


# EX II Series



## Capacitive Touch System Electronics

### Product Highlights

- State-of-the-art accuracy and touch response
- Standard-setting ESD and EMI protection
- Firmware download capability provides flexibility
- Wide operating temperature
- High touch coordinate resolution of 16k x 16k\*
- USB, HID, RS232-compliant interfaces

\* The maximum number of addressable coordinates generated by the controller

### A World-Class Electronics Solution

The MicroTouch™ EX II Series Controllers bring flexibility and feature-rich functionality to capacitive touch screen applications. This high performance electronics platform is based on the innovative MicroTouch™ EX II ASIC, designed to provide high resolution, on-chip RAM, and a wide operating temperature range. With expanded regulatory approvals, improved power modes, and enhanced ESD and EMI protection, this controller series is a robust solution for popular touch applications.

### Advanced Firmware Download Capability

Culminating decades of touch technology experience, the EX II Series electronics enables advanced firmware download capabilities, optimized for MicroTouch™ ClearTek™ II and legacy ClearTek™ touch screens. Standard factory-loaded firmware can be easily updated or replaced at some future date with downloadable, newer firmware revisions to match updated software application functionality. This field upgrade capability can mean minimal downtime for software upgrades.

# EX II Series Capacitive Touch System Electronics

|   | USB EX II 7700UC   | USB EX II 7700HC   | Serial EX II 7700SC  |
|---|--|--|--|
| <b>Part Numbers</b>                     | EXII-7760UC  | EXII-7730HC  | EXII-7720SC  |
| <b>Communications Protocol</b>          | USB Rev 1.1  | HID (Mouse)  | Serial RS-232  |
| <b>Optional Components</b>              | 7312256 96" (2.4 m) Cable, Pearl<br>7315050 23" (0.58m) Cable, Pearl                     | 7312256 96" (2.4 m) Cable, Pearl<br>7315050 23" (0.58m) Cable, Pearl                 | 7310101 96" (2.4 m) Cable, Pearl<br>7310107 26" (0.7 m) Cable, Pearl                     |
| <b>Dimensions</b>                       | 1.30" x 2.55" x 0.45"<br>33.0 x 65.0 x 11.4 mm   | 1.30" x 2.55" x 0.45"<br>33.0 x 65.0 x 11.4 mm                                       | 1.30" x 2.55" x 0.45"<br>33.0 x 65.0 x 11.4 mm   |
| <b>Power Connection</b>                 | USB bus  | USB bus  | 5V through 2-pin connector on board  |
| <b>Touch Screen Connection</b>          | 5-pin locking AMP  | 5-pin locking AMP  | 5-pin locking AMP  |
| <b>Mean Time Between Failure (MTBF)</b> | > 700,000 hours  | > 700,000 hours  | > 700,000 hours  |
| <b>Electrostatic Discharge (ESD)</b>    | ± 8KV Contact, ± 27KV Air  | ± 8KV Contact, ± 27KV Air  | ± 8KV Contact, ± 27KV Air  |
| <b>Relative Humidity</b>                | 0 to 95% non-condensing at +36°C   | 0 to 95% non-condensing at +36°C   | 0 to 95% non-condensing at +36°C   |
| <b>Storage Temperature</b>              | -50° to +85° C   | -50° to +85° C   | -50° to +85° C   |
| <b>Operating Temperature</b>            | -40° to +70° C   | -40° to +70° C   | -40° to +70° C   |
| <b>Power Requirements (Typical)</b>     | 5Vdc ± 5% 75 mA  | 5Vdc ± 5% 75 mA  | 5-12Vdc ± 5% 85 mA   |
| <b>Regulatory</b>                       | UL/cUL, FCC-B, CE, VCCI, AS/NZS 3548, RoHS   | UL/cUL, FCC-B, CE, VCCI, AS/NZS 3548, RoHS   | UL/cUL, FCC-B, CE, VCCI, AS/NZS 3548, RoHS   |
| <b>Driver Support</b>                   | MT 7 (Win Vista, 2000, XP, XPe, WEPOS, CE.net 4.0/5.0, Linux) TouchWare (Win 95, 98, NT) | MSFT HID (Mouse)<br>Optional: MT 7 (Win Vista, 2000, XP, XPe, WEPOS, CE.net 4.0/5.0) | MT 7 (Win Vista, 2000, XP, XPe, WEPOS, CE.net 4.0/5.0, Linux) TouchWare (Win 95, 98, NT) |
| <b>Warranty</b>                         | 5 Years  | 5 Years  | 5 Years  |

# EX II Series Capacitive Touch System Electronics

|   | TouchPen System  | EX II ASIC Chipset  |
|---|--|---|
| <b>Part Numbers</b>                     | EXII-3710SP  | EXII-ASIC-C   |
| <b>Communications Protocol</b>          | Serial RS-232  | Serial RS-232 / USB Rev 1.1   |
| <b>Optional Components</b>              | 69-901 TouchPen Kit (includes stylus, stylus cable, RS232 cable)<br>69-502 (stylus)<br>7311240 (stylus cable)<br>7311273 (RS232 cable) | N/A   |
| <b>Dimensions</b>                       | 4.80" X 1.35" x .32"<br>121.9 x 34.3 x 8.2 mm  | N/A   |
| <b>Power Connection</b>                 | 12V through RS232 cable  | Based on design   |
| <b>Touch Screen Connection</b>          | 6-pin Molex  | 5-pin locking AMP   |
| <b>Mean Time Between Failure (MTBF)</b> | > 600,000 hours  | > 700,000 hours   |
| <b>Electrostatic Discharge (ESD)</b>    | ± 8KV Contact, ± 27KV Air  | Based on design   |
| <b>Relative Humidity</b>                | 0 to 95% non-condensing at +36°C   | 0 to 95% non-condensing at +36°C  |
| <b>Storage Temperature</b>              | -50° to +85° C   | -50° to +85° C  |
| <b>Operating Temperature</b>            | -40° to +70° C   | -40° to +70° C  |
| <b>Power Requirements (Typical)</b>     | 12Vdc ± 5% 100 mA  | Based on design   |
| <b>Regulatory</b>                       | UL/cUL, FCC-B, CE, VCCI, AS/NZS 3548, RoHS   | UL/cUL, FCC-B, CE, VCCI, AS/NZS 3548, RoHS  |
| <b>Driver Support</b>                   | MT 7 (Win Vista, 2000, XP, XPe, WEPOS, CE.net 4.0/5.0, Linux)<br>TouchWare (Win 95, 98, NT)  | MT 7 (Win Vista, 2000, XP, XPe, WEPOS, CE.net 4.0/5.0, Linux)<br>TouchWare (Win 95, 98, NT) |
| <b>Warranty</b>                         | 5 Years  | 1 Year  |

**3M Touch Systems**  
300 Griffin Brook Park Drive  
Methuen, MA 01844  
U.S.A.  
1-888-659-1080  
[www.3M.com/touch](http://www.3M.com/touch)  
For more information  
on 3M touch products,  
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)

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Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

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Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9