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.

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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
8 Megabit (512K 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	ENPSL80

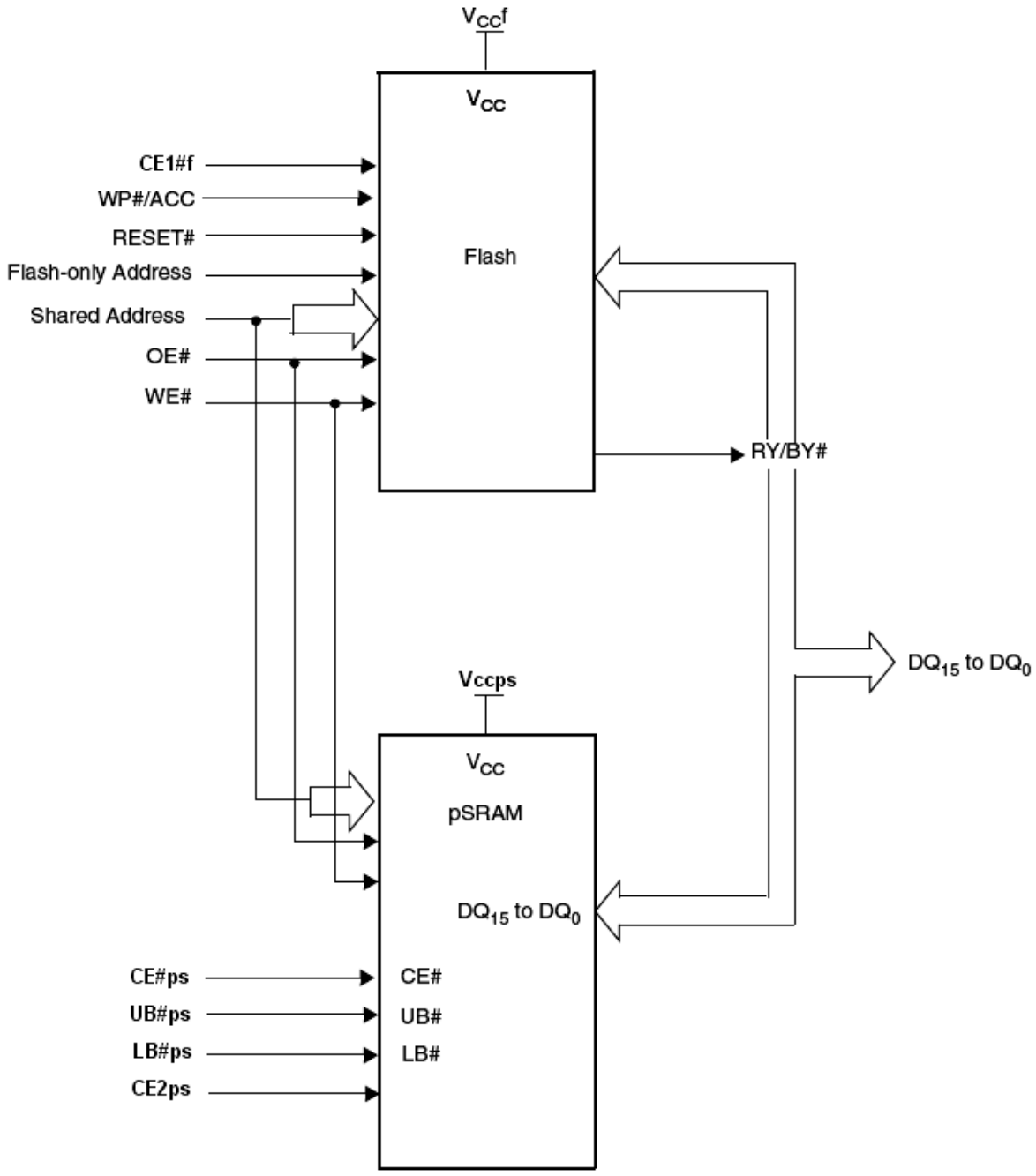
