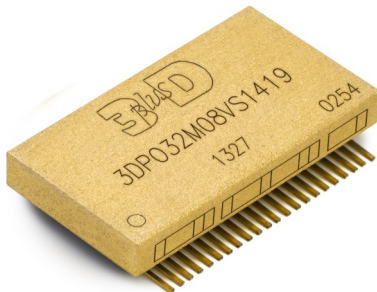


3DPO32M08VS1419



GENERAL DESCRIPTION

The 3DPO32M08VS1419 is a 32 Mb high density Programmable Read Only Memory, which provide an easy to use, integrated two chip containing 16 Mb each.

The 3DPO32M08VS1419 can operate in either serial or byte wide mode. It is a non-volatile one time programmable (OTP) memory designed to store configuration bitstream of FPGA devices.

The memory is guaranteed 20 years life data retention and is also used as processors Boot and Program PROM in a variety of high performance and high reliability computer boards.

The module packaged in a SOP 44 is available for Commercial, Industrial or Military temperature range. It is also available with screening options up to space grade level.

KEY FEATURES

32 Mb memory density

One Time Programmable (OTP) ROM

Single 3.3 V voltage operation

Simple interface for FPGA configuration

Dual configuration modes:

Serial (up to 33 Mb/s)

Parallel (up to 264 Mb/s @ 33 MHz)

Programmable reset polarity

Chaining capability for storing longer or multiple bitstream

Data Retention: 20 Years

Space qualified product

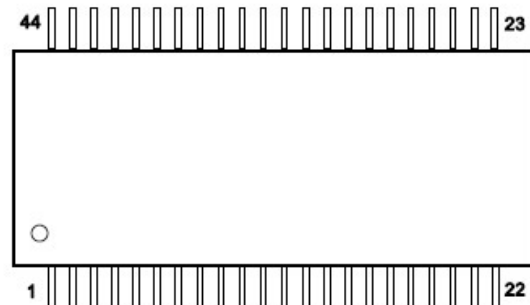
Radiation tolerance:

TID > 50 krad (Si) per spec 1019.5

Latch-up and SEU immune to LET > 120 MeV/cm²/mg

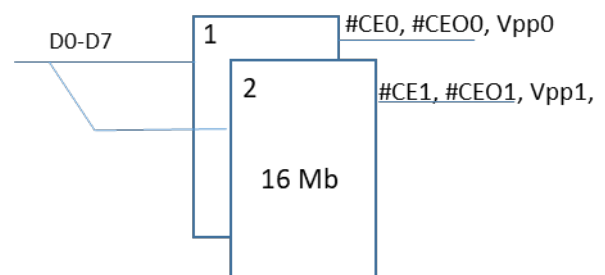
PIN ASSIGNMENT (top view)

SOP 44 Pitch 0.80 mm



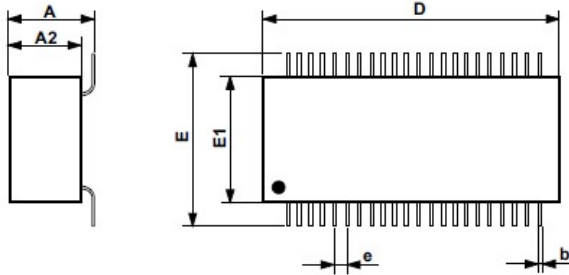
1	RESET/#OE	16	#CE1	31	D5
2	DNU	17	Vcc	32	D4
3	DNU	18	Vss	33	D3
4	DNU	19	DNU	34	D2
5	#CE0	20	DNU	35	D1
6	Vcc	21	DNU	36	D0
7	Vss	22	#CEO1	37	Vcc
8	#CEO0	23	Vpp1	38	Vss
9	DNU	24	DNU	39	Vpp0
10	DNU	25	DNU	40	DNU
11	DNU	26	DNU	41	DNU
12	BUSY	27	Vss	42	DNU
13	DNU	28	Vcc	43	Vss
14	DNU	29	D7	44	CLK
15	DNU	30	D6		

FUNCTIONAL BLOCK DIAGRAM



All other signals are common to all memories

MECHANICAL DRAWING



Dimensions (mm)

	Min	Max
A	4.10	4.80
A2	3.00	3.40
D	19.80	20.20
E	13.40	13.80
E1	10.85	11.05
b	0.35	
e	0.80	

Max. weight: 2.10 g

DC Operating Conditions and Characteristics

Parameter	Symbol	Min	Max	Unit
Supply Voltage core	V_{CC}	3.0	3.6	V
Input logic High Voltage	V_{IH}	2.0	V_{CC}	V
Input logic Low Voltage	V_{IL}	-0.0	0.8	V

Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Supply voltage relative to V_{SS}	V_{CC}	-0.5 to +7.0	V
Programming voltage relative to V_{SS}	V_{PP}	-0.5 to +12.5	V
Storage temperature	T_{STG}	-65 to +150	°C


DC Characteristics

Parameter	Symbol	Value	Unit
Active mode current (V_{CC})	I_{CCa}	103	mA
Standby Current (V_{CC})	I_{CCs}	3	mA

Note: Permanent device damage may occur if "Absolute maximum ratings" are exceeded. Functional operation should be restricted to recommended operating condition.

Exposure to higher than recommended voltage for extended periods of time could affect device reliability.

MODULE MARKING



PART NUMBER MARKING → 3DXX000X00XX0 000

PART OPTION MARKING → XX

PIN 1 INDICATOR

DATE CODE (YYWW) ← 0000

SERIAL NUMBER (optional) ← 0000

3DPO32M08VS1419 X X

Temperature Range

C = (0°C to +70°C)

I = (-40°C to +85°C)

M = (-55°C to +125°C)

Quality Level

N = Commercial Grade

B = Industrial Grade

S = Space Grade

3D PLUS SALES OFFICES

HEADQUARTERS (FRANCE)	TECHNICAL CENTER (USA)	DISTRIBUTOR
408, rue Hélène Boucher - ZI 78530 Buc Tel: +33 (0)1 30 83 26 50 E-mail: sales@3d-plus.com www.3d-plus.com	151 Callan Avenue - Suite #310 San Leandro, CA 94577 Tel: (510) 824-5591 E-mail: sales@3d-plus.com	