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.

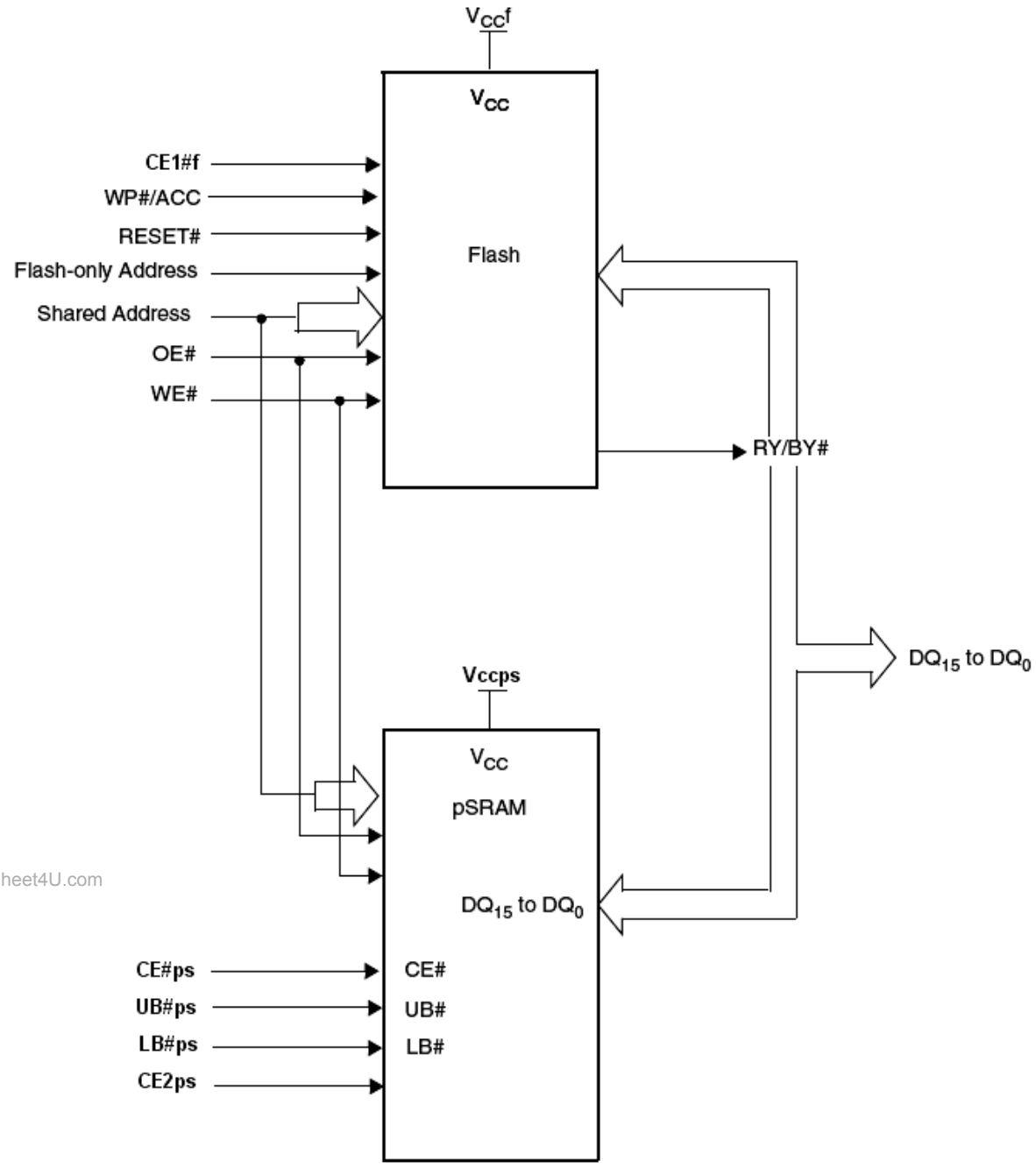
Device	Document
NOR Flash	EN29PL032
Pseudo SRAM	EN_EM1

