



Specification Comparison

4Mb FLASH

EN29LV400A VS SST39VF400A

Part No. :	EN29LV400A
Issued date :	2008 / 01 / 14
Prepared by :	FAE Engineer : <u>Sunny Tai</u>
Approval by :	FAE Manager : <u>Jason Tseng</u>



1. Part No.

Eon : EN29LV400A
SST : SST39VF400A

2. Basic Features:

The following features are identical with each other.

- 2.7 – 3.6 Read/Program/Erase Voltage.
- Data# Polling and toggle bits
- JEDEC standard compatible pin-out and command sets.
- Low Vcc write inhibit
- Available package : 48-Lead TSOP (12x20mm) and 48-Lead FBGA (6x8mm).

3. Differences:

- Pin Configuration

	EN29LV400A	SST39VF400A
Address Inputs	A0-A17	A0-A17
Data I/O	DQ0-DQ15	DQ0-DQ15
Byte/Word Mode	BYTE#	N/A
LSB Address Input in Byte Mode (BYTE# pin low)	DQ15 / A-1	N/A
Hardware Reset Pin	RESET#	N/A
Ready / Busy Output	RY/BY#	N/A
Chip Enable	CE#	CE#
Output Enable	OE#	OE#
Write Enable	WE#	WE#
Power Supply	Vcc	V _{DD}
Ground	Vss	V _{SS}
Not connected to anything	NC	NC

- Word / Byte Configuration

EN29LV400A : x8 and x16 capable

SST39VF400A : only x16



- **Ready/Busy# pin (RY/BY#)**

Provides a hardware method of detecting program or erase cycle completion

EN29LV400A : Yes

SST39VF400A : No

If you didn't use it with SST part, just ignore it.

- **Hardware reset pin (RESET#)**

Hardware method to reset the device to reading array data

EN29LV400A : Yes

SST39VF400A: No

- **Erase Suspend/Erase Resume**

Suspends an erase operation to read data from, or program data to, a sector that is not being erased, then resumes the erase operation.

EN29LV400A : Yes

SST39VF400A: No

- **Manufacture ID and Device ID**

EN29LV400A

- Manufacturer ID : 1CH

- Device ID (Top boot) : 22B9H (Word) / B9H (byte)

- Device ID (Bottom boot) : 22BAH (Word) / BAH (byte)

Description	Mode	$\overline{\text{CE}}$	$\overline{\text{OE}}$	$\overline{\text{WE}}$	A17 to A12	A11 to A10	A9 ²	A8	A7	A6	A5 to A2	A1	A0	DQ8 to DQ15	DQ7 to DQ0
Manufacturer ID: Eon		L	L	H	X	X	V _{ID}	H ¹	X	L	X	L	L	X	1Ch
Device ID (top boot block)	Word	L	L	H	X	X	V _{ID}	X	X	L	X	L	H	22h	B9h
	Byte	L	L	H										X	B9h
Device ID (bottom boot block)	Word	L	L	H	X	X	V _{ID}	X	X	L	X	L	H	22h	BAh
	Byte	L	L	H										X	BAh
Sector Protection Verification		L	L	H	SA	X	V _{ID}	X	X	L	X	H	L	X	01h (Protected)
														X	00h (Unprotected)

Note:

1. If a manufacturing ID is read with A8=L, the chip will output a configuration code 7Fh. A further Manufacturing ID must be read with A8=H.
2. A9 = VID is for HV A9 Autoselect mode only. A9 must be ≤ Vcc (CMOS logic level) for Command Autoselect Mode.



SST39VF400A:

- Manufacturer ID : BFH
- Device ID : 2780H

PRODUCT IDENTIFICATION

	Address	Data
Manufacturer's ID	0000H	00BFH
Device ID		
SST39LF/VF200A	0001H	2789H
SST39LF/VF400A	0001H	2780H
SST39LF/VF800A	0001H	2781H

- **Flexible Sector Architecture:**

EN29LV400A :

One 16 Kbyte, two 8 Kbyte, one 32 Kbyte, and seven 64 Kbyte sectors (byte mode)

One 8 Kword, two 4 Kword, one 16 Kword, and seven 32 Kword sectors (word mode)

SST39VF400A :

- uniform 4Kbyte sectors.

The sector size of SST parts are different from Eon parts.

Software can be configured to fit both.

- **Address input for command cycles:**

EN29LV400A :

use address input 555H and 2AAH for command cycles.

Address bits A_{10} - A_0 are input for 555H and 2AAH, address bits A_{17} - A_{11} are don't cares.

SST39VF400A :

use address input 5555H and 2AAAH for command cycles.

Address bits A_{14} - A_0 are input for 5555H and 2AAAH, address bits A_{17} - A_{15} are don't cares.

The address input in the command sequence for the SST39VF400A can also be used for the EN29LV400A without any change.