



## TSHARC-12USB Analog Resistive Touch Screen Controller

### Product Description:

The Hampshire TSHARC-12 USB touch screen controller is a high performance, highly versatile touch screen controller used to implement 4, 5, 7, or 8 wire analog resistive touch screens in applications using USB, HID compliant communications.

The TSHARC-12USB is jumper configurable for any analog resistive touch screen regardless of manufacturer or technology.

This controller is the perfect for LCD or CRT touch screen applications that demand a rugged flexible controller board. Because a TSHARC-12USB controller board can be jumper configured for any analog resistive technology, it will allow the design engineer maximum flexibility to choose between touch screen manufacturers and/or constructions without having to change the touch screen electronics.

This controller is HID compliant and may be used with any device which supports USB communication including Apple/Macintosh computers. As with all Hampshire TSHARC controllers the TSHARC-12USB controller uses Hampshire's proprietary electronic touch screen drive and sense circuit technology. This technology increases the life and the sensitivity of all analog resistive touch screen overlays when used in conjunction with a TSHARC touch screen controller.

For high volume embedded applications Hampshire can provide a "Chip & Driver" solution, which includes the TSHARC-12USB chip and Hampshire TSHARC USB device drivers as well as technical support.

Hampshire TSHARC device drivers are included with all TSHARC controllers. These device drivers are developed, and supported in house by Hampshire engineers. Custom firmware and drivers are also available from Hampshire Company.

### Electrical Specifications:

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**Touch Screen:** 4, 5, 7 or 8-wire

**Communications:** USB

**Drivers:** Win98, Win2000, WinME

**Power Options:** Power from Port, 5.0 Vdc

**Voltage Regulation:** None

**Power Consumption:**  $\approx 2\text{mA} + i$  Where ( $i = v/\text{touch screen sheet R}$ )

**Resolution:** 12- bit (4,096 x 4,096)

**Size:** 2.74" x 1.62"

**Clock Frequency:** 6.0 MHz

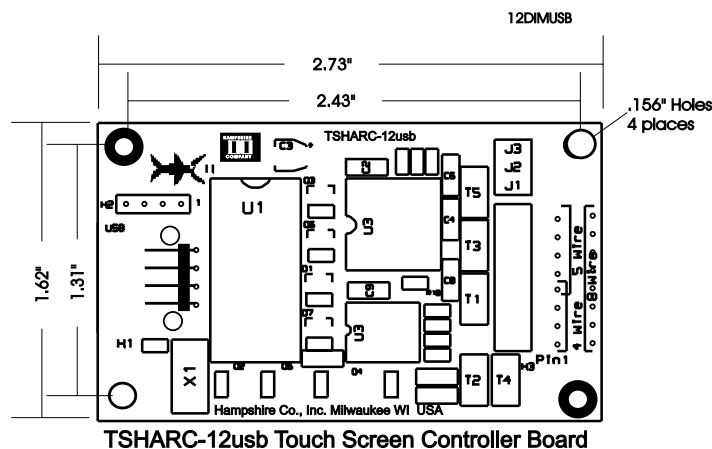
**Sample Rate:**  $\approx 60/\text{Sec.}$  USB Standard

**Baud Rate:** N/A

**Data Output:** HID Compliant

**Environmental:** Storage: -40c - 85c  
Operating: 0c - 70c

**Static Protection:** 600 Watts



Get the complete users manual at: <http://www.tsharc.com/manuals.htm>