



## Purpose

Eon Silicon Solution Inc. (hereinafter called “Eon”) is going to provide its products’ top marking on ICs with < cFeon > from January 1st, 2009, and without any change of the part number and the compositions of the ICs. Eon is still keeping the promise of quality for all the products with the same as that of Eon delivered before. Please be advised with the change and appreciate your kindly cooperation and fully support Eon’s product family.

## Eon products’ New Top Marking

**cFeon**

### cFeon Top Marking Example:

**cFeon**

**Part Number: XXXX-XXX**

**Lot Number: XXXXX**

**Date Code: XXXXX**

## Continuity of Specifications

There is no change to this data sheet as a result of offering the device as an Eon product. Any changes that have been made are the result of normal data sheet improvement and are noted in the document revision summary, where supported. Future routine revisions will occur when appropriate, and changes will be noted in a revision summary.

## Continuity of Ordering Part Numbers

Eon continues to support existing part numbers beginning with “Eon” and “cFeon” top marking. To order these products, during the transition please specify “Eon top marking” or “cFeon top marking” on your purchasing orders.

## For More Information

Please contact your local sales office for additional information about Eon memory solutions.



## EN71GL128 Base MCP

### Stacked Multi-Chip Product (MCP) Flash Memory and RAM

### 128 Megabit (8M x 16-bit) CMOS 3.0 Volt-only Page Mode Flash Memory and 32 Megabit (2M x 16-bit) Pseudo Static RAM

## Distinctive Characteristics

### MCP Features

- Power supply voltage of 2.7 V to 3.3V
- High performance
  - 70 ns
- Package
  - 7 x 9 x 1.2mm 56 ball FBGA
- Operating Temperature
  - 25°C to +85°C

## General Description

The EN71GL series is a product line of stacked Multi-Chip Product (MCP) packages and consists of:

- EN29GL128 (Page mode) Flash memory with lowest address sector protected.
- Pseudo SRAM.

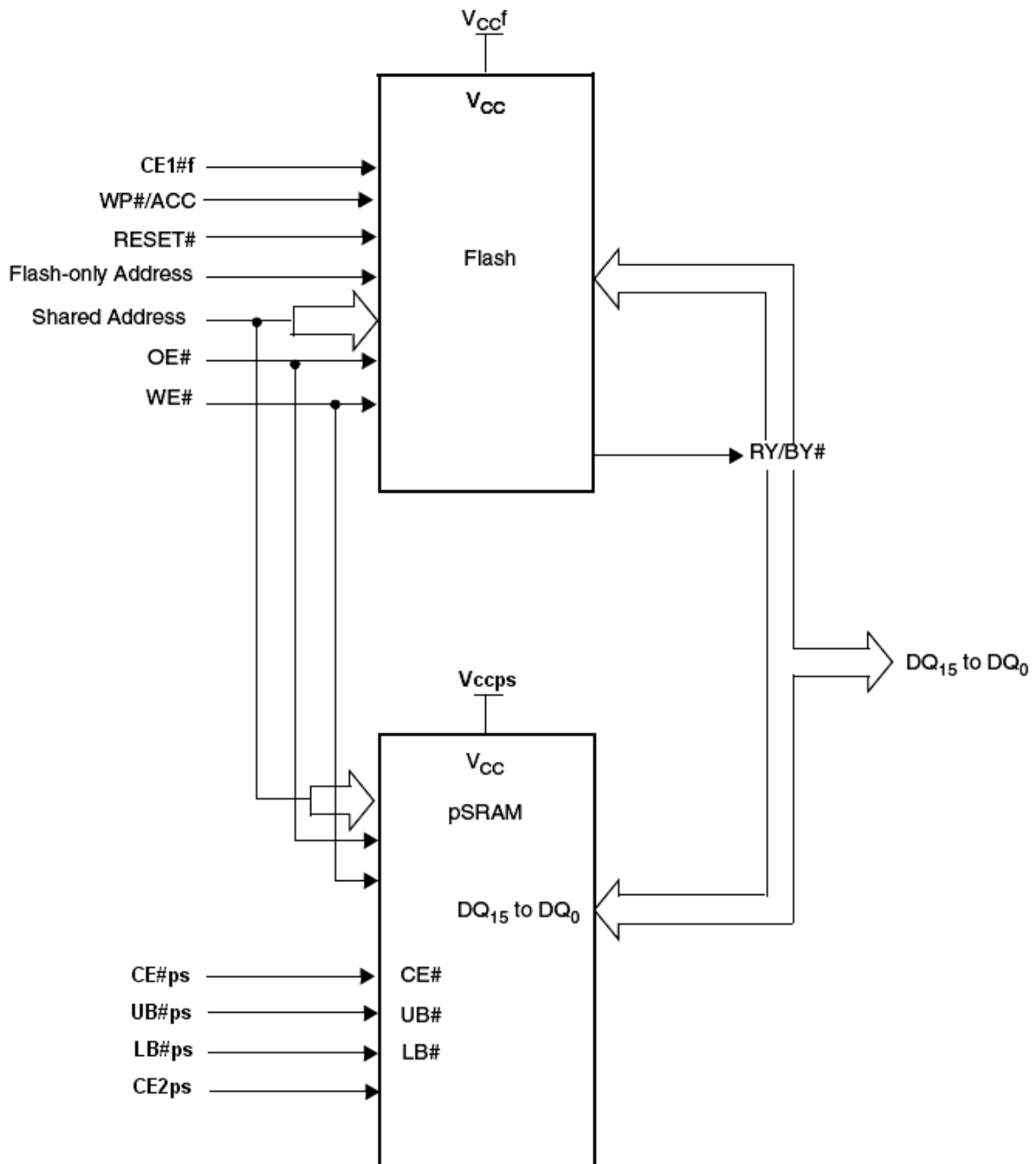
For detailed specifications, please refer to the individual datasheets listed in the following table.

