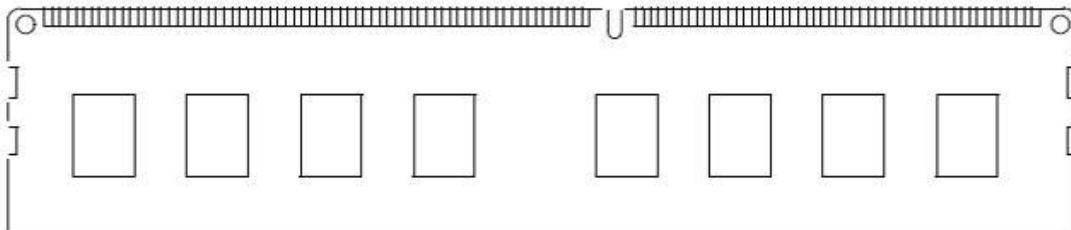
Package Dimensions

Unit: mm

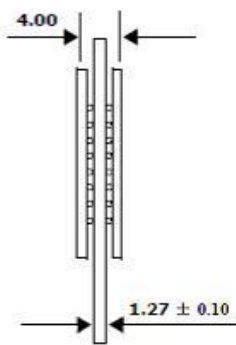
Front



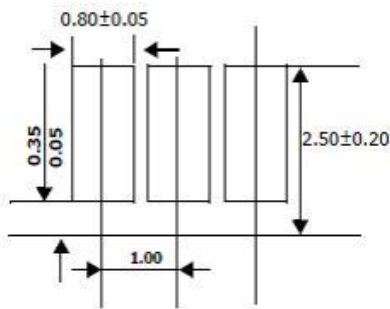
Back



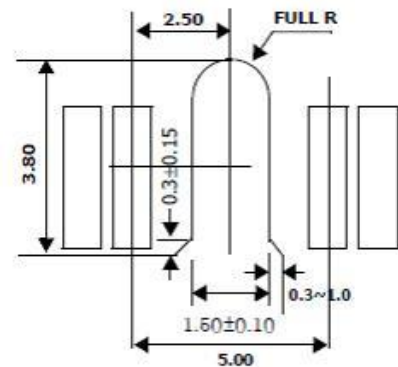
Side



Detail - A



Detail - B



Tolerances : $\pm 0.15\text{mm}$ unless otherwise specified