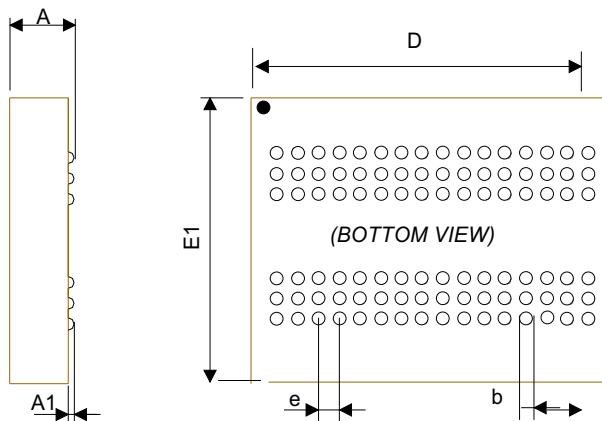


DDR3 Synchronous Dynamic Ram MODULE

3D3D4G16WB2389

4Gbit DDR3 SDRam organized as 256Mx16, based on 256Mx8

Mechanical Drawing



	Min	Max
A	3.20	3.40
A1	0.17	0.20
D	14.60	14.80
E1	9.60	9.80
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	V _{DD}	1.425	1.575	V
I/O Supply Voltage relative to Vss	V _{DDQ}	1.425	1.575	V
Input Leakage Current	I _{li}	-4	4	μA
Vref Supply Leakage Current	I _{vref}	-2	2	μA
Input ref. voltage com/ad bus	V _{REFCA}	0.49xV _{DD}	0.51xV _{DD}	V
I/O Reference Voltage DQ bus	V _{REFDQ}	0.49xV _{DD}	0.51xV _{DD}	V
I/O Ref. Volt. DQ bus in self refresh	V _{REFDQ}	V _{ss}	V _{DD}	V

Absolute maximum ratings

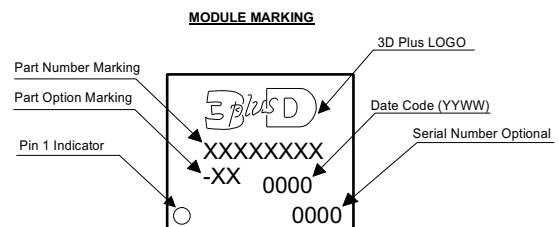
Parameter	Symbol	Value	Unit
Voltage on any ball relative to VSS	V _{IN} , V _{OUT}	-0.4 ~ +1.975	V
Storage temperature	T _{STG}	-55 ~ +150	°C

DC Characteristics

Parameter	Symbol	Value	Unit
Operating current (One bank active)	I _{DD1}	220	mA
Precharge power down current	I _{DD2P0}	24	mA
Self refresh current	I _{DD6}	24	mA

3D3D4G16WB2389 - X

Temperature Range
C = (0°C to + 95°C)
I = (-40°C to + 95°C)
M = (-55°C to + 125°C)



MAIN SALES OFFICE

	3D PLUS	Tel :	Fax :	Web :	DISTRIBUTOR
FRANCE	3D PLUS 408, rue Hélène Boucher Z.I. 78532 BUC Cedex	33 (0)1 30 83 26 50	33 (0)1 39 56 25 89	www.3d-plus.com e-mail : sales@3d-plus.com	
USA	3D PLUS USA, Inc 6633 Eldorado Parkway Suite 420 Mckinney, TX 75070	(214) 733-8505	(214) 733-8506	e-mail : sales@3d-plus.com	

DDR3 Memory Module

PRELIMINARY

3D PLUS S.A. reserves the right to change or cancel products or specifications without notice
 3DFP-0389-REV : 1 - September 2010