EN29LV320 VS M29W320D

32Mb FLASH SPEC COMPARISON

Issued Date :	**2005/11/25**
Prepared By :	**FAE : John Lee**
Approved By :	**FAE: Manager :Jason Tseng**

Phone : 886-3-5525686-280 , E-mail : johnlee@essi.com.tw

1. Part No.

Eon : EN29LV320

ST Micro : M29W320D

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 70 ns
2.3 Power consumption : as low as 9mA for typical READ.
2.4 Standard flash pinouts and command sets.
2.5 Available package : 48-Lead TSOP.

3. Differences

3.1 Boot Sector/Block structure

Eon : Eight 8-Kbyte sectors, sixty-three 64k-byte sectors.
STM : 16kB/8kB/8kB/32kB, sixty-three 64k-byte sectors

3.2 64 bit Security Code of CFI which is not supported by Eon.

3.3 Manufacturer ID

Eon's device uses an extended manufacurer 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.

3.4 Autoselect command during erase suspend mode.

The autoselect 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 EN29LV320, 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 autoselect command sequence during this period. In other words, Autoselect command is not supported during erase suspend mode in EN29LV320, however M29W320D supports it.

3.5 Continuous Sector Erasure.

Sector erase is a six bus cycle operation as defined in the datasheet of EN29LV320. 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 (Autoselect) and sector(group) protection and V_{HH} applied to Accelerated Program are between *10.5V and 11.5V*. The same parameters for M29W320D are 11.5V to 12.5V.

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

4. Conclusion

To sum up, 99% of the specification is the same, and the differences listed would be covered with either small efforts or nothing.