Product Selector Guide

32Mb Flash Memory

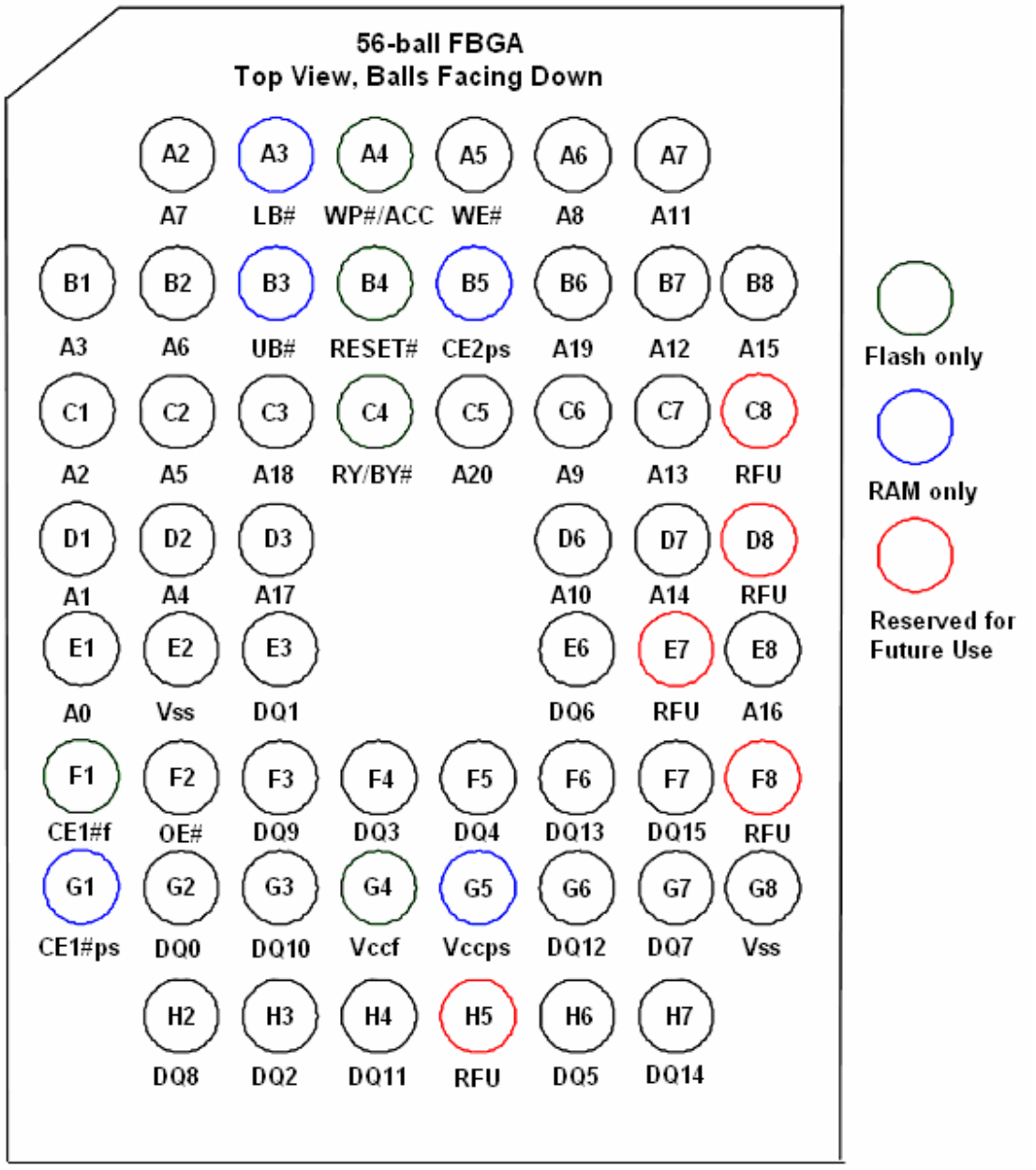
Device-Model#	EN71PL03280	**pSRAM density**	8M pSRAM
Flash Access time	70ns	**pSRAM Access time**	70ns
Page read Access time	25ns	**pSRAM Page read Access time**	25ns
Package	56 FBGA		

