Touch Display 4.3 Development Kit

Development Kit Options				
Tools Included	**PCWHD Compiler**	**PCDIDE Compiler**	Hardware Only*	LCD Board*
Sku	**S-201**	**S-201**	**53331-1612**	**53224-1611**
Compiler Software	**PCWHD**	**PCDIDE**		
Programmer	●	●	●	
Prototyping board	●	●	●	●
Power supply & cables	●	●	●	
Exercise book	●	●	●	

*Hardware only and proto-boards are intended for customers already owning a CCS compiler.
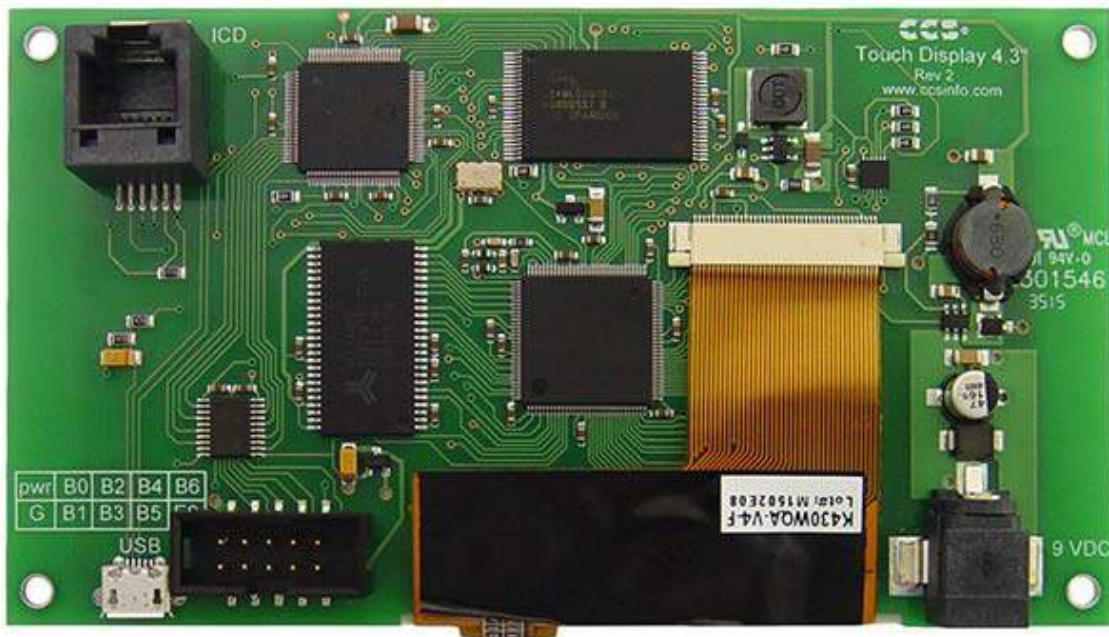
The new Touch Display 4.3 Development Kit is all that is needed to develop a GUI using the Graphics and Touch Library. Powered by a PIC24EP512GU810 it has a 4.3" 480x272 TFT display with a resistive touchscreen, a 256 megabyte flash, capable of storing hundreds of 480x272 images and custom fonts, a USB connection and 8 digital I/O pins that can be used for external inputs and outputs. No device programmer required - includes onboard programming capabilites.

Included is a software IDE to draw out a GUI and the C library for drawing graphics and handling touch.

- Draw an Image
- Draw a Object
- Handle Touch

Touch Display 4.3 Prototyping Board (Size: 4.75" x 2.63") includes:

- PIC24EP512GU810 Microchip PIC® MCU
- 8 I/O Pins
- 4.3" 480x272 TFT Display with a Resistive Touchscreen
- 256 Megabyte Flash
- USB Connector
- Micro USB Cable

Touch Display 4.3 Development Kit includes:

- Touch Display 4.3 Prototyping Board
- In-Circuit Debugger/Programmer
- Exercise Book
- 9V AC Adapter and Cables
- Development Tools CD with GUI Interface and CCSLoad Software

Interface Designer

A Simple, Fast Solution to Create GUI and Handling Touchscreen Function

CCS introduces a new Graphics and Touch Library and Interface Designer software in the CCS C Compiler. This package has every thing you need to quickly and easily develop a Graphical User Interface (GUI) using a graphics LCD and touchscreen. The package consists of a C library for drawing on an LCD and handling touch input, a software package for designing a GUI to be displayed using the C library, and a development kit to get started with the package very easily.

The C library displays bitmap images that are stored on an external memory device, for example an external flash. The library provides the functions gfx_LoadImage() and gfx_EraseImage() for easily loading and erasing images from the external memory. In addition the graphics library provides a method for loading and displaying custom fonts. The functions gfx_LoadFont() and gfx_EraseFont() are provided to easily load and remove custom fonts. The following is a list of functions in the library used to control what is displayed on the graphics LCD:

- gfx_InitGraphics()
- gfx_DisplayImage()
- gfx_RemoveImage()
- gfx_RemoveAllImages()
- gfx_ClearScreen()
- gfx_RedrawScreen()
- gfx_FillArea()
- gfx_FillAreaAbsolute()
- gfx_DrawLineAbsolute()
- gfx_DrawCircleAbsolute()
- gfx_DisplayString()
- gfx_DisplayStringAbsolute()

For the touch portion of the C library the functions gfx_TouchTask() and gfx_SetTouchCallback() are provided to use it. The gfx_TouchTask() function is a task function that needs to be called at least once per main loop to process touches. The gfx_SetTouchCallback() function is used to set the user function that is called by gfx_TouchTask(). In addition the gfx_InitGraphics() function needs to be called to set the calibration values of the touchscreen.