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

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.
MEMORY MODULE
NAND Flash 64Gb

NAND Flash Memory

64Gb NAND Flash with 8 bit-data access

Mechanical Drawing

ABSOLUTE MAXIMUM RATINGS BY DEVICE

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Min</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage input</td>
<td>$V_{in}$</td>
<td>-0.6</td>
<td>+4.6</td>
<td>V</td>
</tr>
<tr>
<td>Vcc supply voltage</td>
<td>$V_{cc}$</td>
<td>-0.6</td>
<td>+4.6</td>
<td>V</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>$T_{STG}$</td>
<td>-65</td>
<td>+150</td>
<td>°C</td>
</tr>
</tbody>
</table>

RECOMMENDED OPERATING CONDITIONS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature Commercial</td>
<td>$T_{a \text{ com}}$</td>
<td>0</td>
<td>-</td>
<td>+70</td>
<td>°C</td>
</tr>
<tr>
<td>Operating Temperature Industrial</td>
<td>$T_{a \text{ ind}}$</td>
<td>-40</td>
<td>-</td>
<td>+85</td>
<td>°C</td>
</tr>
<tr>
<td>Operating Temperature Military</td>
<td>$T_{a \text{ mil}}$</td>
<td>-55</td>
<td>-</td>
<td>+125</td>
<td>°C</td>
</tr>
<tr>
<td>Vcc supply voltage</td>
<td>$V_{CC}$</td>
<td>2.7</td>
<td>3.3</td>
<td>3.6</td>
<td>V</td>
</tr>
<tr>
<td>Ground supply voltage</td>
<td>$V_{SS}$</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>V</td>
</tr>
</tbody>
</table>

Main Sales Office

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

DISTRIBUTOR

3DP-0388-REV 2-July 2014

3D Plus SA reserves the right to cancel product or specifications without notice.