



## 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.

**EN71PL032 Base MCP**

**Stacked Multi-Chip Product (MCP) Flash Memory and RAM**  
**32 Megabit (2M x 16-bit) CMOS 3.0 Volt-only Simultaneous**  
**Operation Page Mode Flash Memory and**  
**16 Megabit (1M 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 EN71PL series is a product line of stacked Multi-Chip Product (MCP) packages and consists of:

- EN29PL032 (Simultaneous Read/Write) Flash memory die.
- Pseudo SRAM.

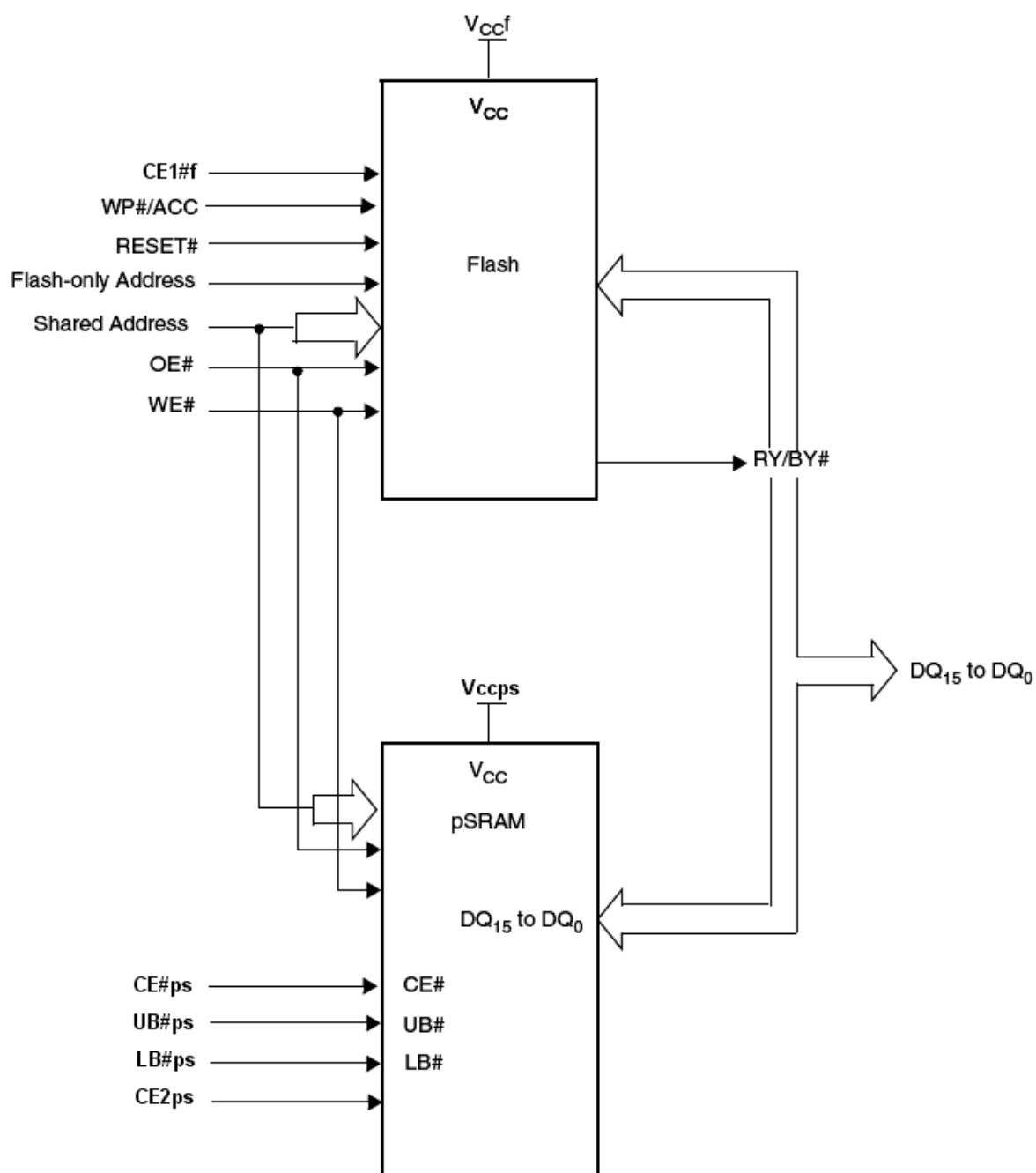
For detailed specifications, please refer to the individual datasheets listed in the following table.

