



Specification Comparison

16Mb FLASH

EN29LV160B VS SST39VF1601-70-4C-B3KE



1. Part No.

Eon: EN29LV160B
SST: SST39VF1601-70-4C-B3KE

2. Basic Features:

The following features are identical with each other.

- 2.7 – 3.6 Read/Program/Erase Voltage.
- CFI (Common Flash Interface) compliant
- Hardware reset pin (RESET#)
- Data# Polling and toggle bits
- JEDEC standard compatible pin-out and command sets.
- Available package: 48-Lead TSOP (12x20mm) and 48-Lead TFBGA (6x8mm, 0.8mm pitch)
- For bottom boot sector & TFBGA package part number selection: EN29LV160BB-70BIP / SST39VF1601-70-4C-B3KE

3. Differences:

- Pin Configuration

| | EN29LV160B | SST39VF1601-70-4C-B3KE |
|---|-----------------|------------------------|
| Addresses Input | A0-A19 | A0-A19 |
| Data Inputs/Outputs | DQ0-DQ15 | DQ0-DQ15 |
| DQ15 (data input/output, word mode), A-1 (LSB address input, byte) | DQ15 / A-1 | N/A |
| Chip Enable | CE# | CE# |
| Output Enable | OE# | OE# |
| Write Enable | WE# | WE# |
| Hardware Reset Pin | RESET# | RST# |
| Ready/Busy Output | RY/BY# | N/A |
| Write Protect | N/A | WP# |
| Byte/Word Mode | BYTE# | N/A |
| Power Supply | V _{CC} | V _{DD} |
| Ground | V _{SS} | V _{SS} |
| Not Connected to anything | NC | NC |



- **Word / Byte Configuration**

EN29LV160B: x8 and x16 capable (Optional word & byte mode)

SST39VF1601-70-4C-B3KE: only x16 (word mode only)

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

Provides a hardware method of detecting program or erase cycle completion

EN29LV160B: Yes

SST39VF1601-70-4C-B3KE: No

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

- **Write Protect # pin (WP#)**

To protect the top/bottom boot block from Erase/Program operation when grounded.

EN29LV160B: No

SST39VF1601-70-4C-B3KE: Yes

- **Manufacture ID and Device ID**

EN29LV160B

- Manufacturer ID : 7FH / 1CH
- Device ID (Top boot) : 22C4H (Word) / C4H (byte)
- Device ID (Bottom boot) : 2249H (Word) / 49H (byte)

| Description | CE # | OE# | WE# | A19 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 _D | L ¹ | X | L | X | L | L | X | 7FH 1CH |
| Device ID (top boot block) | Word | L | L | H | X | X | V _D | X | L | X | L | H | 22h | C4H |
| | Byte | L | L | H | X | X | V _D | X | L | X | L | H | X | C4H |
| Device ID (bottom boot block) | Word | L | L | H | X | X | V _D | X | L | X | L | H | 22h | 49H |
| | Byte | L | L | H | X | X | V _D | X | L | X | L | H | X | 49H |
| Sector Protection Verification | L | L | H | SA | X | V _D | X | X | L | X | H | L | X | 01h (Protected) |
| | | | | | | | | | | | | | X | 00h (Unprotected) |

Note:

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



SST39VF1601-70-4C-B3KE:

- Manufacturer ID : BFH
- Device ID (Bottom boot) : 234BH

PRODUCT IDENTIFICATION

| | Address | Data |
|-------------------|---------|-------|
| Manufacturer's ID | 0000H | BFH |
| Device ID | | |
| SST39VF1601 | 0001H | 234BH |
| SST39VF1602 | 0001H | 234AH |
| SST39VF3201 | 0001H | 235BH |
| SST39VF3202 | 0001H | 235AH |
| SST39VF6401 | 0001H | 236BH |
| SST39VF6402 | 0001H | 236AH |

● Flexible Sector Architecture:

EN29LV160B:

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

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

SST39VF1601-70-4C-B3KE:

- Uniform 4Kbyte sectors.

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

Software can be configured to fit both.

● Address input for command cycles :

EN29LV160B:

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

Address bits A₁₀- A₀ are input for 555H and 2AAH, address bits A₁₉- A₁₁ are don't cares.

SST39VF1601-70-4C-B3KE:

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

Address bits A₁₄- A₀ are input for 5555H and 2AAAH, address bits A₁₉- A₁₅ are don't cares.



The address format in the command sequence for the SST39VF1601-70-4C-B3KE can also be used for the EN29LV160B without any change.