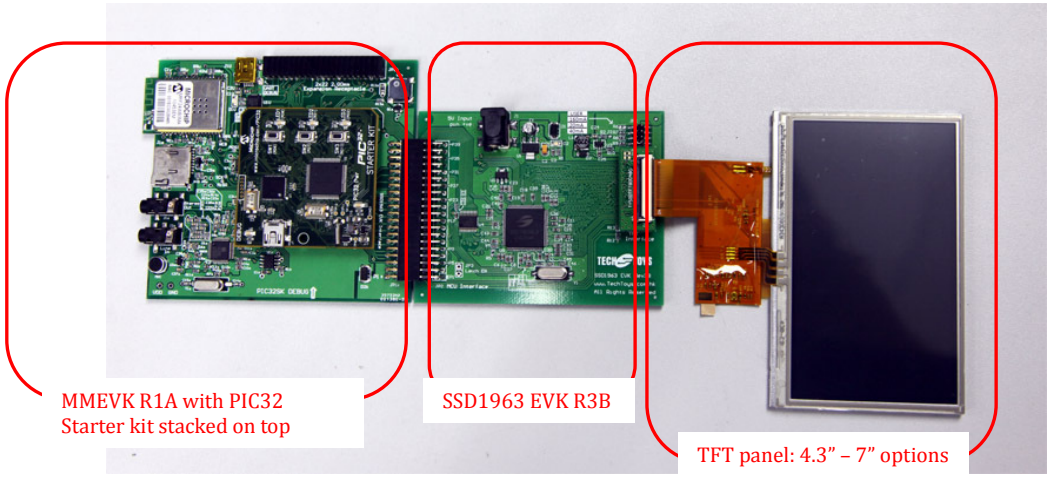
Keywords: SSD1963, Microchip PIC32, PIC32 Starter Kits, VS1003B audio codec, Microchip PIC32 Plays MP3, WiFi, 4.3" TFT GUI, 5" TFT GUI, 7" TFT GUI

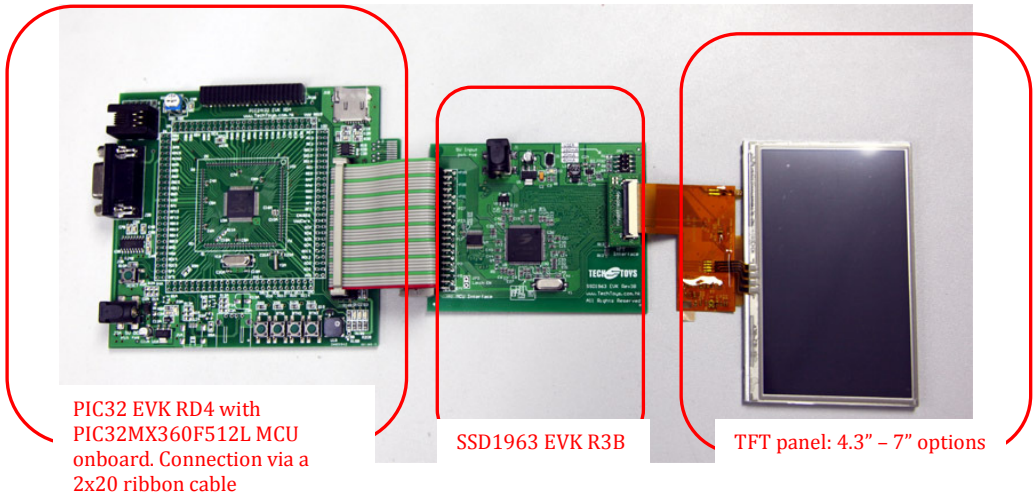
How to use this demo

1. **Software required**
   - MPLAB IDE v8.63
   - C32 compiler version 2.00
   - Firmware folder date version 2011_09_05

2. **Hardware required**
   - PIC32-SSD1963 Multimedia Evaluation Kit (MMEVK) R1A
     (PIC32 starter kit required, sold by Microchip Inc separately)
     –or-
   - PIC32 EVK RD4 with PIC32MX360F512L MCU onboard
   - SSD1963 EVK R3B
   - Display panel (TY430, TY500, TY600, or TY700 panels from us, with size ranges from 4.3" to 7")

3. **Procedure**
   - Prepare the hardware with options as follow. There are several combinations possible.





