

Macronix
Process Change Notification(PCN)

KH29LV160D
(3V, 16M, Parallel Flash)

Date Issued : June, 2008

Issued by : Sales/KH Brand

Dear Macronix Customer,

Macronix is introducing the 5th generation of 16Mb parallel flash product. Macronix has shrunk the die size from 0.15um to 0.13 um in order to continue to offer our customers the most advanced and cost effective products.

In order to achieve better performance, reliability, and cost structure. Macronix is introducing the “D” revision of 16Mb parallel flash products on our advanced 0.13um Technology.

Product is available in samples and mass production now.

The KH29LV160D device is identical in form, fit and function to the previous generation KH29LV160C product. Additional functions added in this version are – Hardware write protection and accelerated program capability.

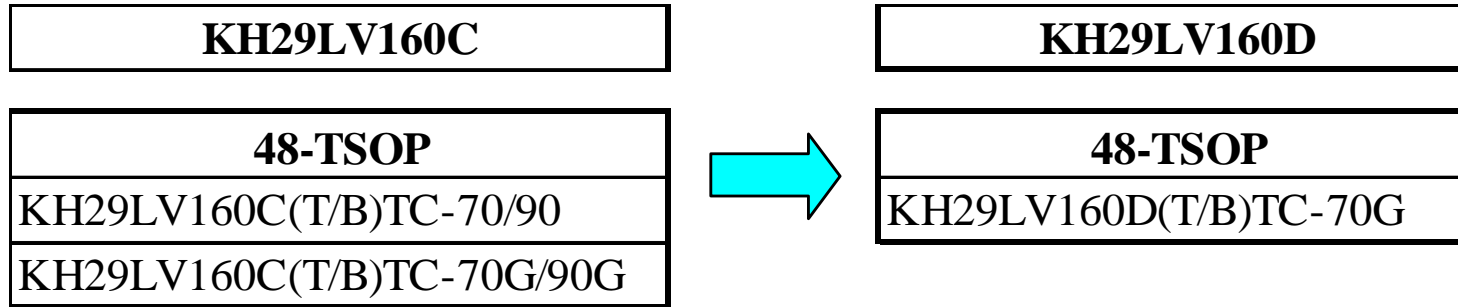
Macronix requests that you kindly qualify the new version as quickly as possible in order for us to continue supporting you without interruption.

Thank you

□ Feature Comparison table

Part No.	KH29LV160C	KH29LV160D	Note
Process	0.15um FG	0.13um FG	
VCC range	2.7V ~ 3.6V	2.7V ~ 3.6V	
Read Speed	70 ns / 90 ns	70 ns	
CFI Query	Yes	Yes	Please note the CFI data between LV160C and LV160D is different
Icc Standby	5uA(max.)	15uA(max.)	
Active Read Current	16mA(max, @5MHz)	12mA(max, @5MHz)	
Active Write Current (Erase/Program)	30mA (max.)	30mA (max.)	
Very High voltage for hardware Voltage for Automatic Select and Temporary unprotect	11.5V (min.) / 12.5V (max.)	9.5V (min.) / 10.5V (max.)	Symbol "VID" for LV160C Symbol "Vhv" for LV160D
Low Vcc Lock-out Voltage	1.4V(min) / 2.1V(max.)	2.3V(min) / 2.5V(max.)	
Chip Erase Time	15sec (typ.) / 30sec (max.)	15sec (typ.) / 32sec (max.)	
Sector Erase Time	0.7sec (typ.) / 15sec (max.)	0.7sec (typ.) / 2sec (max.)	
Chip Programming time (word mode)	12sec(typ.) / 36sec (max.)	12sec(typ.) / 36sec (max.)	
Word Program Time	11us (typ.) / 360us (max.)	11us (typ.) / 360us (max.)	
Package Type	48-TSOP	48-TSOP	Please note that LV160D add WP#ACC pin
Additional Functions	KH29LV160C	KH29LV160D	Note
Hardware Write Projection	Not Available	Available	
Accelerated Programming	Not Available	Available	

Part Numbering Change



Conversion Schedule

➤ “D” version sample available	Now
➤ “D” version mass production:	6 th of Mar. 2008
➤ Old version last order placement date:	31 st of Dec. 2008
➤ Old version final shipment date:	31 st of Mar. 2009

Macronix Recommendations:

- **Macronix requests that qualify new D version sample now. This will allow Macronix to continue supporting you without interruption.**
- **Datasheets are available on KH brand website (www.macronix.com.hk)**