Device	Document
NOR Flash	EN29PL032
Pseudo SRAM	ENPSL16

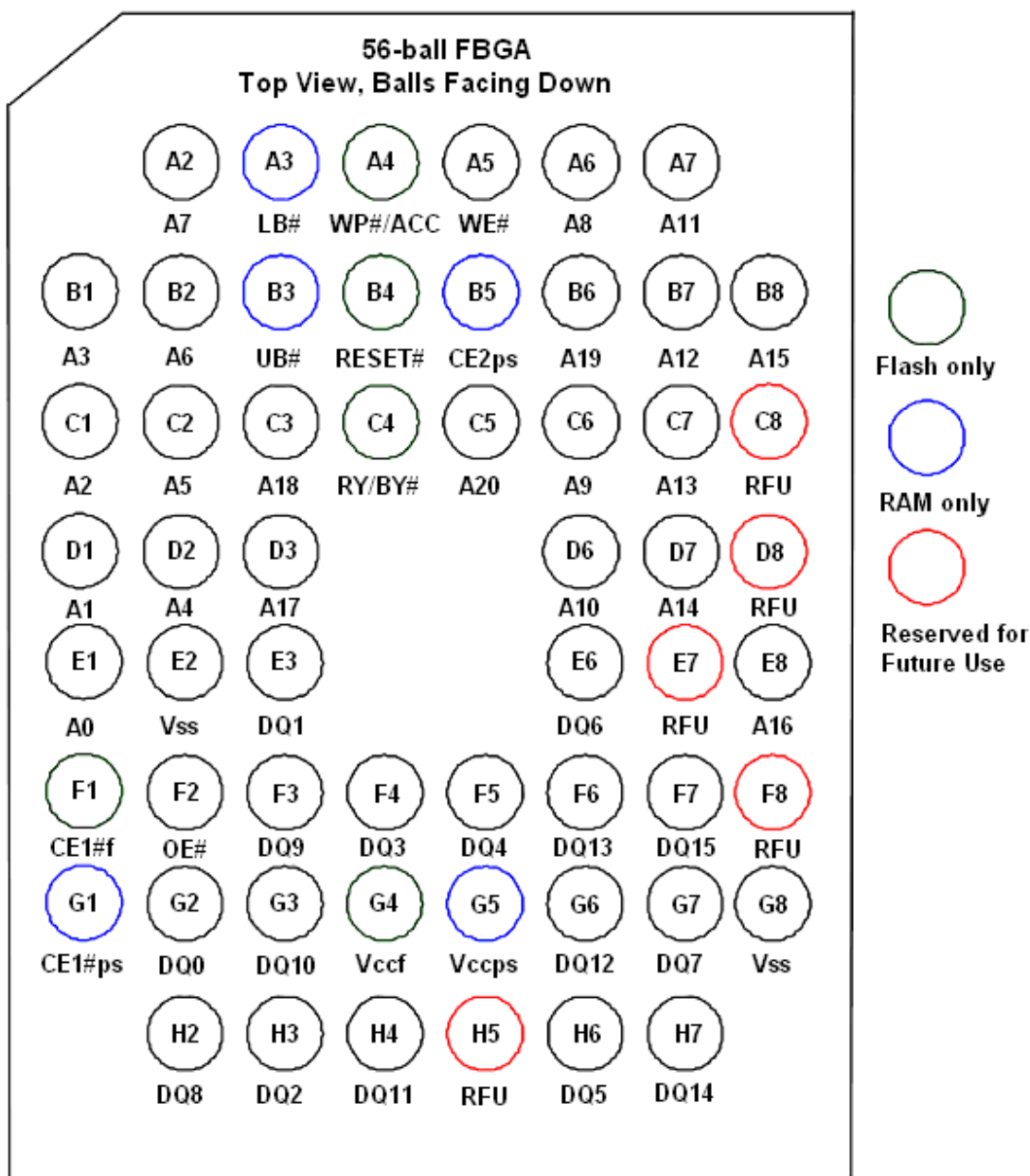
**Product Selector Guide****32Mb Flash Memory**

