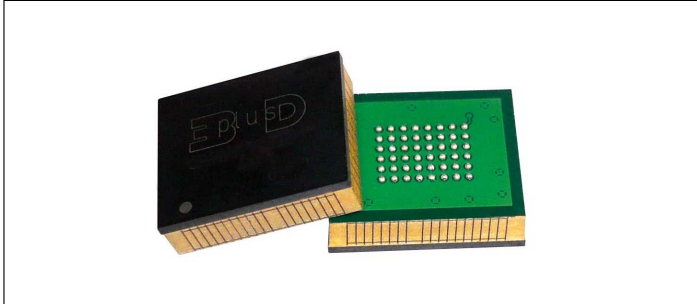


Static Ram MODULE

3DSR32M16VB2409

32Mbit SRam organized as 2Mx16, based on 1Mx16



Features

- Single 3.3V power supply (2.4V to 3.6V)
- High performance, low power CMOS process
- High Speed Access Time : 10ns (8ns for Vcc=3.3V +/- 5%)
- TTL Compatible Inputs and Outputs.
- #CE power down
- Fully Static Operation
 - No clock or Refresh required.
- Easy memory expansion with #CE and #OE options
- Available in 48-Ball BGA package
- Multiple center power and ground pins for greater noise immunity
- Available Temperature Range :
 - 0°C to +70°C
 - 40°C to +85°C
 - 55°C to +125°C

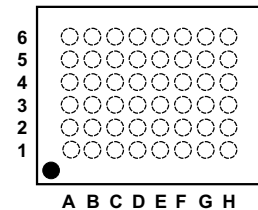
General description

The 3DSR32M16VB2409 is a high-speed highly integrated Static Random Access Memory containing 33.554.432 bits. It is organized as 2 banks of 16Mbit. Each bank has a 16-bit interface and is selected with specific CEs. It is particularly well suited for use in high reliability, high performance and high density system applications, such as rugged boards. The 3DSR32M16VB2409 is packaged in a 48-balls BGA.

Pin Assignment (Top View)

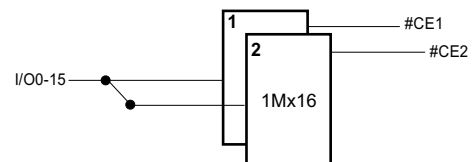
BGA 48 - (6x8 Pitch : 0.75mm)

(TOP VIEW - VIEWED BY TRANSPARENCY)



	1	2	3	4	5	6
A	#LB	#OE	A0	A1	A2	#CE2
B	I/O8	#UB	A3	A4	#CE1	I/O0
C	I/O9	I/O10	A5	A6	I/O1	I/O2
D	VSS	I/O11	A17	A7	I/O3	VCC
E	VCC	I/O12	NC	A16	I/O4	VSS
F	I/O14	I/O13	A14	A15	I/O5	I/O6
G	I/O15	A19	A12	A13	#WE	I/O7
H	A18	A8	A9	A10	A11	NC

FUNCTIONAL BLOCK DIAGRAM



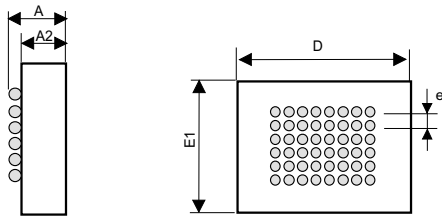
(All other signals are common to the two memories)

Static Ram MODULE

3DSR32M16VB2409

32Mbit SRam organized as 2Mx16, based on 1Mx16

Mechanical Drawing



	Min	Max
A	3.25	3.45
A2	3.05	3.25
D	11.6	11.8
E1	9.60	9.80
e	0.75	
Dimensions (mm)		
Max. weight : 1.5 gr.		

Test Tools

3DSR32M16VB2409

Modified by 3D PLUS

DC Operating conditions and characteristics

Parameter	Symbol	Min	Typ	Max	Unit
Supply voltage	V _{CC}	2.4	3.3	3.6	V
Input high voltage	V _{IH}	2.0	-	V _{CC} +0.3	V
Input low voltage	V _{IL}	-0.3	-	0.8	V
Output high Voltage	V _{OH}	1.8	-	-	V
Output low voltage	V _{OL}	-	-	0.4	V

Absolute maximum ratings

Parameter	Symbol	Value	Unit
Terminal Voltage with respect to GND	V _{TERM}	-0.5 to V _{CC} +0.5	V
Storage temperature	T _{STG}	-65 ~ +150	°C
Power dissipation	P _D	1	W

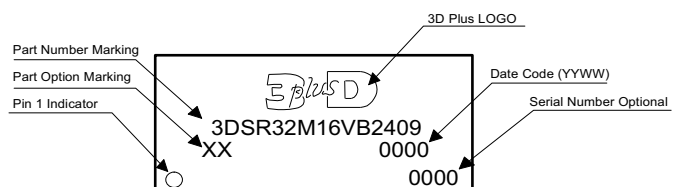
Power Supply Characteristics (Mil temperature range)

Parameter	Symbol	Max. Value	Unit
Dynamic Operating Supply current	I _{CC}	210	mA
Operating Supply current	I _{CC1}	180	mA
TTL Standby Current	I _{SB1}	140	mA
CMOS Stanby Current	I _{SB2}	120	mA

3DSR32M16VB2409 - X

Temperature Range
C = (0°C to +70°C)
I = (-40°C to +85°C)
M = (-55°C to +125°C)

MODULE MARKING



MAIN SALES OFFICE

	3D PLUS			Web : www.3d-plus.com e-mail : sales@3d-plus.com	DISTRIBUTOR
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USA	3D PLUS USA, Inc 6633 Eldorado Parkway Suite 420 Mckinney, TX 75070	Tél : (214) 733-8505	Fax : (214) 733-8506	e-mail : sales@3d-plus.com	