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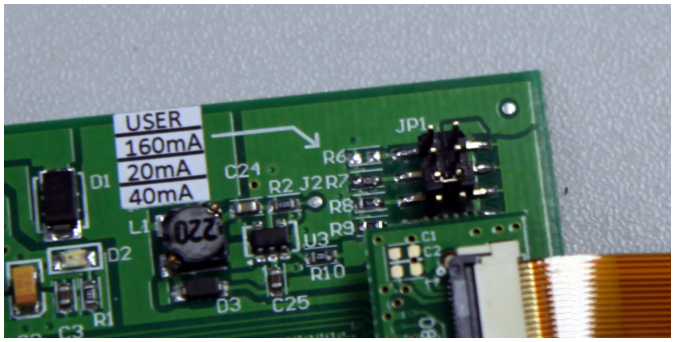
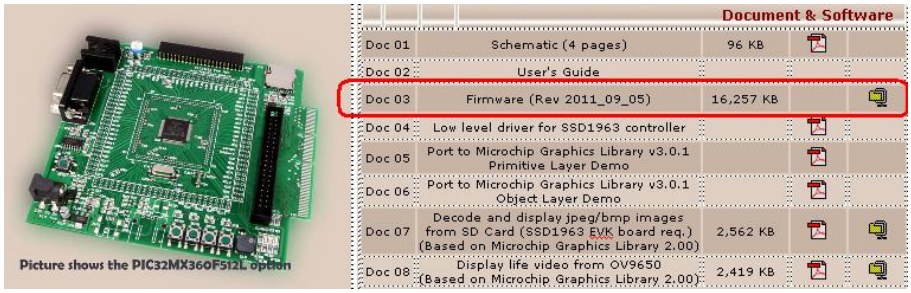
- Select a suitable jumper position for TFT panel's backlight. Please refer to datasheet of individual TFT panel for the current required.

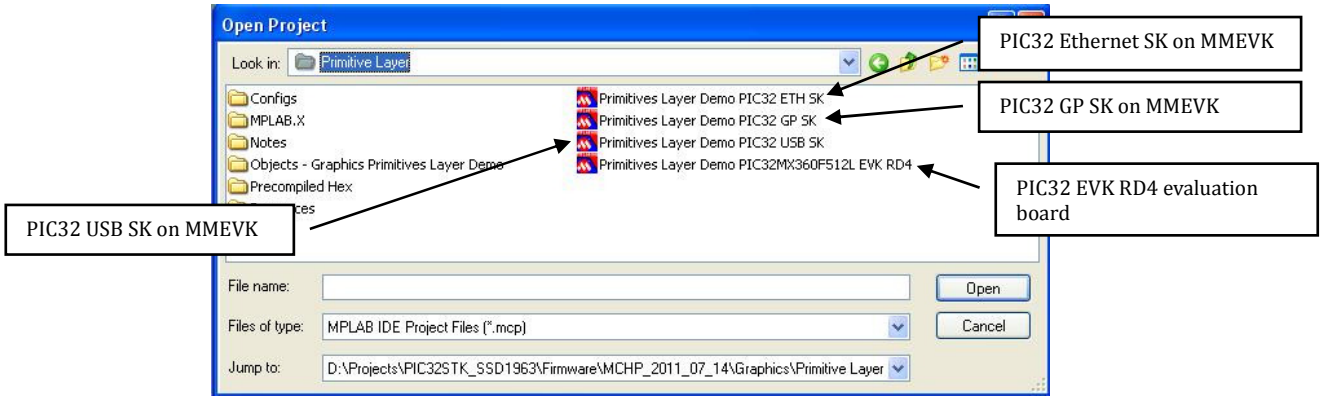


- Finally, apply 5V (1A) to J1 of SSD1963 EVK R3B as power supply. This last step finishes the hardware setup.

