

CTND2G08U3D

3V/1.8V, x8/x16 2G-BIT NAND FLASH

Confidential

Documents title

2Gbit (256Mx8Bit, 128Mx16Bit) NAND FLASH

Revision History

Revision No.	History	Draft date	Remark
0.0	Initial Draft	Apr.05.2013	Preliminary
0.1	Added Data Retention 4bit /512byte ECC. Changed Read ID value 5 th from 44h to 46h.	Aug.27.2014	
0.2	Added 63B, 67B FBGA Ball Assignments	Dec.01.2014	
0.3	Changed typical TPROG	Feb.11.2015	
0.4	Revised the 4 th Read ID	Jun. 21. 2016	Final

FEATURES

■ x8/x16 I/O BUS

- NAND Interface
- ADDRESS / DATA Multiplexing

■ SUPPLY VOLTAGE

- VCC = 1.8/2.7/3.3 Volt core supply voltage for Program, Erase and Read operations

■ PAGE READ / PROGRAM

- x8 : (2048+64 spare) byte
- x16: (1024+32 spare) word page
- Synchronous Page Read Operation
- Random access : 25us (Max)
- Serial access : 45ns (1.8V)
25ns (2.7/3.0V)
- Page program time : 300us (Typ)

■ PAGE COPY BACK

- Fast data copy without external buffering

■ CACHE PROGRAM

- Internal buffer to improve the program throughput

■ READ CACHE

■ LEGACY/ONFI 1.0 COMMAND SET

■ FAST BLOCK ERASE

- Block size :
x8 : (128K + 4K) bytes x16:
(64K+2K) words
- Block erase time : 2ms (Typ)

■ MEMORY CELL ARRAY

- x8 : (2K + 64) bytes x 64 pages x 2048 blocks
- x16: (1K + 32) words x 64 pages x 2048 blocks

■ ELECTRONIC SIGNATURE

- Manufacturer Code
- Device Code

■ STATUS REGISTER

■ HARDWARE DATA PROTECTION

■ DATA RETENTION

- Max cycling : 50K Program / Erase cycles
- Data retention : 10 Years(4bit/512byte ECC)

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