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MCP Block Diagram



Connection Diagram



MCP	Flash-only Addresses	Shared Addresses
EN71PL03280	A20, A19	A18 – A0

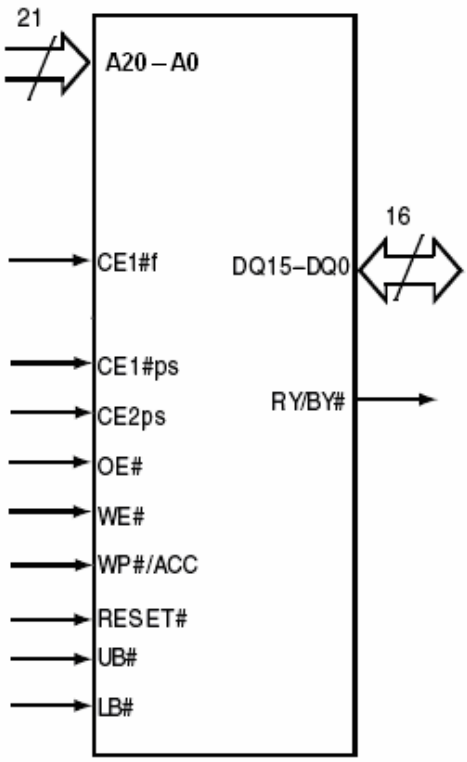
Note: A9 = VID for HV Autoselect mode is not available for MCP product.

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_{CC}f	Flash 3.0 volt-only single power supply
V_{CC}ps	pSRAM Power Supply
V_{SS}	Device Ground (Common)
NC	Pin Not Connected Internally

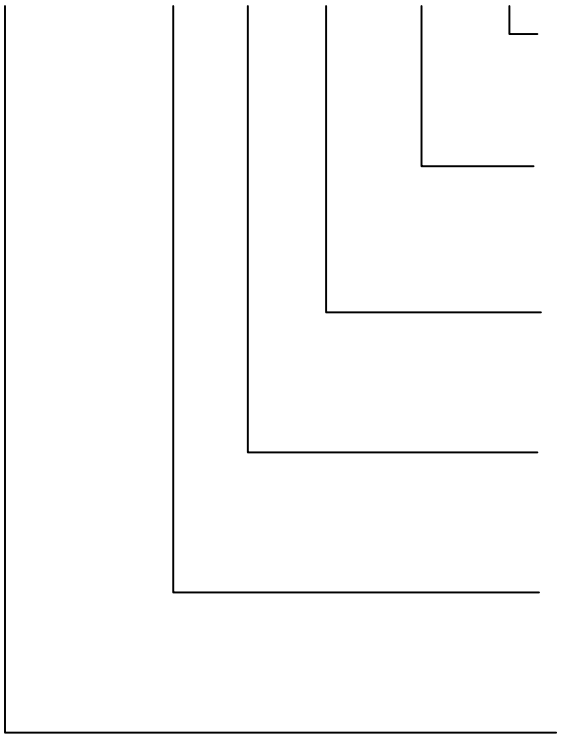
Note: A9 = VID for HV Autoselect mode is not available for MCP product.

