Protouch2 USB2530 Linux SDK Release Notes

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REV	DATE	ORIGINATOR	DESCRIPTION OF CHANGE
1.0	1/21/2015	Vishnu P	Initial revision
1.1	9/21/2015	Vishnu P	New APIs added
1.1.1	11/2/2015	Karpagam A	Changes from 1.1 to 1.1.1

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1 Introduction

This document provides release information about Protouch2 Linux SDK.

2 Legal Information

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3 OS supported

- Linux - Ubuntu 10.04.3 LTS ,
- Linux Mint 13 - Kernel 3.2.0-23

4 USB Controllers supported

1. EHCI - USB 2.0
2. XHCI - USB 3.0

Note: External PCI USB controllers are not supported.

5 Supported SKU List

The following devices are supported in this release

- USB2532
- USB2533
- USB2534
- USB3613
- USB3813
- USB4604
- USB4624
- USB84604

6 Prerequisites

- GCC version 4.92
- C++ version – C++11
- GNU make 3.81
- Linux kernel – 3.0.2-23

7 Package Content

The release package contains the following files and directories

7.1 *libpt2*

- Source files for creating libpt2 library**.**
- **README-** Describes the compilation procedure.
- **Makefile -** For generating the static library**.**

7.2 *Examples*

7.2.1 Flexconnect

- **Source files** – Sample source files for generating custom application
- **README-** Describes the build procedure.
- **Makefile -** For generating the static library

Disclaimer:
Firmware required: USB2534_SPI_CARPLAY_V128.bin
Supported hardware: USB4604, USB84604

7.2.2 Gpio

- **Source files** – Sample source files for generating custom application
- **README-** Describes the build procedure.
- **Makefile -** For generating the static library

7.2.3 register_rw

- **Source files** – Sample source files for generating custom application
- **README-** Describes the build procedure.
- **Makefile -** For generating the static library

7.2.4 I2C_Bridging

- **Source files** – Sample source files for generating custom application
- **README-** Describes the build procedure.
- **Makefile -** For generating the static library

7.2.5 OTPProgrammer

- **Source files** – Sample source files for generating custom application
- **README-** Describes the build procedure.
- **Makefile -** For generating the static library

7.2.6 SPI_Bridging

- **Source files –** Sample source files for generating custom application
- **README-** Describes the build procedure.
- **Makefile -** For generating the static library

7.2.7 UART_Bridging

- **Source files –** Sample source files for generating custom application
- **README-** Describes the build procedure.
- **Makefile -** For generating the static library

8 Release History

8.1 *Version 1.1.1*

8.1.1.1   Changes
- Reduced time delay for MchpUsbI2CSetConfig API

8.1.1.2   Feature Addition
- None

8.1.1.3   Bug Fixes
- Program crash fixed : API throws error message if Null pointer is passed

8.1.1.4   Known limitation
- Programming multiple options (SPI Firmware, Configuration file, Serial Number) at one shot is not supported
- If multiple hubs with same vendor id and product id are connected, then the tool will select and connect to the first device.

8.2 *Version 1.1*

8.2.1 PT2 library

8.2.1.1   Features
Following API's are available as part of this release,
- Device Open / Close APIs
  - MchpUsbOpenID
  - MchpUsbClose
- GPIO Bridging APIs
  - MchpUsbGpioGet
  - MchpUsbGpioSet
  - MchpUsbConfigureGpio
- XDATA Bridging APIs
  - MchpUsbXdataRead
  - MchpUsbXdataWrite
- Flexconnect API
  - MchpUsbFlexConnect
- I2C Bridging APIs
  - MchpUsbI2CSetConfig
  - MchpUsbI2CRead
  - MchpUsbI2CWrite
  - MchpUsbI2CTransfer
- SPI Bridging APIs

- o MchpUsbSpiSetConfig
- o MchpUsbSpiFlashRead
- o MchpUsbSpiFlashWrite
- o MchpUsbSpiTransfer
- UART Bridging APIs
  - o MchpUsbEnableUARTBridging
  - o MchpUsbSetUARTBaudrate
  - o MchpUsbUartRead
  - o MchpUsbUartWrite
- Programming APIs
  - o MchpProgramFile

8.2.2 Examples

8.2.2.1   Features

- These are the sample applications that can be used to exercise the API's provided in this release.
- There are 7 applications included.
  - o Flex connect demo
  - o GPIO Toggle sample application
  - o Register read write sample application.
  - o I2C Bridging sample application
  - o SPI Bridging sample application
  - o UART Bridging sample application
  - o OTP Programmer sample application

8.2.3 Known limitations

- Programming multiple options (SPI Firmware, Configuration file, Serial Number) at one shot is not supported
- If multiple hubs with same vendor id and product id are connected, then the tool will select and connect to the first device. This will be addressed in the next release.

8.3 *Version 1.0*

8.3.1 PT2 library

8.3.1.1 Features

Following API's are available as part of this release,

- MchpUsbOpenID
- MchpUsbClose
- MchpUsbGpioGet
- MchpUsbGpioSet
- MchpUsbGpioSet
- MchpUsbConfigureGpio
- MchpUsbXdataRead
- MchpUsbXdataWrite
- MchpUsbFlexConnect

8.3.2 Examples

8.3.2.1 Features

- These are the sample applications that can be used to exercise the API's provided in this release.
- There are 3 applications included.
  - Flex connect demo
  - GPIO Toggle sample application
  - Register read write sample application.

8.3.3 Known limitations

- If multiple hubs with same vendor id and product id are connected, then the tool will select and connect to the first device. This will be addressed in the next release.