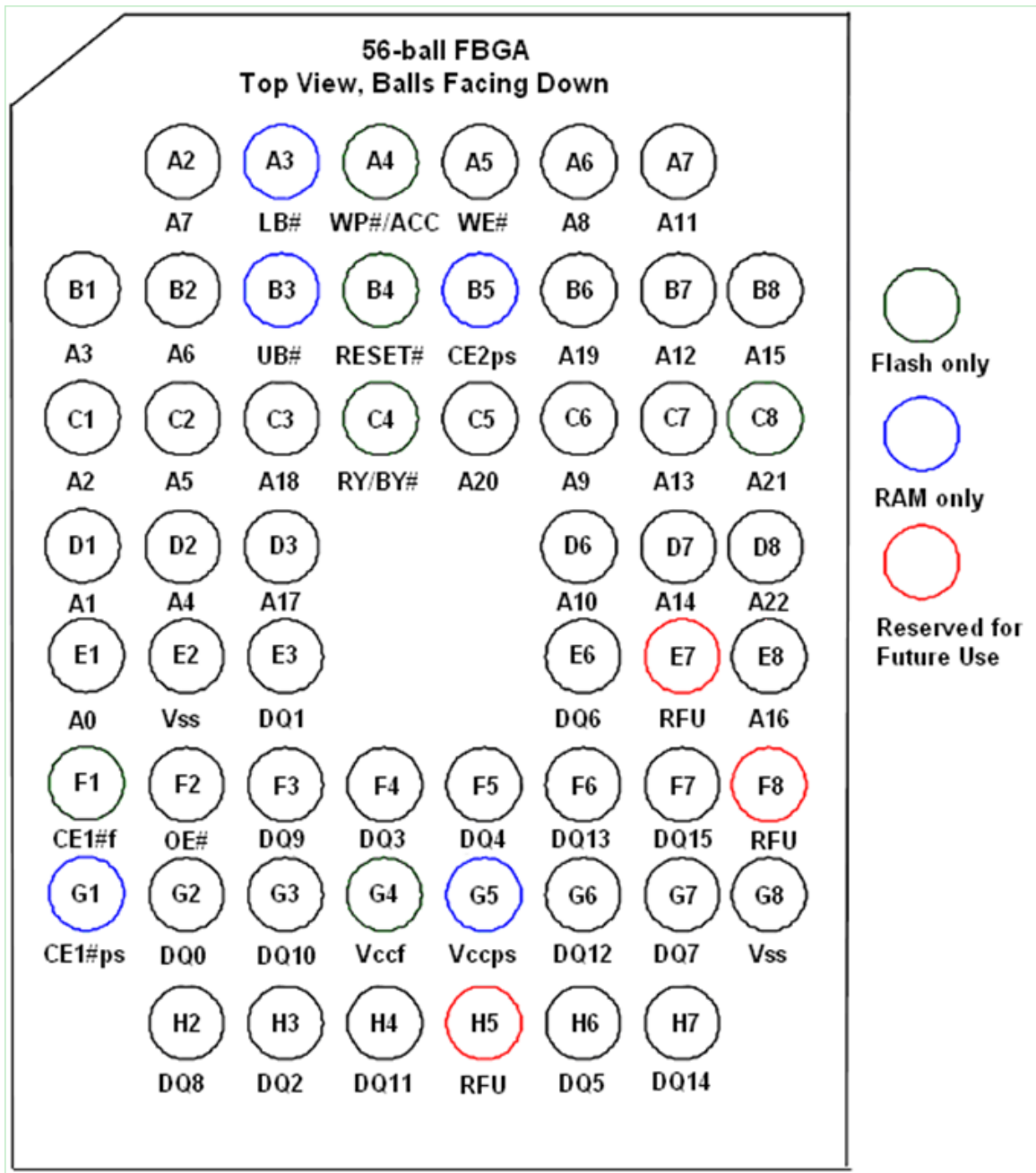
Device	Document
NOR Flash	EN29GL128
Pseudo SRAM	ENPSL32

