

# PIC32 GUI Development Board with Projected Capacitive (PCAP) Touch Information Sheet

Thank you for purchasing a PIC32 GUI Development Board with Projected Capacitive (PCAP) Touch, also referred to as the *PCAP Board*. This information sheet provides some important details that will help you successfully use the board as quickly as possible.

Additional information can be accessed at: <http://www.microchip.com>

## Basic Requirements

The PCAP Board is a stand-alone solution that does not require a starter kit or a plug-in module (PIM) to run. The board uses a PIC32MX795F512L microcontroller to control the LCD using Low-Cost Controllerless (LCC) graphics. A capacitive sensing MTCH6301 microcontroller is also on the board to handle the PCAP sensing. The board uses a separate sensor for PCAP that is attached to the LCD.

As an alternate PCAP sensing method, an additional header (J6) on the board enables the use of an LCD with built-in PCAP sensing. It is assumed that an I<sup>2</sup>C™ interface will be used for communications. In this case, a driver must be added to the software to support this change.

For more information about LCC Graphics visit: <http://www.microchip.com/LCC>

## Getting Started

To get started with the PCAP Board, follow these steps:

1. Ensure that MPLAB® IDE is installed.
2. Download a project file for the PCAP board from the Microchip web site.
3. Power the PCAP board using a USB cable.
4. Connect a debugger/programmer using the PICKIT™ header, J2.
5. Using MPLAB IDE, open the project that was previously downloaded.
6. Select a debugger/programmer in MPLAB IDE.
7. Click **Build**. This builds the downloaded project.
8. Click **Program all memories**.
9. Click **Run**.

Your PCAP Board should now be up and running. On the main screen, which will have a white background, there are icons of demonstrations to choose. These demonstrations showcase some of the features of LCC and the multi-touch features of PCAP.

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Microchip Technology Inc. • 2355 West Chandler Blvd. • Chandler, AZ 85224-6199

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