Product Selector Guide

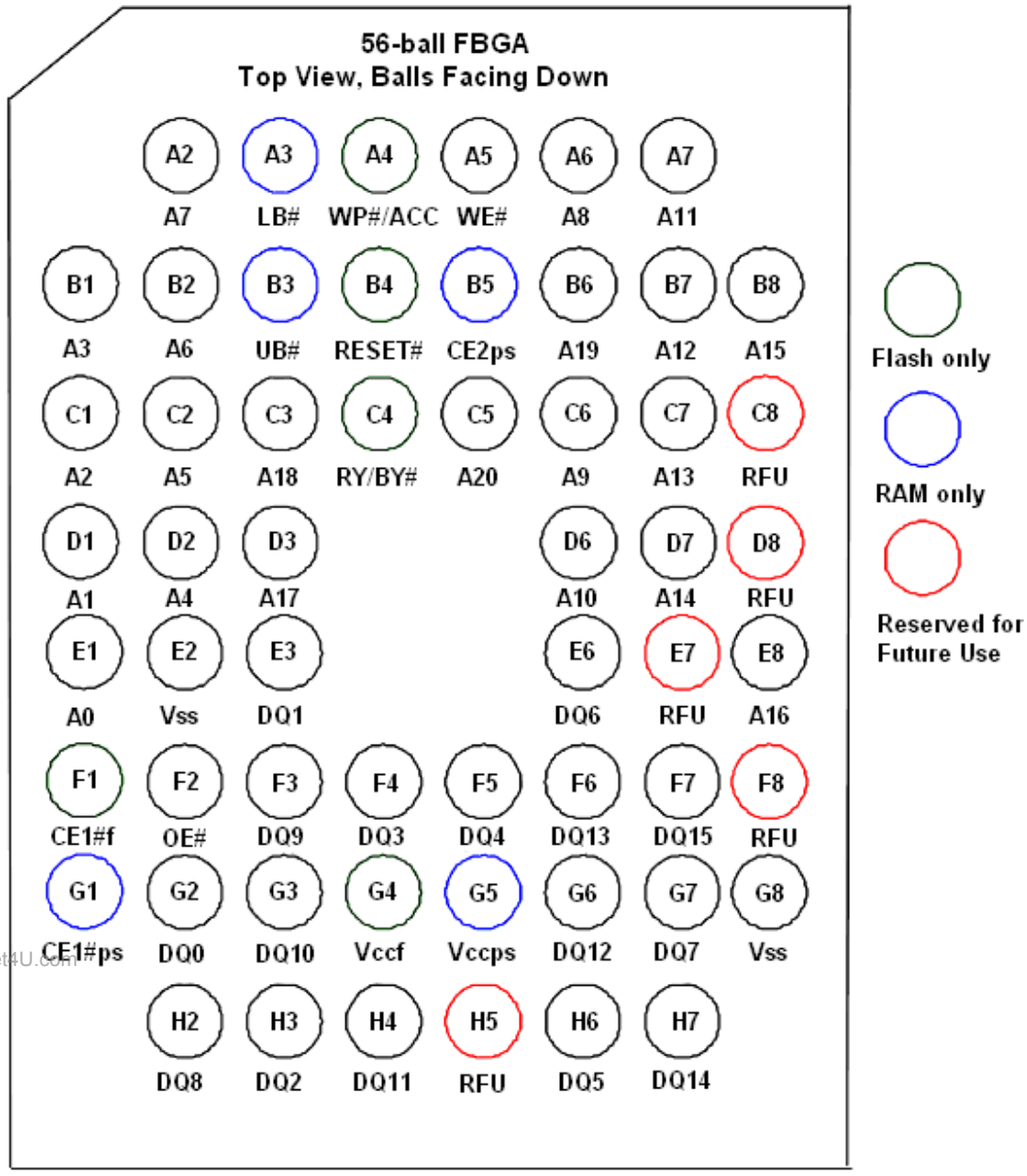
32Mb Flash Memory

Device-Model#	Flash Access time (ns)	pSRAM density	pSRAM Access time (ns)	Package
EN71PL032A0	70	16M pSRAM	70	56 FBGA