Device-Model#	EN71PL032A0	pSRAM density	16M 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
EN71PL032A0	A20	A19 – A0

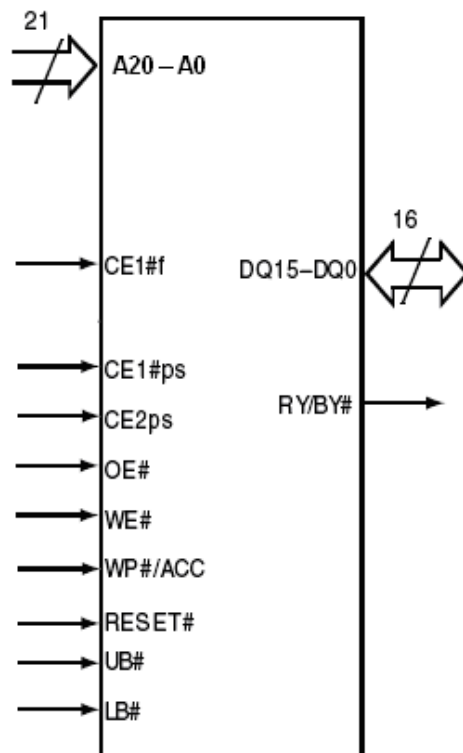
**Note:** A9 = VID for HV Autoselect mode is not available for MCP product.

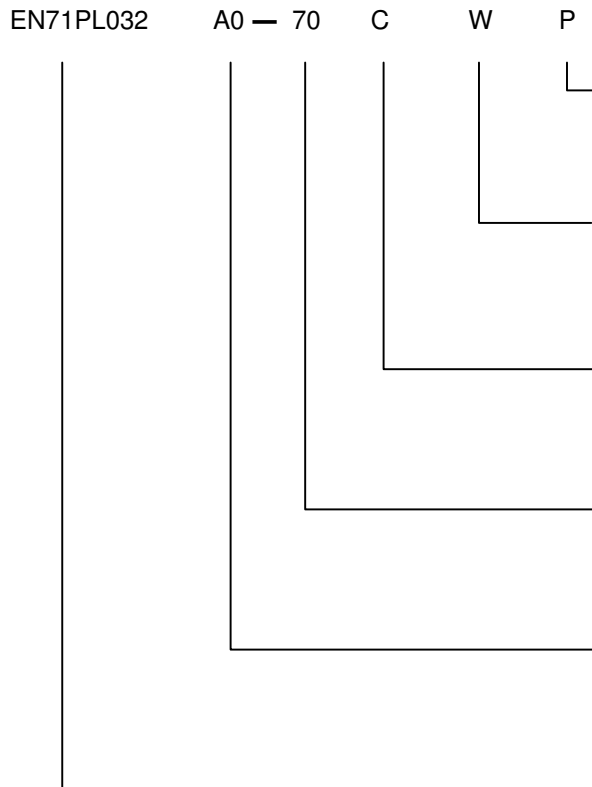
## Pin Description

Signal	Description
A20–A0	21 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