- Download from our web page the latest firmware version. At time of writing, the latest version is on 5th Sept 2011 (Rev 2011_09_05). There are two MCU boards from us but the same firmware folder applies to both development boards. They share the same firmware folder. Unzip the rar file to any location. This rar file contains also the source code for MCHP graphics libraries that are essential for us.



- Launch MPLAB, browse to the root directory of the Primitive Layer demo under ..\Firmware\MCHP_2011_07_14\Graphics\Primitive Layer. The filename that contains "MCHP_2011_07_14" indicates the date version of Microchip Application Libraries. According to your hardware combination select the appropriate project.



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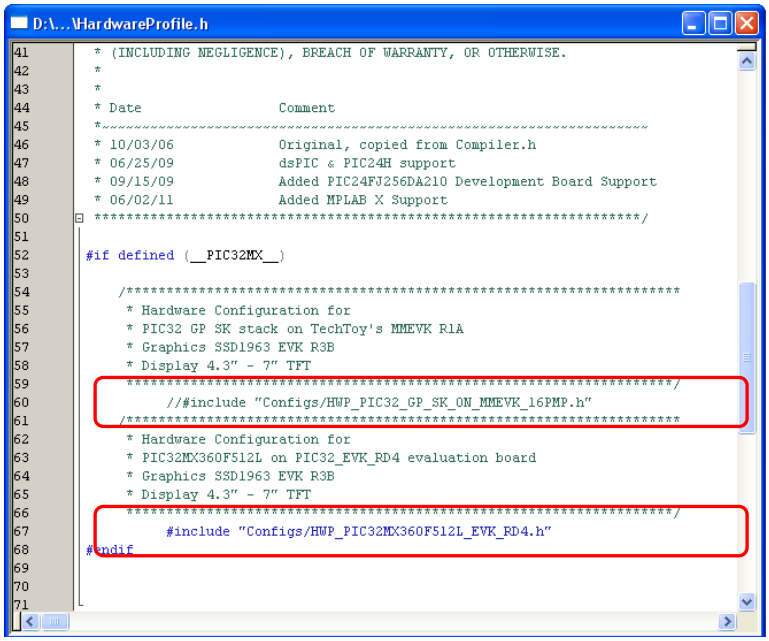
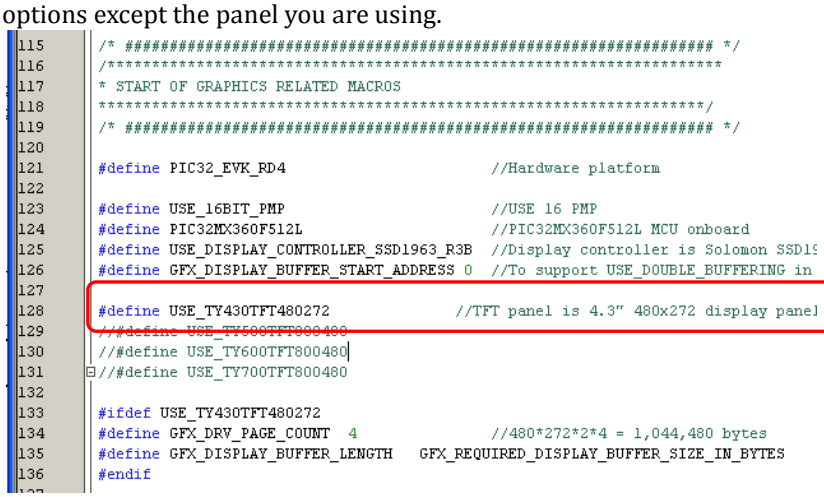
- There are only two files to change for a particular hardware setup. They are HardwareProfile.h and selection of the appropriate TFT panels from the corresponding hardware profile. Double click on HardwareProfile.h. Select the right hardware profile as below. *Only one #include "..." is needed.*



- Next, select the panel you are using. Open the corresponding hardware profile for your hardware. If it is a MMEVK, select HWP_PIC32_GP_SK_ON_MMEVK_16PMP.h, else, select HWP_PIC32MX360F512L_EVK_RD4.h
  Browse the file to the section #define USE_TYXXXTFTXXXXX as below. Uncomment all other options except the panel you are using.



- Finally, *Build All* from *Project* and program the board.