

## CIR-S3SUSOM1604G

DDR3 SO-DIMM 1600MHz 4GB

Description	Specifications	
<p>The CIR-S3SUSOM1604G is 512M words X 64 bits, 2 ranks. Unbuffered Small Outline Dual In-Line Memory Module (SO-DIMM). DDR3 SDRAMs in Fine Ball Grid Array(FBGA) packages on a 204pin glass-epoxy substrate. Provide a high performance 8 byte interface in 67.60mm width form factor of industry standard. It is suitable for easy interchange and addition.</p>	Density	4GB
	Pin Count	204pin
	Type	Unbuffered
	Dimensions	67.6mm x 30.0mm
	ECC	Non-ECC
	Component Config	256M x 8 bit
	Data Rate	1600 MHz
	CAS Latency	11
	Voltage	1.5V / 1.35V
	PCB Layers	8
	Operating Temp.(TCASE)	0°C~+85°C
	Module Ranks	Dual Rank

### Features

- Data rate: 1600MHz
- 204pin, Small outline dual in-line memory module(SO-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  $85^{\circ}\text{C} \leq \text{TC} \leq 95^{\circ}\text{C}$

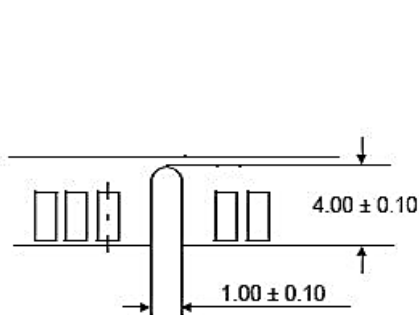
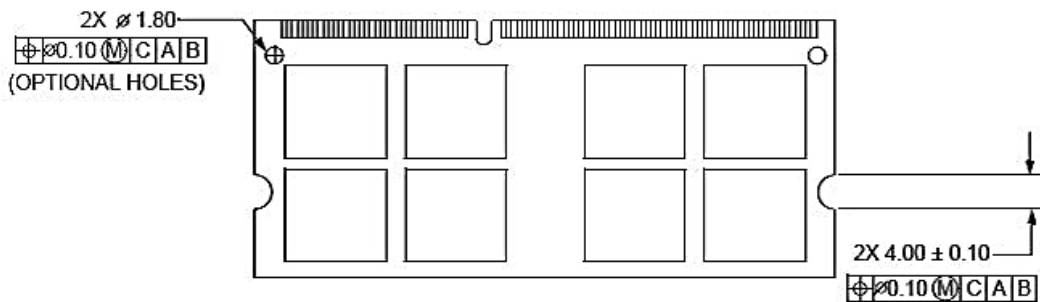
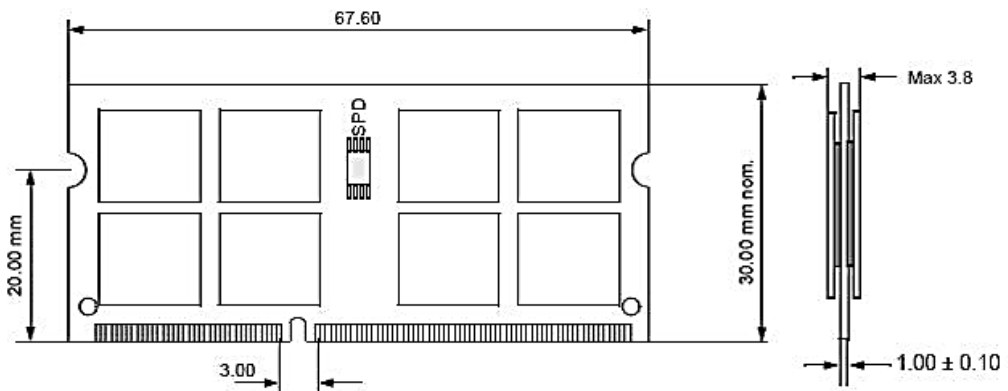


Speed Grade

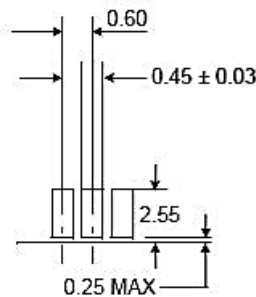
Frequency Grade	Data Transfer Rate	CAS Latency Support						CL-tRCD-tRP
		CL6	CL7	CL8	CL9	CL10	CL11	
DDR3-1600	PC3-12800	800	1066	1066	1333	1333	1600	11-11-11

Package Dimensions

Unit: mm



Detail A



Detail B

Tolerances :  $\pm 0.15$ mm unless otherwise specified