## Product Selector Guide

### 128Mb Flash Memory

Device-Model#	EN71GL128B0	pSRAM density	32M pSRAM
Flash Access time	70ns	pSRAM Access time	70ns
Page read Access time	25ns	pSRAM Page read Access time	25ns
Package	56 FBGA		

**MCP Block Diagram**


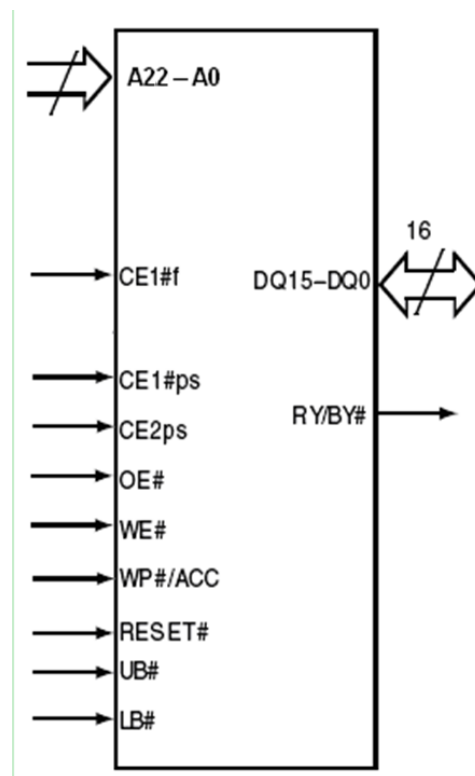
**Connection Diagram**


MCP	Flash-only Addresses	Shared Addresses
EN71GL128B0	A22, A21	A20 – A0

## Pin Description

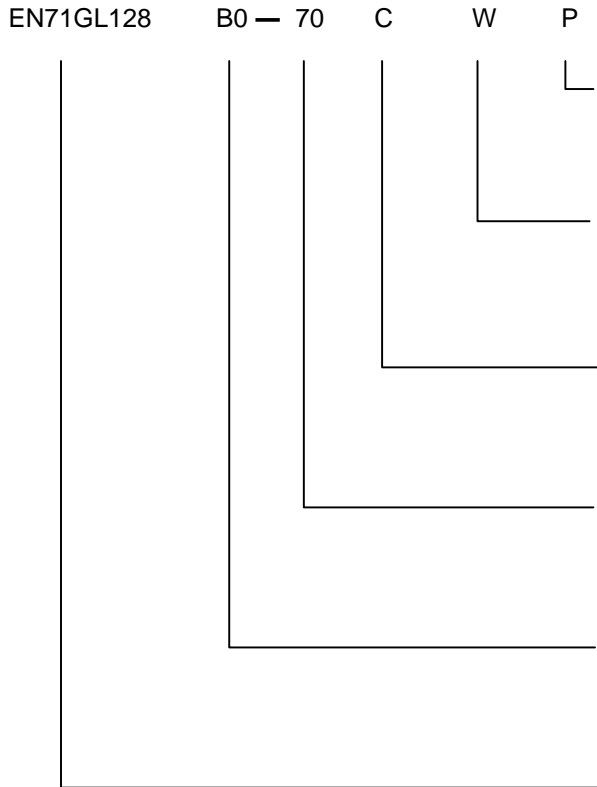
Signal	Description
A22–A0	23 Address Inputs (Common)
DQ15–DQ0	16 Data Inputs/Outputs (Common)
CE1#f	Chip Enable 1 (Flash)
CE1#ps	Chip Enable 1 (pSRAM)
CE2ps	Chip Enable 2 (pSRAM)
OE#	Output Enable (Common)
WE#	Write Enable (Common)
RY/BY#	Ready/Busy Output (Flash)
UB#	Upper Byte Control (pSRAM)
LB#	Lower Byte Control (pSRAM)
RESET#	Hardware Reset Pin, Active Low (Flash)
WP#/ACC	Hardware Write Protect/Acceleration Pin (Flash)
V <sub>ccf</sub>	Flash 3.0 volt-only single power supply
V <sub>ccps</sub>	pSRAM Power Supply
V <sub>ss</sub>	Device Ground (Common)
NC	Pin Not Connected Internally

