



# 128MB One-Time Programming (OTP) Memory with NAND Interface

Small Die Size, Improved Density, Performance, Reliability and Cost – Offers Unique Data Storage and Security Solutions



USB



micro SD



micro SD Reader



TSOP-48



Bare Die

Over the past few years, the growth of NAND applications has been overwhelming and today NAND is conceived as the most appealing segment of the non-volatile memory industry. The market is constantly striving for an improved cost where Infinite-Memories has the most compelling solution.

### Cost-Effective and Non-Erasable Solutions

Delivering promotional material for your marketing needs.



### Unique Technology & Reliability

Infinite Memories provides products for the content delivery market by combining novel system solutions, optimal One-Time-Program (OTP) technology and NAND interface. This technology is Quad NROM® based with unique OTP properties, demonstrating excellent lifetime retention and reliability performance that meets the market requirements.

### Game Cartridges and Card Solutions

Offering infinite retention and superior reliability.



### 128MB (1Gb) OTP Memory with NAND Interface

The 128MB OTP fully supports NAND interface and command set. The array is organized in pages of 1K bytes divided to two user chunks.

All the OTP device operations are accomplished by applying commands to a Command User Interface (CUI). Fast data access is enabled through an on-chip data buffer of 1K bytes. The OTP device can be read or programmed on a per-page basis.

Internal controller is embedded in the device managing the program and read algorithms, enabling additional unique solutions developed to accommodate special OTP device requirements.

### Silicon Media

Storing a full movie for playing on a portable media player.



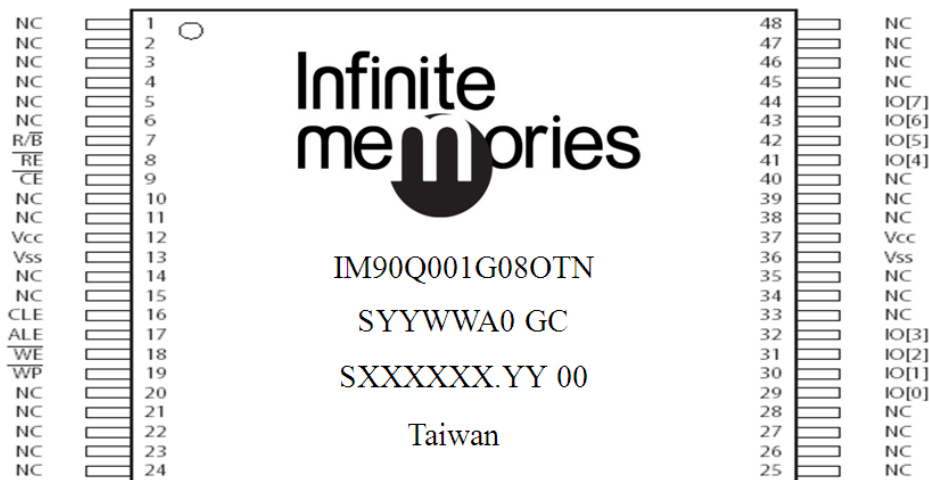
### Data Security

The One-Time Programming (OTP) technology sustain user data integrity and secures device content by preventing re-write or erase of the device blocks, unique device protect feature disables users from writing additional data after device is locked. This feature is widely used to protect customer's data in a system so that it cannot be corrupted.

## Technical Specifications

Model Name	IM9Q001G08OTN
Density	128MByte
Technology	90nm 4bit/cell Quad NROM®
Power Supply	2.70V – 3.60V
Architecture	<ul style="list-style-type: none"> <li>- x8 I/O Organization</li> <li>- Page Buffer: (1024+32) bytes</li> <li>- Page Read: (1024+32) bytes</li> <li>- Page Program: (1024+32) bytes</li> </ul>
Features	<ul style="list-style-type: none"> <li>- Page Read and Program</li> <li>- Protected Factory Bad Block Table</li> <li>- Controlled power-up current consumption</li> <li>- Power-up successful indication</li> </ul>
Performance Characteristics	<ul style="list-style-type: none"> <li>- Page Read: 115µS (Typ)</li> <li>- Page Program: 3.0mS (Typ)</li> <li>- RT &amp; Vdd 3.6V</li> <li>- I/O Burst Mode: 30ns</li> </ul>
Current Consumption	<ul style="list-style-type: none"> <li>- Read: 30mA (Typ)</li> <li>- Program: 30mA (Typ)</li> <li>- Stand-By: 50µA (Max)</li> </ul>
Reliability	- RAC: 100Years @ 40C after single programming
Temperature	<ul style="list-style-type: none"> <li>- Read: -25°C to +85°C</li> <li>- Program: 0°C - 70°C</li> <li>- Storage: &gt;-65°C &lt;150°C / 90% RH</li> </ul>
Packaging Options	- TSOP-I 48, Bare Die, micro SD and USB

### TSOP-I 48



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**SolidState**isks  
LTD

Reactive Group LTD/SSD UK LTD

The Granary

Hose Hill

Sulhamstead

Berks

RG7 4BB

United Kingdom

Telephone: +44 (0) 1189 323499

Fax: +44 (0) 1189 323510

Email: sales@reactivegroup.com