TUSB3210KBDPDK : Getting Started

This document lists the documents and software intended for use with the keyboard product development kit (TUSB3210KBDPDK.) The TUSB3210KBDPDK may be used to evaluate the TUSB3210 universal serial bus micro-controller from Texas Instruments.

What comes in the kit ?
1. *Hardware:*
    a. Evaluation Module for the TUSB3210 (the printed circuit board in this kit.) The evaluation module is a printed circuit board with a resident TUSB3210 and mini keyboard input pad. The TUSB3210 can be tested with the resident input keys and via connection to a USB-enabled host.
    b. USB cable.
2. *Firmware* – Object code that is suitable for a keyboard is preloaded on the EPROM.
3. *Literature* – these also can be found at the following URL: http://www.ti.com/sc/tusb3210kbdpdk
    a. This "Getting Started Letter"
    b. The TUSB3210 Keyboard Evaluation Board User's Guide (SLLU032): This manual includes hardware overview and requirements, schematic, board layout and description of jumpers and switches.

What is available to be downloaded from http://www.ti.com/sc/tusb3210kbdpdk**?**
1. *Firmware* – Source code for firmware is available with a software licensing agreement. The agreement can be made online at the above URL.
2. *Literature* - Listed below are the documents with an identifying literature number. As an alternative, one can always go to www.ti.com and perform a search on 'TUSB3210' to find all items associated with this product.
    a. The TUSB3210 Data Manual (SLLS466) : This data manual describes TUSB3210 chip features, functions, and includes a functional block diagram, pin assignments, and ordering information. It also contains a detailed functional description, electrical specifications, and includes some application examples.
    b. The TUSB2136/TUSB3210 Firmware Debugging Guide (SLLU027A): This debugging user's guide describes how to use the TUSB3210 serial interface to debug firmware. It contains sample "C" code and header files.
    c. The TUSB2136/TUSB3210/TUSB5052 USB Firmware Programming Flow 8052 Embedded (SLLU020A): This programming user's guide describes 8052 embedded microcontroller features, USB transfer function, and application firmware programming examples.
    d. The VIDs, PIDs, and Firmware: Design Decisions When Using TI USB Device Controllers (SLLA154): This document discusses how the vendor ID (VID) and product ID (PID) of the USB device are handled within a system using one of the TI USB device controllers.
    e. The TUSB2136/3210 Bootcode Document for USB to General-Purpose Device Controller (SLLU025A): This document contains pertinent information about the bootcode process, of the TUSB3210.
3. *Support Utilities/Tools:*
    a. USB I^{2}C Header Generator Utility for General Purpose Applications (SLLC152D.ZIP): This is a DOS-based utility that facilitates the adding of a header to the object-code for the I^{2}C EEPROM. Note that this utility does not program the EEPROM, it only formats the file so that it can be programmed via 3rd party EEPROM programming hardware.

What is not included or not available for download?
1. Utilities for monitoring USB traffic – any generic utility will work with our device.
2. Compiler - The TUSB3210 is based upon the industry-standard 8052 microcontroller. Since the 8052 is not proprietary, there are several compilers on the market that would be suitable. Some examples are at iar.com, keil.com, and tasking.com

Technical Questions
Contact the product information center (PIC) at (972) 644-5580, 8am-6pm central time.

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Mailing Address: Texas Instruments
                     Post Office Box 655303 Dallas, Texas 75265

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