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



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

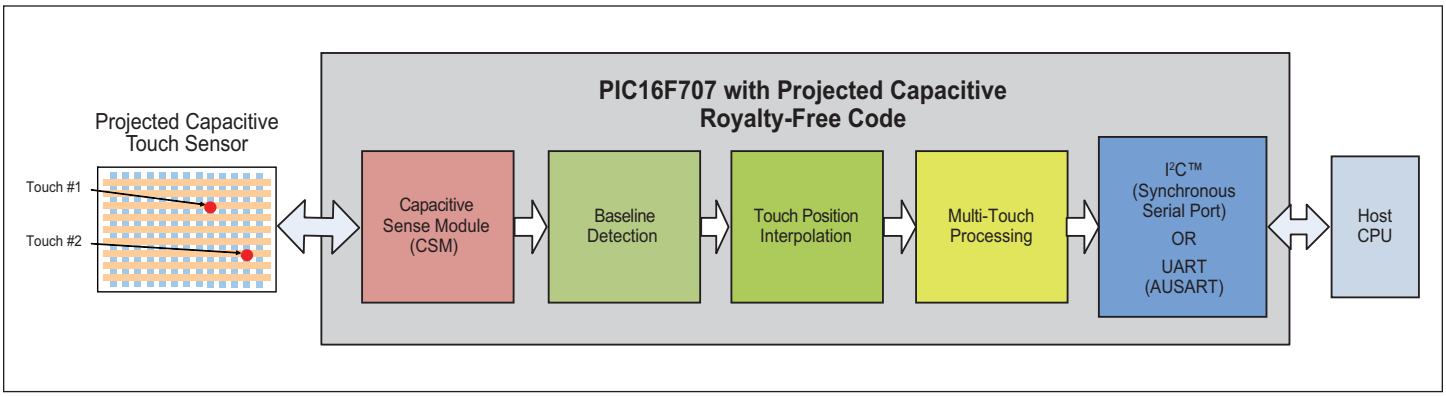
Power Consumption: operating 1.5 mA typical, sleep 20 µA

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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