

## CIR-W2DUIG8001G

DDR2 WIDE TEMP. DIMM 800MHz 1GB

### Description

The CIR-W2DUIG8001G is 128M words x 8 bits, 1 rank DDRII SDRAM Small Outline Dual In-line Memory Module, mounting 8 pieces of 1G bits DDRII SDRAM sealed in FBGA package. Read and write operations are performed at the cross points of the CK and the /CK. This high-speed data transfer is realized by the 4 bits prefetch-pipelined architecture. Data strobe (DQS and /DQS) both for read and write are available for high speed and reliable data bus design. By setting extended mode register, the on-chip Delay Locked Loop(DLL) can be set enable or disable. This module provides high density mounting without utilizing surface mount technology. Decoupling capacitors are mounted beside each FBGA on the module board.

### Specifications

Density	1GB
Pin Count	240pin
Type	Unbuffered
Dimensions	133.35mm x 30.0mm
ECC	Non-ECC
Component Config	128M x 8 bit
Data Rate	800 Mbps
CAS Latency	5
Voltage:	1.8V
PCB Layers	6
Operating Temp.(TCASE)	-40°C~+95°C
Module Ranks	Single Rank

### Features

- All of Lead-Free products are compliant for ROHS
- 240-pin, dual in-line memory module(DIMM)
- 1.8V + 0.1V power supply
- Data rate: 800Mbps(max)
- 8 Banks
- JEDEC standard 1.8V I/O(SSTL\_18-compatible)
- Burst Length: 4,8
- Programmable /CAS latency (CL): 3, 4, 5
- Double-data-rate architecture: two data transfers per clock cycle
- Differential clock inputs (CK and /CK)
- Four-bit prefetch architecture
- Auto precharge operation for each burst access
- Auto refresh and self refresh modes
- Differential data strobe(DQS,DQS#) option
- DLL to align DQ and DQS transitions with CK
- Programmable Sequential / Interleave Burst Mode
- Bi-directional Differential Data-Strobe (Single-ended data-strobe is an optional feature)
- Posted CAS# additive latency (AL)
- 64ms,8192-cycle refresh
- Serial presence detect with EEPROM
- Gold edge contacts
- Operating temperature: (Note 1)  
— TOPR (Tcase) = Industrial -40°C ≤ TC ≤ +95°C

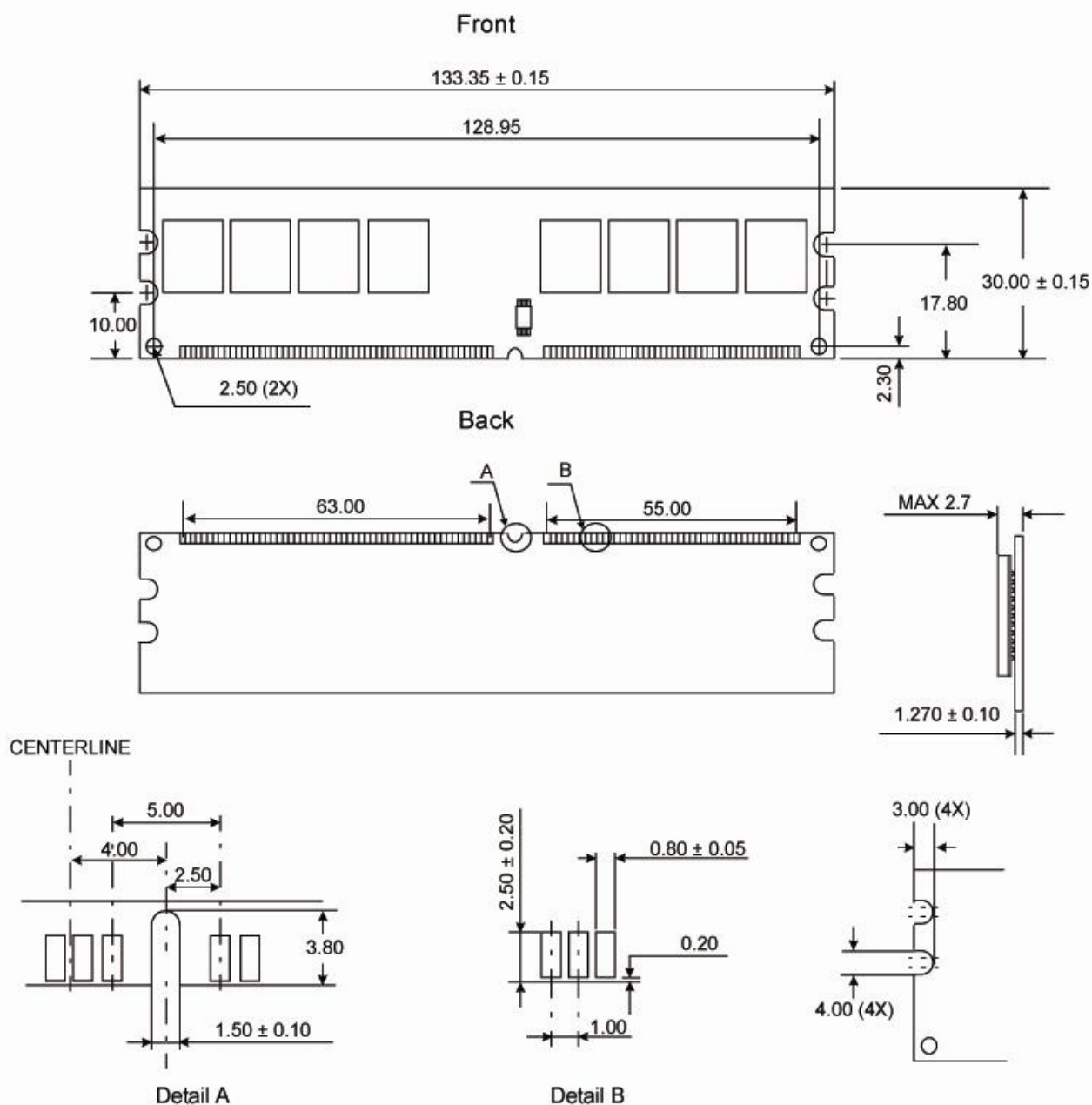
(Note 1) The refresh rate is required to double when TC exceeds 85°C.

## Speed Grade

Frequency Grade	Data Transfer Rate	CAS Latency Support			CL-tRCD-tRP
		CL3	CL4	CL5	
DDR2-800	PC2-6400	400	533	667/800	5-5-5

## Package Dimensions

Unit: mm



Tolerances :  $\pm 0.15$ mm unless otherwise specified