



**EN29LV640T/B VS EN29LV640H/L
64Mb FLASH SPEC COMPARISON**

Part No. :	EN29LV640T/B
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1. Purpose

EN29LV640H/L will EOL and be replaced by EN29LV640T/B which can offer Top or Bottom boot sector and allow for greater flexibility in applications. This note highlights the difference between those two devices. It helps customers to migrate into new device.

2. Part No.

Eon : EN29LV640T/B

Eon : EN29LV640H/L

Eon	Sector Architecture	Remark
EN29LV640T	Boot	Top Boot
EN29LV640B	Boot	Bottom Boot
EN29LV640H	Uniform	highest address sector protected
EN29LV640L	Uniform	lowest address sector protected

2. Basic Features:

The following features are identical with each other.

- 2.1 2.7 – 3.6 Read/Program/Erase Voltage.
- 2.2 JEDEC standard compatible
- 2.3 Support JEDEC Common Flash Interface (CFI)
- 2.4 Standard DATA# polling and toggle bits feature
- 2.5 Unlock Bypass Program command supported
- 2.6 Erase Suspend / Resume modes :
Read and program another Sector during Erase Suspend Mode
- 2.7 RESET# hardware reset pin
Hardware method to reset the device to read mode
- 2.8 WP#/ACC input pin

3. Difference

- **Pin Out**

Pin No.	EN29LV640T/B	EN29LV640H/L
Pin 45	DQ15 / A-1	DQ15
Pin 47	BYTE#	NC

- **Block Sector Architecture**

EN29LV640T/B : Flexible sector Architecture

- Eight 8-Kbyte sectors, One hundred and twenty-seven 32K-Word / 64K-byte sectors

EN29LV640H/L : Uniform sector Architecture

- One hundred and twenty-eight 32K-Word / 64K-byte sectors

Note : In the condition of erasing the uniform sector of EN29LV640H/L to be replaced with EN29LV640T/B, sector erase command for the boot sector must be issued multiple times in EN29LV640T/B depending on the actual code size. The correlation table is shown below.

EN29LV640T:

Sector Size (Kbytes / Kwords)	Address Range (h) Byte mode (x8)	Address Range (h) Word Mode (x16)	EN29LV640T	EN29LV640H/L
8/4	7F0000–7F1FFF	3F8000–3F8FFF	Issue sector erase for sector 127	Issue sector erase for sector 127 (3F8000h-3FFFFFFh)
8/4	7F2000–7F3FFF	3F9000–3F9FFF	Issue sector erase for sector 128	
8/4	7F4000–7F5FFF	3FA000–3FAFFF	Issue sector erase for sector 129	
8/4	7F6000–7F7FFF	3FB000–3FBFFF	Issue sector erase for sector 130	
8/4	7F8000–7F9FFF	3FC000–3FCFFF	Issue sector erase for sector 131	
8/4	7FA000–7FBFFF	3FD000–3FDFFF	Issue sector erase for sector 132	



8/4	7FC000–7FDFFF	3FE000–3FEFFF	Issue sector erase for sector 133	
8/4	7FE000–7FFFFF	3FF000–3FFFFF	Issue sector erase for sector 134	

EN29LV640B:

Sector Size (Kbytes / Kwords)	Address Range (h) Byte mode (x8)	Address Range (h) Word Mode (x16)	EN29LV640B	EN29LV640H/L
8/4	000000–001FFF	000000–000FFF	Issue sector erase for sector 0	Issue sector erase for sector 0 (000000h-007FFFh)
8/4	002000–003FFF	001000–001FFF	Issue sector erase for sector 1	
8/4	004000–005FFF	002000–002FFF	Issue sector erase for sector 2	
8/4	006000–007FFF	003000–003FFF	Issue sector erase for sector 3	
8/4	008000–009FFF	004000–004FFF	Issue sector erase for sector 4	
8/4	00A000–00BFFF	005000–005FFF	Issue sector erase for sector 5	
8/4	00C000–00DFFF	006000–006FFF	Issue sector erase for sector 6	
8/4	00E000–00FFFF	007000–007FFF	Issue sector erase for sector 7	

- **Byte/Word Access**

EN29LV640T/B : x8 and x16 capable

EN29LV640H/L : only x16

● **Autoselect Codes (Using High Voltage, VB_{IDB})**

EN29LV640T/B :

Description		CE#	OE#	WE#	A21 to A12	A11 to A10	A9 ²	A8	A7	A6	A5 to A2	A1	A0	DQ8 to DQ15	DQ7 to DQ0
Manufacturer ID:		L	L	H	X	X	V _{ID}	H ¹	X	L	X	L	L	X	1Ch
Eon								L							7Fh
Device ID	Word	L	L	H	X	X	V _{ID}	X	X	L	X	L	H	22h	C9h
(top boot sector)	Byte	L	L	H											X
Device ID	Word	L	L	H	X	X	V _{ID}	X	X	L	X	L	H	22h	CBh
(bottom boot sector)	Byte	L	L	H											X
Sector Protection Verification		L	L	H	SA	X	V _{ID}	X	X	L	X	H	L	X	01h (Protected)
														X	00h (Unprotected)

EN29LV640H/L :

Description		CE#	OE#	WE#	A21 to A15	A14 to A10	A9 ²	A8	A7	A6	A5 to A2	A1	A0	DQ15 to DQ0
Manufacturer ID:		L	L	H	X	X	V _{ID}	H ¹	X	L	X	L	L	XX1Ch
Eon								L						XX7Fh
Autoselect Device ID		L	L	H	X	X	V _{ID}	X	X	L	X	L	H	227Eh
Sector Protection Verification		L	L	H	SA	X	V _{ID}	X	X	L	X	H	L	XX01h (Protected)
														XX00h (Unprotected)



Revisions History

Revision No	Description	Date
A	Initial Release.	2007/09/11