


# SC Series



## Resistive Touch Screen Electronics

### Product Highlights

- High performance feature set with state-of-the-art components.
- Fast and accurate touch response.
- Competitively priced controller offering.
- Provide USB, HID, and WHQL\* compliance.
- Supports 4-, 5-, and 8-wire resistive touch screens.

### A Flexible Electronics Solution

The MicroTouch™ SC Series Controllers provide the solution needed for long term viability. This enhanced voltage-driven series supports a full range of common resistive touch screens for LCD's, while offering tremendous flexibility and high performance at a cost-effective price. This solution offers standards compliance as well as configuration adaptability.

### Making the Difference

3M supports the latest communication interfaces by providing both a Serial (RS232) Plug and Play interface and a Universal Serial Bus (USB) interface compliant with the USB Human Interface Device (HID) class. Available in a compact 1" x 2" format and supporting 4-, 5-, and 8-wire resistive touch screens, these controllers are designed for easy integration with LCD panels.

\*Allows customers to apply for Microsoft™ Windows Hardware Qualification Laboratory (WHQL) certification.

## SC Series Resistive Touch Screen Electronics

	ASIC Chipset	4-wire USB	4-wire Serial
<b>Part Numbers</b>	SCX-ASIC	SC401U	SC402S
<b>Nominal Uncased Dimensions</b>	NA	2.67" x 1.30" x 0.45" 67.8 x 33.0 x 11.4 mm	2.72" x 1.57" x 0.45" 69.1 x 39.9 x 11.4 mm
<b>Communications Protocol</b>	USB Rev 1.1, HID/Serial RS232 Plug and Play	USB Rev 1.1, HID	Serial RS232 Plug and Play
<b>Touch Screen Support</b>	4-, 5-, 8-wire Resistive	4-wire Resistive	4-wire Resistive
<b>Host Cable Length (Pc99 Compatible)</b>	NA	7319420: 96" Cable, Pearl, 5-pin Connector	7319630: 96" Cable, Teal, 8-pin Connector
<b>Touch Screen Connection</b>	Based on design	4-pin locking AMP	4-pin locking AMP
<b>Mean Time Between Failure (MTBF)</b>	400,000 hours	400,000 hours	400,000 hours
<b>Electro-Static Discharge (ESD)</b>	8KV contact, 20KV Air	8KV contact, 20KV Air	8KV contact, 20KV Air
<b>Relative Humidity</b>	0-95RH up to +36° C*	0-95% RH up to +36° C *	0-95% RH up to +36° C *
<b>Storage Temperature</b>	-20° to +75° C	-20° to +75° C	-20° to +75° C
<b>Operating Temperature</b>	0° to +65° C	0° to +65° C	0° to +65° C
<b>Power Requirements (Typical)</b>	Based on design	USB Bus Powered 5Vdc ±10% 15 mA typical	5Vdc ±5% 16 mA typical 12Vdc ±5% 19 mA typical
<b>Regulatory</b>	CE, FCC, VCCI, RoHS, AS/NZS 3548, UL/cUL L	CE, FCC, VCCI, RoHS, AS/NZS 3548, UL/cUL	CE, FCC, VCCI, RoHS, AS/NZS 3548, UL/cUL
<b>Drivers/Software</b>	MT 7 (Windows 2000/XP), MicroTouch USB-HID Calibration Utility, TouchWare 5.6sr4 and later (Win 2000 XP, CE, Linux)	MT 7 (Windows 2000/XP), MicroTouch USB-HID Calibration Utility	TouchWare 5.6sr4 and later (Win 2000 XP, CE, Linux)
<b>Warranty</b>	1 Year	3 Years	3 Years

