



Application Note

NUMBER

AN-02252004-01D

REV.

1.0

SHT

1 of 2

SUBJECT

PL-2303H to PL-2303HX Hardware and Software Migration Advisory Guide

PRODUCT NUMBER/NAME

PL-2303HX
USB to Serial Bridge Controller

Release Date

02/25/2004

Contents

Scope and Purpose:

This application note will guide you on how to migrate from PL2303H to PL-2303HX.

Chip Comparison Table:

	PL-2303H	PL-2303HX
Core Voltage	5V	3.3V
Load mode	Set by pin	Set by EEPROM
Tri-state	Set by pin	Set by EEPROM
RS-232 VDD	5V ~ 3.3V	3.3V ~ 1.8V
GPIO	No	2 pins
Baud Rate setting	75 ~ 1.2M bps	75 ~ 6M bps
Buffer Size	Non-configurable Upstream 256 bytes Downstream 256 bytes	Configurable Upstream 256/384 bytes Downstream 256/128 bytes
Upstream buffer overflow detect	No	Yes
Flow Control (XON/XOFF)	By Software	By Hardware / Software
Flow Control (RTS/CTS)	By Hardware	By Hardware
Serial number in EEPROM	No	Yes
Adjustable threshold for flow control	No	Yes
Serial interface (Data Bits)	5,6,7,8 or 16	5,6,7 or 8
NC Pins	No	Pin 8/19/24
Circuit	H Version	Compatible with H Version
PKG	SSOP28	SSOP28

Upstream: From RS-232 to USB / Downstream: From USB to RS-232

Hardware Design Migration Advisory:

- Pin 4 of PL-2303HX cannot support 5V (Only 1.8 to 3.3V). Hardware migration is only possible if your design is 3.3V. Otherwise, you need to modify your PCB.
- Power mode is configured in EEPROM. The default mode for PL-2303HX is low power. If your PL-2303H design is high power mode, you need to add EEPROM to change the mode.
- Refer also to PL-2303HX Schematic Diagram and Datasheet.



Application Note

NUMBER

AN-02252004-01B

REV.

1.0

SHT

2 of 2

SUBJECT

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PL-2303HX Software Migration Advisory:

Following is the Software Comparison Table for PL-2303H and PL-2303HX:

	PL-2303H	PL-2303HX
Windows Driver (WHQL XP Logo)	V2.0.0.18 (for 2K/XP) V1.5.0.0 (for ME/98)	V2.0.0.18 (for 2K/XP) V2.0.0.11 (for ME/98)
Latest Windows Driver	V2.0.0.24 (for 2K/XP) V2.0.0.11 (for ME/98)	V2.0.0.24 (for 2K/XP) V2.0.0.11 (for ME/98)
<i>Note: All driver versions starting from v2.0.0.18 (2K/XP) and V2.0.0.11 (for ME/98) are the same and compatible for PL-2303H, PL-2303HX, and PL-2303X controllers.</i>		
EEPROM Writer Program	V1.5.0.x	V1.0.0.1
<i>Note: EEPROM Writer program are not compatible for H and HX controller. An update program will be released for HX that can detect the chip version to prevent chip misconfiguration.</i>		
Cable Test Program	V2.2.1.1	V2.2.1.1
<i>Note: Cable Test program are the same and compatible for PL-2303H, PL-2303HX, and PL-2303X controllers.</i>		
Function Test Program	V3.1.4.5	V3.1.4.5
<i>Note: Function Test program are the same and compatible for PL-2303H, PL-2303HX, and PL-2303X controllers.</i>		