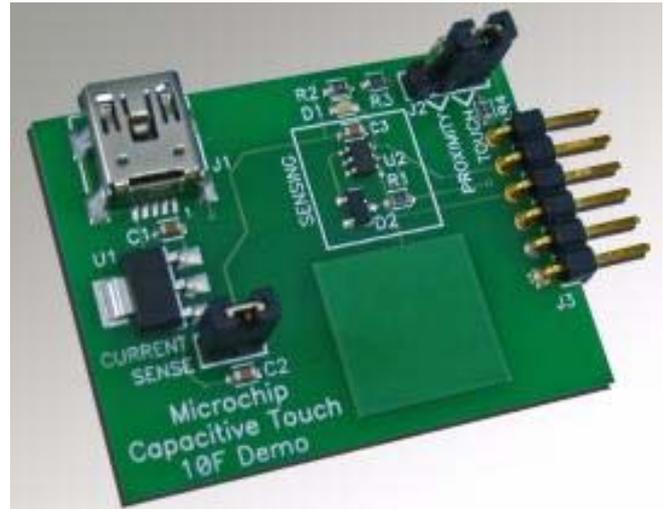




Microchip - PIC10F - PIC10F Capacitive Touch Board

Product Overview:

Touch sensing is fast becoming an alternative to traditional push button switch user interfaces, because it requires no mechanical movement, and it enables a completely sealed and modern-looking design. Expanding beyond the consumer market, touch sensing is beginning to take hold in medical, industrial and automotive applications for reasons such as improved aesthetics, reduced maintenance and lower cost.



Microchip's capacitive mTouch Solution is a free and easy method to optimize your touch sensing application using a wide variety of hardware and software resource options.

Key Features:

- Can be used as a on/off, open/close button or other single action user interface
- Act as a proximity sensor – detecting a hand coming close to the sensor
 - Enable lower standby power consumption
 - Trigger an action, like lighting up a display, without a touch

The schematic is very simple and uses a PIC10F204/6 MCU, a diode, a capacitor and a resistor (see the white sensing square on the PCB).

Being a microcontroller based solution; capacitive touch can also be used to drive an LED, a buzzer or to communicate with the main processor or the rest of the system. The necessary schematic software is

provided in AN1202: Capacitive Sensing with PIC10F.

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
AC103003	Microchip	1718272	26R2377

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
DM164125	Microchip	PICDEM Touch Sense 1 Development Kit	PIC16F677, PIC16F887	1547488	78M5155
DM164128	Microchip	KIT, PICDEM TOUCH SENSE 2	PIC24F	1631878	07P9072
DM240011	Microchip	PIC24F Starter Kit	PIC24FJ25 6GB110	1605296	98M0708
STEVAL-IFP004V1	ST	STEVAL-IFP004 V1 Digital input termination PCLT2	PCLT2	1694057	45P5437
CAPTOUCHSENSESK	Silicon Labs	Capacitive Touch Sense Starter Kit	C8051F931	1558938	94M6556

Document List

Datasheets:

Part Number	Description	Size
AC103003	Capacitive mTouch™ Sensing Solutions	129 KB

Application Notes:

File Name	Size
A01101 Introduction to Capacitive Sensing	442KB

A01102 Layout and Physical Design Guidelines for Capacitive Sensing	666KB
A01103 Software Handling for Capacitive Sensing	513KB
A01104 Capacitive Multi button Configurations	332KB
A01171 Using the Capacitive Sensing Module on the PIC16F72X	113KB
A01250 Microchip CTMU for Capacitive Touch Applications	834KB
A01254 Capacitive Touch Algorithm Simulation	269KB
A01286 Water-Resistant Capacitive Sensing	183KB
AN1254_CapTouchAlgoInstall	1.02MB

Hardware & Software:

File Name	Size
CaptouchPIC10FDemo	46.7KB
PIC10F Capacitive Touch schematic	21.2KB

Others Resources:

File Name	Size
Capacitive mTouch™ Sensing Solutions Design Guidelines	82.1KB