

# mTouch™ Projected Capacitive Touch-Screen Sensing Technology

Microchip's mTouch™ Projected Capacitive Touch-Screen Sensing Technology and development kit provide a royalty-free solution with GUI-based tools. This flexible, low cost, low power solution facilitates the design and integration of projected capacitive touch-screen applications.

## Benefits of mTouch Projected Capacitive Touch-Screen Sensing Technology

- **High Flexibility**
  - Easily accessible solution via royalty-free source code license
- **Low-Cost PIC16F707 Microcontroller**
  - < \$0.99 each in volume
- **Low Power**
  - Wide operating voltage range of 1.8V-5.5V
  - Operating Current 1.5 mA at 5V typical

## mTouch Projected Capacitive Development Kit (DM160211)



The mTouch Projected Capacitive Development Kit includes a 3.5" sensor mounted on a sensor board, a projected-capacitive board with the PIC16F707 MCU and fully functional firmware. The kit enables users to connect sensors to up to 24 channels without modifying the firmware.

## Web Links

Touch Sensing Design Center: [www.microchip.com/mtouch](http://www.microchip.com/mtouch)



## Key Performance Characteristics

(Based on development kit DM160211)

**Touch Screen Support:** up to 3.5" diagonal, independent XY tracking for 2 touches in real time

**Number of Channels:** dev kit channels 12 x 9, 108 nodes; software expandable to 24 channels & 144 nodes

**Response Time:** <15 ms typical

**Report Rate:** Single Point: 65 pps, Two Points: 55 pps

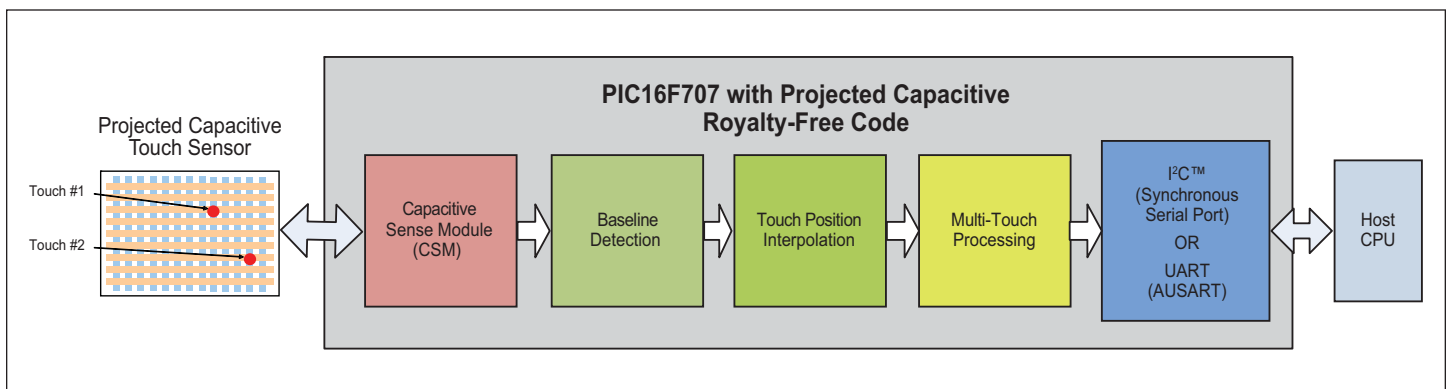
**Power Consumption:** operating 1.5 mA typical, sleep 20 µA

**Resolution:** 128 bar-to-bar, scaled to 1024 x 1024

**Package Size:** 44-pin 8 x 8 mm QFN & TQFP

**Communication:** UART to USB convertor on dev kit for easy connection to any PC

**Technology:** Gesture Capable, Auto adjusts for environmental changes (baseline, calibrate, drift)



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7/21/09



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