**Note:** A9 = VID for HV Autoselect mode is not available for MCP product.

## 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**

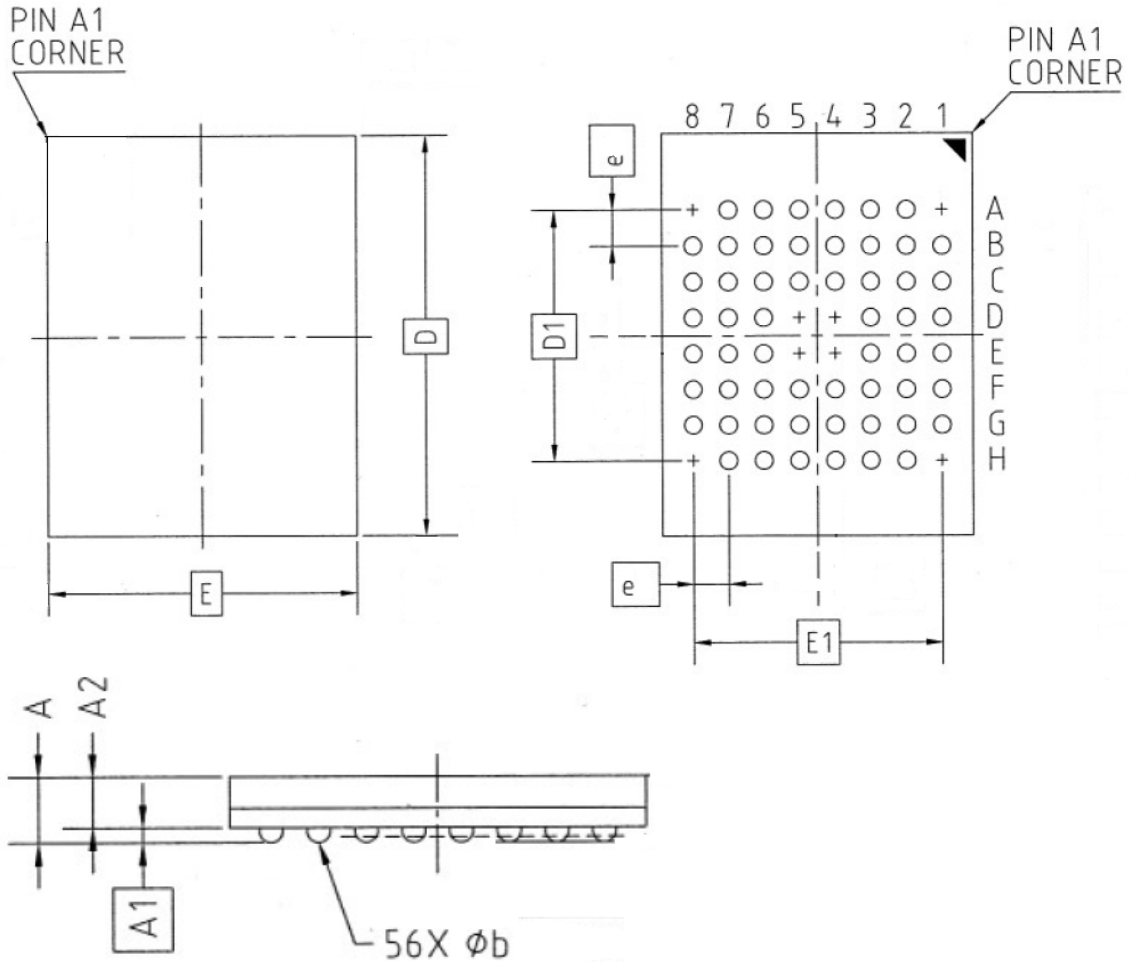
A0 = 16M pSRAM

**BASE PART NUMBER**

EN = Eon Silicon Solution Inc.  
71PL = Multi-chip Product (MCP)  
3.0V Simultaneous Read/Write,  
Page Mode Flash Memory and RAM  
032 = 32 Megabit (2M 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
<b>A</b>	---	---	<b>1.20</b>
<b>A1</b>	<b>0.25</b>	<b>0.30</b>	<b>0.35</b>
<b>A2</b>	<b>0.80</b>	---	<b>0.95</b>
<b>D</b>	<b>8.95</b>	<b>9.00</b>	<b>9.05</b>
<b>E</b>	<b>6.95</b>	<b>7.00</b>	<b>7.05</b>
<b>D1</b>	---	<b>5.60</b>	---
<b>E1</b>	---	<b>5.60</b>	---
<b>e</b>	---	<b>0.80</b>	---
<b>b</b>	<b>0.35</b>	<b>0.40</b>	<b>0.45</b>

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

**Revisions List**

<b>Revision No</b>	<b>Description</b>	<b>Date</b>
A	Initial Release	2008/04/08
B	1. Update MCP Block Diagram in page 2 and Pin Description in page 4. 2. Remove the individual datasheet descriptions of EN29PL064/032 and EN_EM566168GD from Vision A.	2008/09/10
C	1. Add Eon products' New top marking "cFeon" information in page 1. 2. Rename Pseudo SRAM EN_EM1 to ENPSL16 in page 2. 3. Add page read spec in page 2. 4. Add A9 note in page 4 and 5.	2009/01/13
D	Update package mechanical dimension in page 7	2009/10/06