



## EN29LV320A Application Note

### 32 Megabit (4M x 8-bit / 2Mx 16-bit) Flash Memory

### Boot Sector Flash Memory, CMOS 3.0 Volt-only

The EN29LV320A is a high-performance 32-Megabit flash memory, which has the same features with the flash memories provided by other major vendors like SPANSION S29AL032D (AMD Am29LV320D). In addition to the compatibility of drop-in replacement, something has been pointed out for you to facilitate your smooth design-in.

#### 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.

#### 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.

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.

#### Continuous Sector Erasure.

Sector erase is a six bus cycle operation as defined in the datasheet of EN29LV320A. 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.

#### V<sub>ID</sub> and V<sub>HH</sub> is 11.5V Max.

V<sub>ID</sub> applied to enable Signature (Autoselect) and sector(group) protection and V<sub>HH</sub> applied to Accelerated Program are between **10.5V and 11.5V**. The same parameters for SPANSION's Am29LV320D are 11.5V to 12.5V.

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

#### In-system Sector (Un)Protect extra wait state.

There must be a delay between the sector (un)protect verify command (40h) and the reading of the status data, which is **longer than 0.4 μs**.

#### Security Sector or Secured Silicon.

Unlike devices from other vendors, the feature to permanently lock one sector is not implemented.

**Revisions History**

<b>Revision No</b>	<b>Description</b>	<b>Date</b>
A	Initial Release.	2008/05/05