

CIR-S3DVSOM1602G

DDR3 VLP-DIMM 1600MHz 2GB

Description

The CIR-S3DVSOM1602G is 256M 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 | 2GB |
| Pin Count | 240pin |
| Type | Unbuffered |
| Dimensions | 133.35mm x 18.30mm |
| 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 | Single Rank |

Features

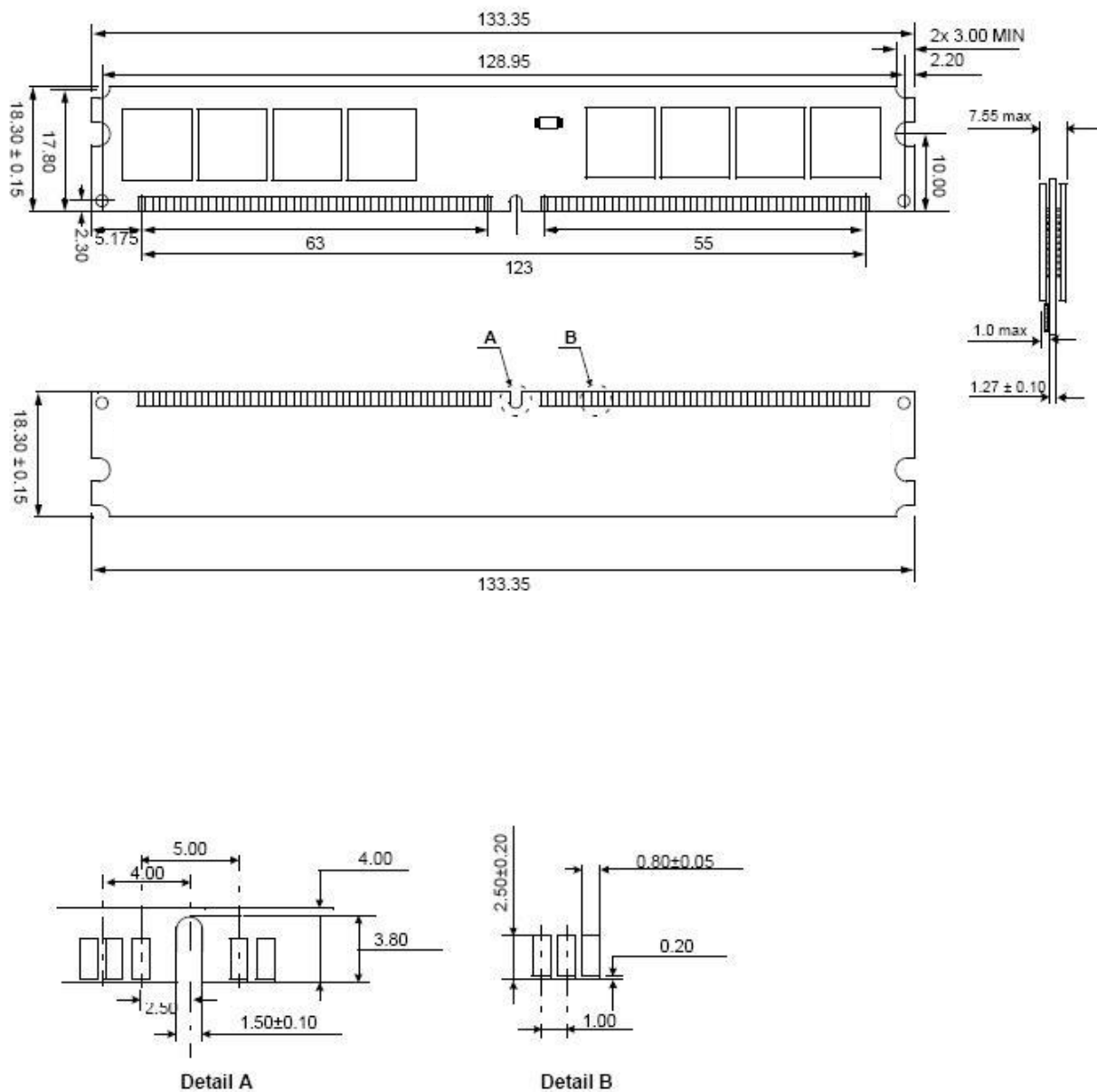
- Data rate: 1600MHz
- Very Low Profile dual in-line memory module (VLP-DIMM)
- Power supply: VDD= 1.5V (1.425V to 1.575V) & VDD= 1.35V (1.283V to 1.45V)
- Interface: SSTL_15
- Programmable CAS Latency (CL): 6,7,8,9,10,11 support
- Fully differential clock inputs (CK, /CK) operation
- Differential Data 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