## Logic Symbol





**ORDERING INFORMATION**



**PACKAGING CONTENT**  
(Blank) = Conventional  
P = Pb Free

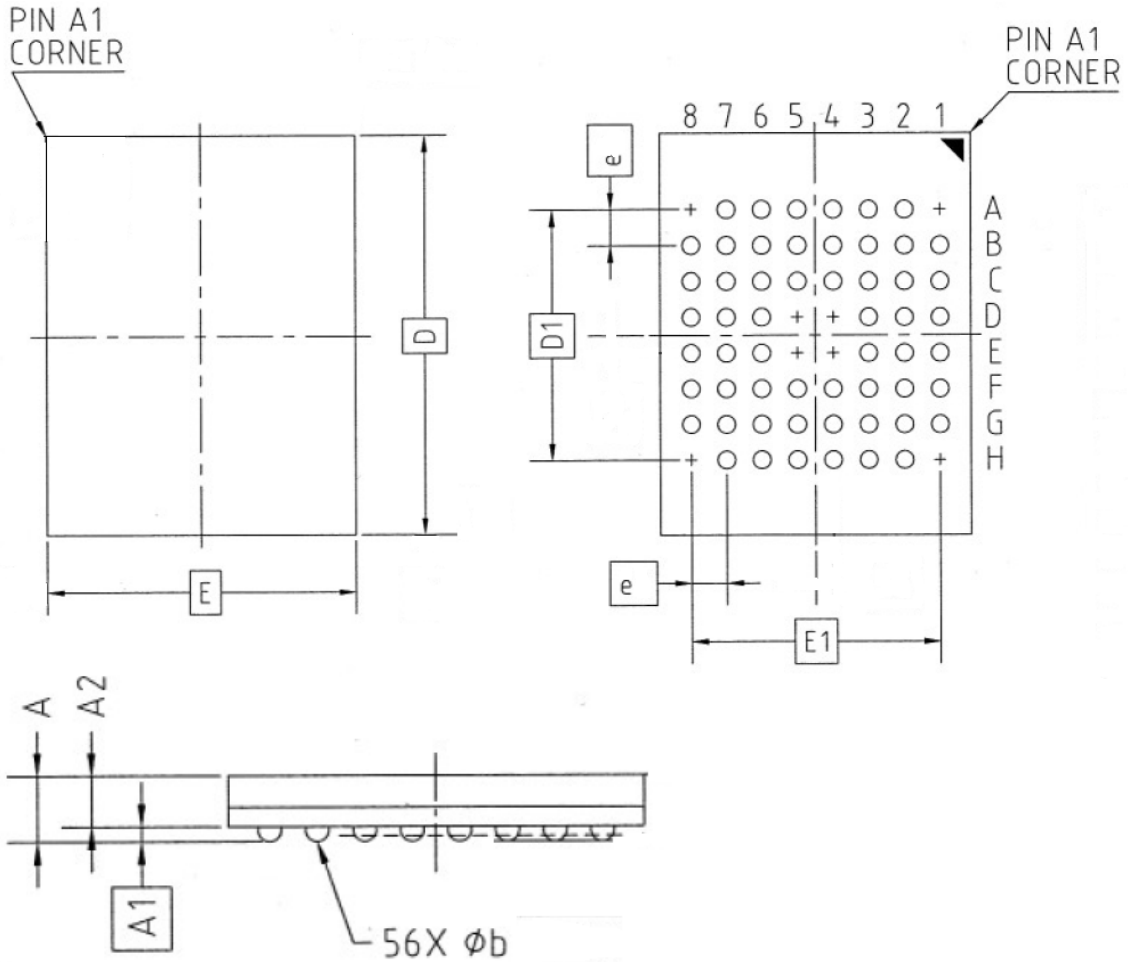
**TEMPERATURE RANGE**  
W = Wireless (-25°C to +85°C)

**PACKAGE**  
C =56-Ball Fine Pitch Ball Grid Array (FBGA)  
0.80mm pitch, 7mm x 9mm package

**SPEED**  
70 = 70ns

**pSRAM density**  
B0 = 32M pSRAM

**BASE PART NUMBER**  
EN = Eon Silicon Solution Inc.  
71GL = Multi-chip Product (MCP)  
3.0V Page Mode Flash Memory and RAM  
128 = 128 Megabit (8M x 16)

**PACKAGE MECHANICAL**
**56-ball Fine-Pitch Ball Grid Array (FBGA) 7 x 9 mm Package,  
pitch: 0.8mm, ball: 0.4mm**


SYMBOL	DIMENSION IN MM		
	MIN.	NOR	MAX
A	---	---	1.20
A1	0.25	0.30	0.35
A2	0.80	---	0.95
D	8.95	9.00	9.05
E	6.95	7.00	7.05
D1	---	5.60	---
E1	---	5.60	---
e	---	0.80	---
b	0.35	0.40	0.45

**Note : Controlling dimensions are in millimeters (mm).**



**Revisions List**

Revision No	Description	Date
A	Initial Release	2009/05/27
B	Update EN29GL128 (Page mode) Flash memory with lowest address sector protected on page 2.	2009/11/23