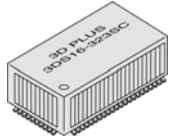
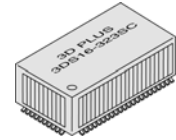


3D PLUS MEMORY MODULE DECODER



	1	2	3	4	5	6	7	8	9	10	11	12	13
3D	<u>XX</u>	<u>000X</u>	<u>00</u>	<u>X</u>	<u>X</u>	<u>0</u>	<u>000</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>00</u>	<u>X</u>



Ex: 3DFN32G08VS8259 IS R00M

1 Module Type

DP : DPRam
EE : E²Prom
FN : Flash NAND
FO : Flash NOR
FR : FRam
MR : MRam
PO : PROM
SF : StrataFlash
SD : Synchronous DRam
SR : Static Ram
1D : DDR1
2D : DDR2

2 Module Density

nnn K : nnn Kilobit
nnn M : nnn Megabit
nnn G : nnn Gigabit
nnn T : nnn Terabit

3 Module Data Bit

04 : x4 Bit
08 : x8 Bit
16 : x16 Bit
32 : x32 Bit
40 : x40 Bit
48 : x48 Bit
64 : x64 Bit
nn : xnn Bit

4 Module Voltage

C : 5.0 Volts
V : 3.3 Volts
S : 2.8 Volts
T : 2.5 Volts
U : 1.8 Volts

5 Module Package

B : BGA
C : Connector
J : QFJ
P : PGA
Q : QFP
S : SOP
W : Wire Bond

6 Stacked Layers

1 : 1 Layer
2 : 2 Layers
4 : 4 Layers
8 : 8 Layers
n : n Layers
A : 10 Layers

7 Control Features

nnn : Product Flyer Number

Note: The Product Flyer's number characterizes a single product and takes into account the technology flow, the die source, the module's features and the electrical and mechanical user interfaces.

8 Temperature Range

C : 0°C to +70°C
I : -40°C to +85°C
M : -55°C to +125°C
S : Specific

9 Quality Level

N : Commercial Grade
B : Industrial Grade
S : Space Grade
C : Custom

10 Space Screening Option

: The Space Quality Grade corresponds to the ESA Qualified Quality Grade for Space applications (Category 1 hybrid Manufacturer as per ECSS-Q-60-05C).

P : The Space Quality Grade corresponds to the NASA PEM Selection, Screening and Qualification Flow ref. PEM-INST-001.

11 Radiation Assurance

R : Radiation Data Tested
A : Generic Radiation Data Available
- : Not Applicable

12 Speed/Access Time

00 : N/A

SRAM

10 : 10ns
12 : 12ns
15 : 15ns
20 : 20ns

MRAM

35 : 35ns

FRAM

60 : 60ns

SDRAM

50 : 5ns
55 : 5.5ns
75 : 7.5ns, PC133
60 : 6ns
70 : 7ns
80 : 8ns

DDR 0 0

5 : 200MHz
6 : 166MHz
7 : 133MHz
8 : 100MHz
C : CL3
B : CL2.5
A : CL2

DDR2 0 0

4 : DDR2-400 (200Mhz)
5 : DDR2-533 (266Mhz)
6 : DDR2-667 (333Mhz)
8 : DDR2-800 (400Mhz)
A : CL=3, tRCD=3, tRP=3
C : CL=4, tRCD=4, tRP=4
E : CL=5, tRCD=5, tRP=5
G : CL=6, tRCD=6, tRP=6

FLASH

03 : 30ns
05 : 50ns
07 : 70ns
08 : 80ns
09 : 90ns
10 : 100ns
11 : 110ns
12 : 120ns
35 : 35ns
25 : 25ns

13 Module Option

: No Option*

A : "ARATHANE" Finish
E : "EPOTEK 302-3M" (salt fog protect)
H : HERMETIC Package
M : "MAPSIL" Finish
T : TANTALUM Shielding
W : WALOPACK Shielding
X : "XV501T4" (Black) Finish Solder

** By default, there is no finishing nor shielding.*