Logic Symbol



ORDERING INFORMATION

EN71PL032 80 — 70 C W P



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

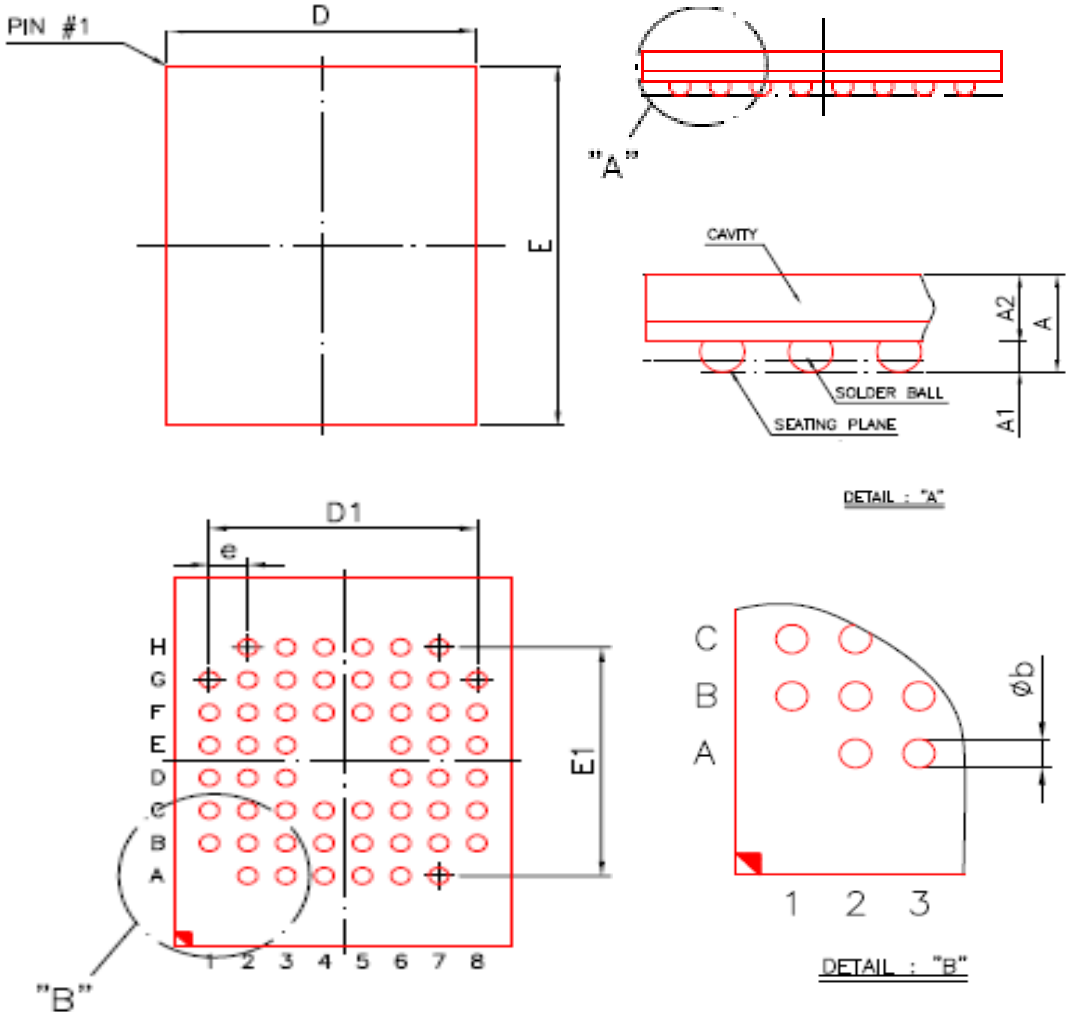
pSRAM density
80 = 8M pSRAM

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)

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PACKAGE MECHANICAL

56-ball Fine-Pitch Ball Grid Array (FBGA) 7 x 9 mm Package



SYMBOL	DIMENSION IN MM		
	MIN.	NOR	MAX
A	- - -	- - -	1.20
A1	0.25	0.30	0.35
A2	0.61	0.66	0.71
D	6.90	7.00	7.10
E	8.90	9.00	9.10
D1	- - -	5.60	- - -
E1	- - -	5.60	- - -
e	- - -	0.80	- - -
b	0.35	0.40	0.45

Note : 1. Coplanarity: 0.1 mm

Revisions List

Revision No	Description	Date
A	Initial Release	2009/05/05