

## CIR-S3DUSP1604G

DDR3 DIMM 1600MHz 4GB

### Description

The CIR-S3DUSP1604G is 512MB words X 64 bits, 1 rank. 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	512M x 8 bit
Data Rate	1600 MHz
CAS Latency	11
Voltage:	1.5V/1.35V
PCB Layers	6
Operating Temp.(TCASE)	0°C~+85°C
Module Ranks	Single Rank

### Features

- Data rate: 1600MHz
- 240-pin,Dual in-line memory module(DIMM)
- Power supply: VDD= 1.5V (1.425V to 1.575V) & VDD= 1.35V (1.283V to 1.45V)
- 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  $85^{\circ}\text{C} \leq \text{TC} \leq 95^{\circ}\text{C}$

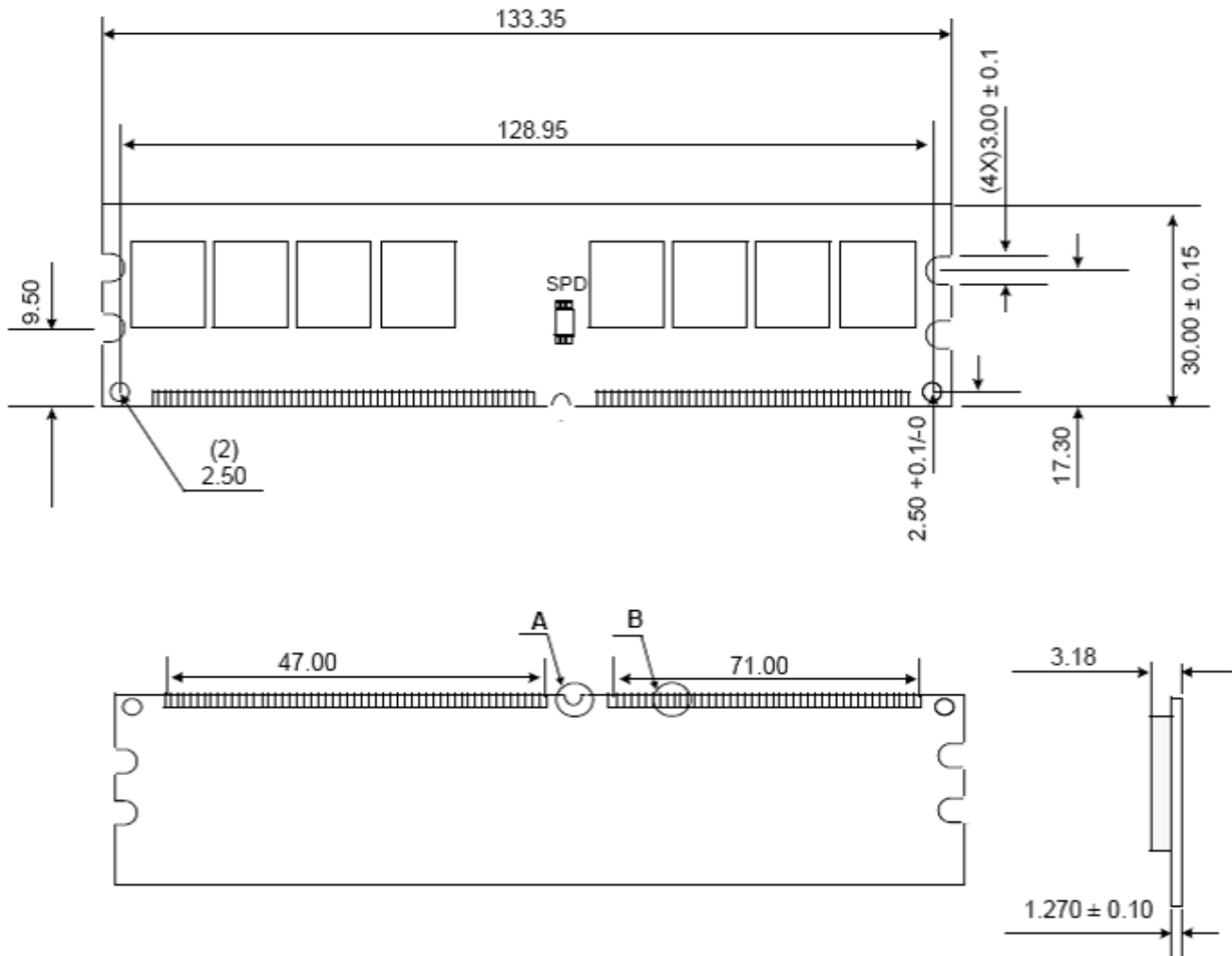


### Speed Grade

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



Tolerances : ± 0.15mm unless otherwise specified