MCP Block Diagram



Connection Diagram

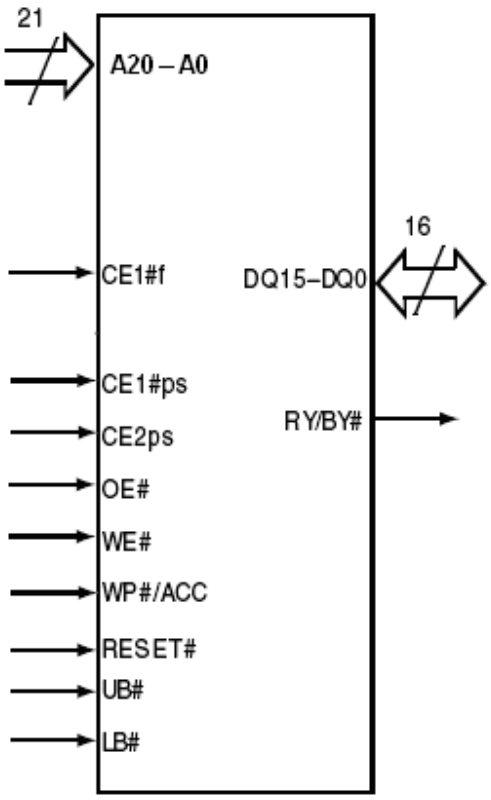


MCP	Flash-only Addresses	Shared Addresses
EN71PL032A0	A20	A19 – A0

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

Logic Symbol



ORDERING INFORMATION

EN71PL032 A0 — 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

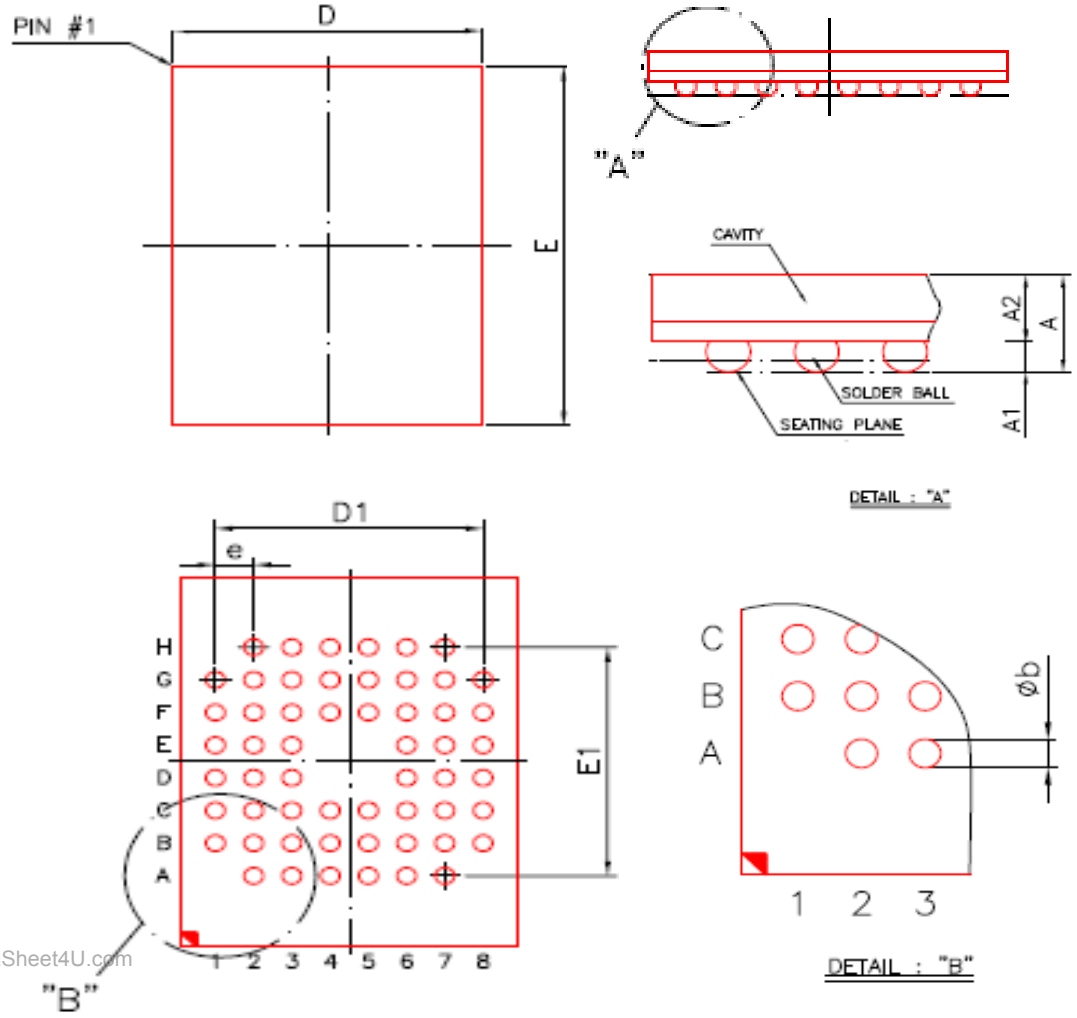
SPEED
70 = 70ns

pSRAM density
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



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	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