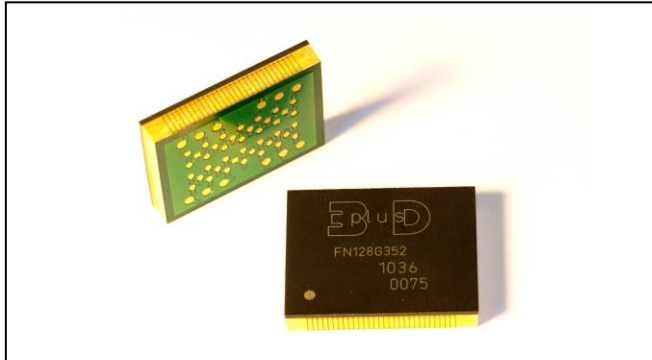


NAND Flash Memory

3DFN64G08VB1388

64Gbit NAND Flash with 8 bit-data access

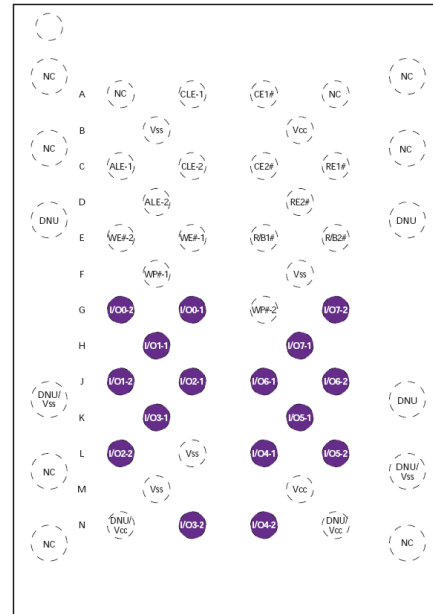


Features

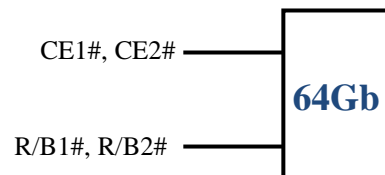
- Open NAND Flash interface 2.1 compliant
- Single Level Cell (SLC) technology
- Device width: x8
- Operating voltage range
Vcc: 2.7V-3.6V
- Page Read Operation
Random read: 35μs (Max)
Serial access: 25ns (Min)
- Fast Write Cycle Time
Program page: 350μs (Typ)
Erase block: 1.5ms (Typ)
- Command/address/Data Multiplexed I/O port
- Hardware data protection
- Command driven operation
- Data Retention: 5 Years
- Endurance: 60,000 program/erase cycles
- Available Temperature Range:
0°C to 70°C
-40°C to +85°C
-55°C to +125°C

Pin Assignment (Top View)

LGA 52



Block Diagram



General Description

The 3DFN64G08VB1388 is a high-density non-volatile NAND Flash Memory based on one 64Gb basic component. It is organized as a 8-bit bank, with separated control signals: CE# and R/B# (1~2). This organization is fully compliant with ONFi 2.1 standard.

Thanks to the high density patented technology and the cold manufacturing process the memories are embedded in a small form factor package without compromising electrical or thermal performance. This Flash memory module provides a cost-effective solution for low power and high-capacity non-volatile memory data storage needs.

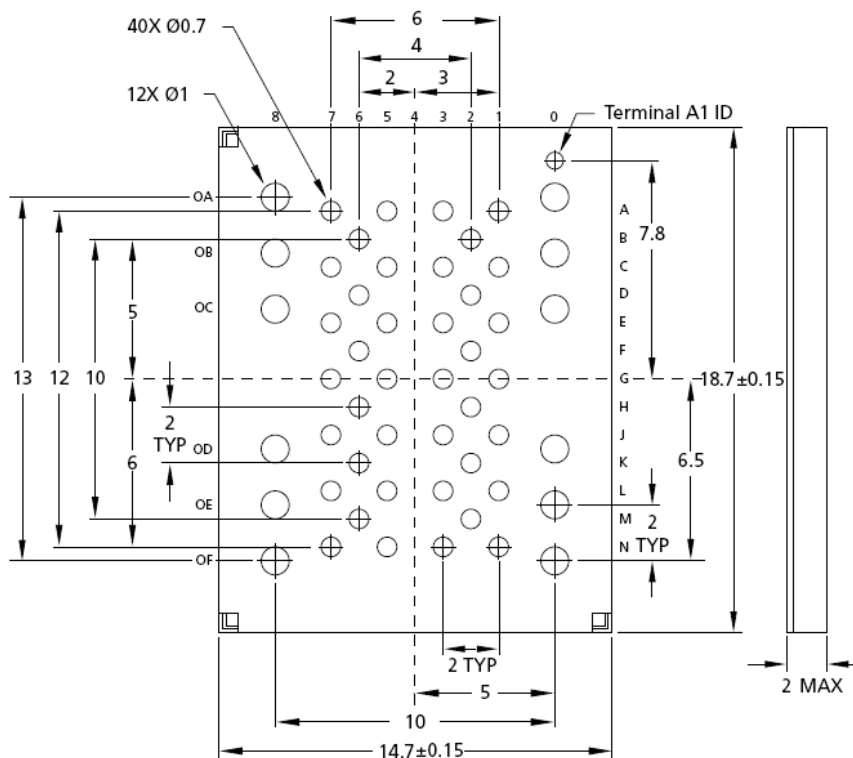
The 3DFN64G08VB1388 is packaged in a 52 pads LGA and available in commercial, industrial and military temperature grade.

NAND Flash Memory

3DFN64G08VB1388

64Gbit NAND Flash with 8 bit-data access

Mechanical Drawing



ABSOLUTE MAXIMUM RATINGS BY DEVICE

| Parameter | Symbol | Min | Max | Unit |
|---------------------|-----------|------|------|------|
| Voltage input | V_{in} | -0.6 | +4,6 | V |
| Vcc supply voltage | V_{cc} | -0.6 | +4,6 | V |
| Storage temperature | T_{STG} | -65 | +150 | °C |

RECOMMENDED OPERATING CONDITIONS

| Parameter | Symbol | Min | Typ | Max | Unit |
|----------------------------------|--------------|-----|-----|------|------|
| Operating Temperature Commercial | $T_{a\ com}$ | 0 | - | +70 | °C |
| Operating Temperature Industrial | $T_{a\ ind}$ | -40 | - | +85 | °C |
| Operating Temperature Military | $T_{a\ mil}$ | -55 | - | +125 | °C |
| Vcc supply voltage | V_{cc} | 2.7 | 3.3 | 3.6 | V |
| Ground supply voltage | V_{ss} | 0 | 0 | 0 | V |

Main Sales Office

| | | | | | DISTRIBUTOR |
|--------|---|---------------------------|---------------------------|---|-------------|
| FRANCE | 3D PLUS 408, rue Hélène Boucher ZI. 78532 BUC Cedex | Tel : 33 (0)1 30 83 26 50 | Fax : 33 (0)1 39 56 25 89 | Web : www.3d-plus.com e-mail : sales@3d-plus.com | |
| USA | 3D PLUS USA, Inc 6401 W Eldorado Pkwy Suite 238 Mckinney, TX 75070 | Tel : (214) 733-8505 | Fax : (214) 733-8506 | e-mail : sales@3d-plus.com | |

FLASH Memory Module

3DFN64G08VB1388

3D Plus SA reserves the right to cancel product or specifications without notice
3DFP-0388-REV 2-July 2014