



**EN29LV640T/B VS S29GL064A
64Mb FLASH SPEC COMPARISON**

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1. Part No.

Eon : EN29LV640T/B

Spansion : S29GL064A

Eon	Spansion	Remark
EN29LV640T	S29GL064AxxxR3	Top Boot
EN29LV640B	S29GL064AxxxR4	Bottom Boot

2. Basic Features:

The following features are identical with each other.

- 2.1 2.7 – 3.6 Read/Program/Erase Voltage.
- 2.2 Access Time : as fast as 90 ns
- 2.3 JEDEC standard compatible pin-out and command sets.
- 2.4 Available package : 48-Lead TSOP and FBGA.
- 2.5 boot sector structure:
127 32-Kword (64-Kbyte) sectors + 8 4Kword (8Kbyte) boot sectors
R3 =Top boot sector device, top two address sectors protected when WP#/ACC=VIL
R4 =Bottom boot sector device, bottom two address sectors protected when WP#/ACC=VIL
- 2.6 Byte/Word Access : x8 and x16 capable



3. Differences

3.1 Secured Silicon Sector 128-word is not supported by Eon.

3.2 Manufacturer ID

Eon's device uses an extended manufacturer identification code at address 100h , instead of address 000h. Thus, on address 100h, the output is 1Ch ;while on address 000h, the output is 7Fh.

3.3 Autoselect command during erase suspend mode.

The auto-select command sequence allows the host system to access the manufacturer and device codes, and determine whether or not a sector is protected. Normally, it is initiated from read mode. For EN29LV640T/B, in erase suspend mode while an erase operation has been suspended, the system can read data from any sector not selected for erasure. However, manufacturer and device codes *can not* be read out by writing auto-select command sequence during this period. In other words, Auto-select command is not supported during erase suspend mode in EN29LV640T/B, however S29GL064A supports it.

3.4 Page Read & Write buffer

S29064A has 4-word/8-byte page read buffer and 16-word/32-byte write buffer in accordance with the commands, write-to-buffer, program-buffer-to-flash, and write-to-buffer-abort-reset. These are not available for EN29LV640T/B.

3.5 Continuous Sector Erasure

Sector erase is a six bus cycle operation as defined in the datasheet of EN29LV640T/B. Once the sector erase operation has begun, only the erase suspend command is valid. All other commands are ignored. Unlike the devices from other vendors, only *a single sector can be specified for each sector erase command*.

Users must issue another sector erase command for the next sector to be erased after the previous one is completed.

3.6 V_{ID} and V_{HH} is 11.5V Max.

V_{ID} applied to enable Signature (Auto-select) and sector(group) protection and V_{HH} applied to Accelerated Program are between 10.5V and 11.5V. The same parameters for S29064M are 11.5V to 12.5V.

Any voltage level higher than 11.5V would damage the device.



4. Conclusion

EN29LV640T/B are compatible with Spansion S29GL064A on the major features. Moreover Eon has faster word program time 8 μ s (Spansion 15us) and lower active read current 9mA, (Spansion 18mA) which is more useful in practice.

Note:

1. Cross reference to other parts of Spansion S29GL064A family

S29GL064AxxxR1 = Uniform sector device, highest address sector protected when WP#/ACC=VIL ;
x8 and x16 capable, 56 pin TSOP, no cross to this part

S29GL064AxxxR2 = Uniform sector device, lowest address sector protected when WP#/ACC=VIL ;
x8 and x16 capable, 56 pin TSOP, no cross to this part

S29GL064AxxxR5 = Uniform sector device, x16 only, FBGA, no cross to this part

S29GL064AxxxR6 = Uniform sector device, highest address sector protected when WP#=VIL
x16 only, 48 pin TSOP, cross to **EN29LV641H**

S29GL064AxxxR7 = Uniform sector device, lowest address sector protected when WP#=VIL
X16 only, 48 pin TSOP, cross to **EN29LV641L**



Revisions History

Revision No	Description	Date
A	Initial Release.	2007/08/06