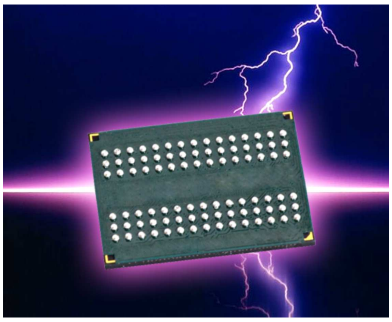
DDR3 Synchronous Dynamic Ram MODULE

3D3D8G08WB2335

8Gbit DDR3 SDRam organized as 1Gx8, based on 256Mx8



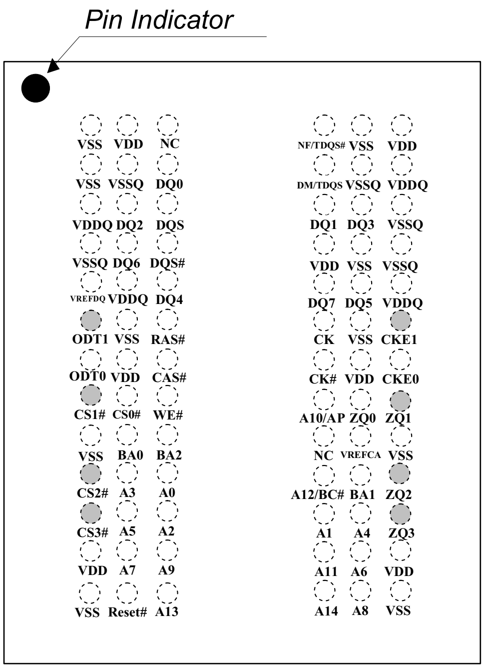
Target application

- Embedded Systems
- Workstations
- Server
- Super computers
- Test systems

Pin Assignment

FBGA 78 (Pitch 0.80mm)

Top View
(Viewed by Transparency)



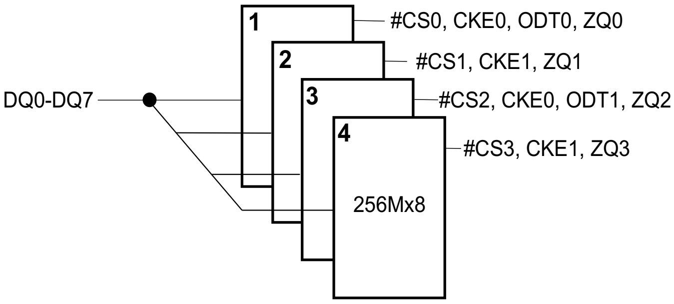
Features and Benefits

- JEDEC-standard 78 balls
- Vdd=VddQ = +1.5V +/-0.075V
- Differential bidirectional data strobe
- 8n-bit prefetch architecture
- 8 internal banks per memory
- Nominal and dynamic on-die termination
- Programmable CAS latency
- Posted CAS additive latency
- Fixed burst lengths of 8 and burst chp (BC) of 4
- Selectable BC4 or BL8 on-the-fly
- Self refresh mode
- Write leveling
- Multipurpose register
- Output driver calibration
- Clock rate available : 533Mhz and 667Mhz
- Commercial (0°C/+95°C) or Industrial (-40°C/+95°C) temperature range.

General description

3D Plus offers a new **8Gbit DDR3 SDRAM** cube with a **compatible JEDEC standard package**.
This cube embeds 4 chips with a capacity of 2Gb (256Mbx8) each. They can be addressed with separates CS, CKE, ODT and ZQ.
Our products are available at 533 and 667Mhz clock speed which is equivalent to 1066 and 1333 Mbps in Commercial (0°C / 95°C) and Industrial (-40°C / +95°C) temperature range.
Thanks to the **high density patented technology** and the **cold manufacturing process** the memories are embedded in a small form factor cube without compromising electrical or thermal performance.
This device is ideal for high density memory applications that require high speed transfer and compatibility with standards servers and networking equipment.

FUNCTIONAL BLOCK DIAGRAM



(All other signals are common to the two memories)

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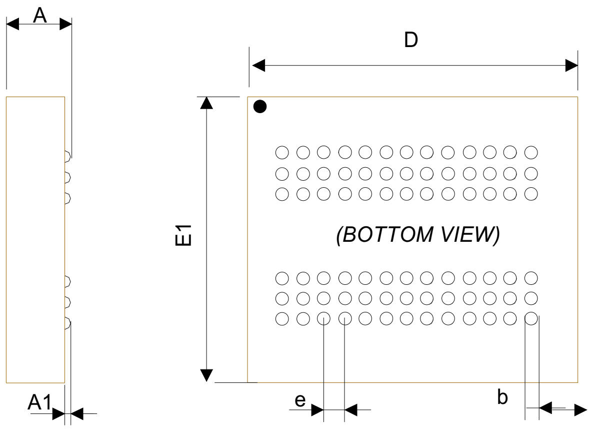
Mechanical Drawing



	Min	Max
A	3.20	3.40
A1	0.17	0.20
D	12.00	12.20
E1	9.50	9.70
b	0.40	
e	0.80	
Dimensions (mm)		

Max. weight : 1.00 gr.

DC Operating conditions and characteristics

Parameter	Symbol	Min	Max	Unit
Supply Voltage relative to Vss	VDD	1.425	1.575	V
I/O Supply Voltage relative to Vss	VDDQ	1.425	1.575	V
Input Leakage Current	Ii	TBC	TBC	µA
Vref Supply Leakage Current	Ivref	TBC	TBC	µA
Input ref. voltage com/ad bus	VREFCA	0.49xVDD	0.51xVDD	V
I/O Reference Voltage DQ bus	VREFDQ	0.49xVDD	0.51xVDD	V
I/O Ref. Volt. DQ bus in self refresh	VREFDQ	Vss	VDD	V

Absolute maximum ratings

Parameter	Symbol	Value	Unit
Voltage on any ball relative to VSS	VIN, VOUT	-0.4~ +1.975	V
Storage temperature	TSTG	-55 ~ +150	°C

DC Characteristics

Parameter	Symbol	Value	Unit
Operating current (One bank active)	IDD1	192	mA
Precharge power down current	IDD2P0	44	mA
Self refresh curreny	IDD6	40	mA

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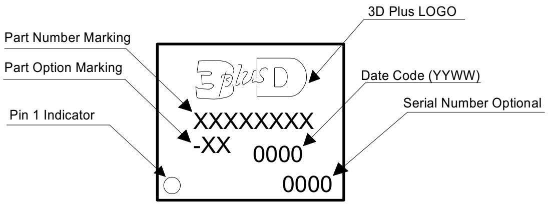
Temperature Range
C = (0°C to + 95°C)
I = (-40°C to + 95°C)

MODULE MARKING



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