\* Above +36° C, reference controller delivery specifications

	5-wire USB	5-wire Serial	8-wire USB	8-wire Serial
<b>Part Numbers</b>	SC501U	SC502S	SC801U	SC802S
<b>Nominal Uncased Dimensions</b>	2.85" x 1.30" x 0.45" 72.4 x 33.0 x 11.4 mm	2.77" x 1.57" x 0.45" 70.4 x 39.9 x 11.4 mm	2.75" x 1.30" x 0.45" 69.9 x 33.0 x 11.4 mm	2.82" x 1.57" x 0.45" 71.6 x 39.9 x 11.4 mm
<b>Communications Protocol</b>	USB Rev 1.1, HID	Serial RS232 Plug and Play	USB Rev 1.1, HID	Serial RS232 Plug and Play
<b>Touch Screen Support</b>	5-wire Resistive	5-wire Resistive	8-wire Resistive	8-wire Resistive
<b>Host Cable Length (Pc99 Compatible)</b>	7319420: 96" Cable, Pearl, 5-pin Connector	7319630: 96" Cable, Teal, 8-pin Connector	7319420 96" Cable, Pearl, 5-pin Connector	7319630 96" Cable, Teal, 8-pin Connector
<b>Touch Screen Connection</b>	5-pin locking AMP	5-pin locking AMP	8-pin locking AMP	8-pin locking AMP
<b>Mean Time Between Failure (MTBF)</b>	400,000 hours	400,000 hours	400,000 hours	400,000 hours
<b>Electro-Static Discharge (ESD)</b>	8KV contact, 20KV Air	8KV contact, 20KV Air	8KV contact, 20KV Air	8KV contact, 20KV Air
<b>Relative Humidity</b>	0-95% RH up to +36° C *	0-95% RH up to +36° C *	0-95RH up to +36° C *	0-95% RH up to +36° C *
<b>Storage Temperature</b>	-20° to +75° C	-20° to +75° C	-20° to +75° C	-20° to +75° C
<b>Operating Temperature</b>	0° to +65° C	0° to +65° C	0° to +65° C	0° to +65° C
<b>Power Requirements (Typical)</b>	USB Bus Powered 5Vdc ±10% 15 mA typical	5Vdc ±5% 16 mA typical 12Vdc ±5% 19 mA typical	USB Bus Powered 5V dc ±10% 15 mA typical	5Vdc ±5% 16 mA typical 12Vdc ±5% 19 mA typical
<b>Regulatory</b>	CE, FCC, VCCI, RoHS, AS/NZS 3548, UL/cUL	CE, FCC, VCCI, RoHS, AS/NZS 3548, UL/cUL	CE, FCC, VCCI, RoHS, AS/NZS 3548, UL/cUL	CE, FCC, VCCI, RoHS, AS/NZS 3548, UL/cUL
<b>Drivers/Software</b>	MT 7 (Windows 2000/XP), MicroTouch USB-HID Calibration Utility	TouchWare 5.6sr4 and later (Win 2000 XP, CE, Linux)	MT 7 (Windows 2000/XP), MicroTouch USB-HID Calibration Utility	TouchWare 5.6sr4 and later (Win 2000 XP, CE, Linux)
<b>Warranty</b>	3 Years	3 Years	3 Years	3 Years

**MicroTouch**

**3M**

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For more information  
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visit [3M.com/touch](http://3M.com/touch) or  
call toll-free 1-888-659-1080

**RoHS Directive compliant:** In accordance with European Directive 2002/95/EC, "RoHS Directive compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's knowledge and belief based on information provided by third party suppliers to 3M. (9/06)

**NOTICE:** Given the variety of factors that can affect the use and performance of a 3M Touch Systems Product (the "Product"), including that solid state equipment has operation characteristics different from electro mechanical equipment, some of which factors are uniquely within User's knowledge and control, it is essential that User evaluate the 3M Touch Systems Product and software to determine whether it is suitable for User's particular purpose and suitable for User's method of application. 3M Touch Systems' statements, engineering/technical information, and recommendations are provided for User's convenience, but their accuracy or completeness is not warranted. 3M Touch Systems products and software are not specifically designed for use in medical devices as defined by United States federal law. 3M Touch Systems products and software should not be used in such applications without 3M Touch Systems' express written consent. User should contact its sales representative if User's opportunity involves a medical device application.

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