



**EN29LV640T/B VS EN29LV641H/L
64Mb FLASH SPEC COMPARISON**

Part No. :	EN29LV640T/B
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1. Note

There are several pad assignment are different between EN29LV640T/B and EN29LV641H/L. If customers want to use EN29LV640T/B to replace EN29LV641H/L, **please re-design your system and PCB.**

2. Part No.

Eon : EN29LV640T/B

Eon : EN29LV641H/L

Eon	Sector Architecture	Remark
EN29LV640T	Boot	Top Boot
EN29LV640B	Boot	Bottom Boot
EN29LV641H	Uniform	highest address sector protected
EN29LV641L	Uniform	lowest address sector protected

3. 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

4. Difference

- Pin Out

Pin No.	EN29LV640T/B	EN29LV641H/L
1	A15	A15
2	A14	A14
3	A13	A13
4	A12	A12
5	A11	A11
6	A10	A10
7	A9	A9
8	A8	A8
9	A19	A21
10	A20	A20
11	WE#	WE#
12	RESET#	RESET#
13	A21	ACC
14	WP#/ACC	WP#
15	RY/BY#	A19
16	A18	A18
17	A17	A17
18	A7	A7
19	A6	A6
20	A5	A5
21	A4	A4
22	A3	A3
23	A2	A2
24	A1	A1

Pin No.	EN29LV640T/B	EN29LV641H/L
48	A16	A16
47	BYTE#	V _{IO} (V _{CC})
46	Vss	Vss
45	DQ15/A-1	DQ15
44	DQ7	DQ7
43	DQ14	DQ14
42	DQ6	DQ6
41	DQ13	DQ13
40	DQ5	DQ5
39	DQ12	DQ12
38	DQ4	DQ4
37	Vcc	Vcc
36	DQ11	DQ11
35	DQ3	DQ3
34	DQ10	DQ10
33	DQ2	DQ2
32	DQ9	DQ9
31	DQ1	DQ1
30	DQ8	DQ8
29	DQ0	DQ0
28	OE#	OE#
27	Vss	Vss
26	CE#	CE#
25	A0	A0



● **Block Sector Architecture**

EN29LV640T/B : Flexible sector Architecture

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

EN29LV641H/L : Uniform sector Architecture

- One hundred and twenty-eight 32K-Word sectors

Note : In the condition of erasing the uniform sector of EN29LV641H/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	EN29LV641H/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	7FE000–7FFFFFF	3FF000–3FFFFFF	Issue sector erase for sector 134	



EN29LV640B:

Sector Size (Kbytes / Kwords)	Address Range (h) Byte mode (x8)	Address Range (h) Word Mode (x16)	EN29LV640B	EN29LV641H/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

EN29LV641H/L : only x16

- **RY/BY#: Ready/Busy Status output**

Provides a hardware method of detecting program or erase cycle completion

EN29LV640T/B : Yes

EN29LV641H/L : No

● **Autoselect Codes (Using High Voltage, V_{ID})**

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: Eon		L	L	H	X	X	V _{ID}	H ¹ L	X	L	X	L	L	X	1Ch 7Fh
Device ID	Word	L	L	H										22h	C9h
(top boot sector)	Byte	L	L	H	X	X	V _{ID}	X	X	L	X	L	H	X	C9h
Device ID	Word	L	L	H										22h	CBh
(bottom boot sector)	Byte	L	L	H	X	X	V _{ID}	X	X	L	X	L	H	X	CBh
Sector Protection Verification		L	L	H	SA	X	V _{ID}	X	X	L	X	H	L	X	01h (Protected)
														X	00h (Unprotected)

EN29LV641H/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: Eon		L	L	H	X	X	V _{ID}	H ¹ L	X	L	X	L	L	XX1Ch XX7Fh
Autoselect Device ID		L	L	H	X	X	V _{ID}	X	X	L	X	L	H	22D7h
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.	2008/04/15