

3M™ MicroTouch™ System SCT3240CX

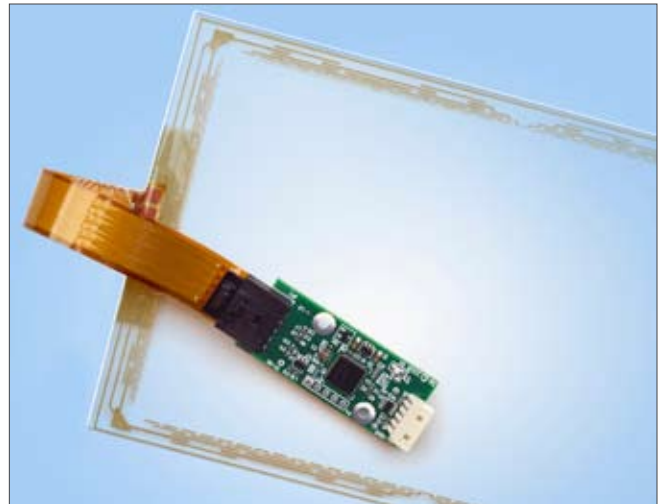
The Clear Touchscreen Solution for 5.7" to 15" Applications

With more than 20 years of surface capacitive technology expertise, 3M has developed a touch system specifically designed to meet the optical and durability needs of small display applications. As an all-glass design, the 3M™ MicroTouch™ System SCT3240CX offers up to 8% better light transmission than typical resistive solutions and is inherently free of the distracting appearance of Newton rings.

The SCT3240CX touch system, with its industry-proven 3M™ durable hard coat, offers superior surface durability compared to typical resistive solutions. This difference helps the SCT3240CX touch system support heavy-use applications while maintaining its functional, optical and aesthetic characteristics.

In addition to the superior sensor design, the 3M MicroTouch Controller CX is a breakthrough in capacitive sensing electronics. Using up to 54% less board area and operating with up to 25% less electrical power requirements than certain competitive resistive electronics, this controller is ideal for small, compact devices where low power consumption is required. The controller's proprietary firmware and algorithms dynamically adapt to changes in the application's environment are designed to help maintain the initial video alignment of the display.

With no polyester film surface to degrade over time from ultraviolet light exposure or scratched from everyday use, the 3M MicroTouch System SCT3240CX all-glass solution provides a unique offering for 5.7" to 15" display applications that require superior optical performance and extended surface durability.



Recommended Applications

- Customer-facing displays
- Small POS all-in-one devices
- Product locators
- Price checkers
- Process automation
- Point of Purchase (POP)
- Home automation
- Fitness equipment
- Security systems
- Table-side ordering

| Feature | Benefit |
|---|---|
| All-Glass Solution with Durable Hard Coat | <ul style="list-style-type: none">• Up to 8% better light transmission than typical resistive solutions offers superior display performance• Superior surface durability is designed to maintain optical and functional performance over the life of the product• All-glass sensor is unaffected by spacer dots or damaged films to provide increased reliability and accuracy |
| 3M MicroTouch Electronics CX | <ul style="list-style-type: none">• Small form factor for compact devices with limited space• Single IC solution minimizes component count and achieves higher MTBF• Up to 25% less power consumption for power-constrained applications |
| Scratch-resistant Hard Coat | <ul style="list-style-type: none">• Hardness MoHS 5 or less does not induce a scratch which will cause a functional failure• Exceeds 9H (highest rating) on Pencil Hardness test versus 3H typical resistive touchscreen rating• Smooth surface allows for improved scroll performance• Durable finish provides excellent chemical resistance and an easy-to-clean surface |

3M™ MicroTouch™ System SCT3240CX Specifications

System Performance

| | |
|--------------------|-------------------------|
| Light Transmission | 88% minimum |
| Input Method | Finger input |
| Accuracy | >98.5% of true position |
| Resolution | 2048 x2048 |
| Linearization | Factory linearized |
| Tail Connection | Solder-less design |

Electronics (3M MicroTouch Controller CX)

| | |
|--------------------|--|
| Communication | USB HID (mouse) |
| Dimensions | 0.80" (20.32 mm) x 1.90" (48.26 mm) REF |
| Operating | Current 25 mA (typical) |
| Sleep Current | < 500 uA |
| Power Connection | USB BUS (5V) |
| Connectors | 5-pin AMP (Touchscreen side) 5-pin Molex (USB COM side) |
| ESD | ±8KV Contact, ±20KV Air |
| Point Speed (PPS) | 100 pps |
| Minimum Touch Time | <22 ms |

Standard Part Numbers

| Display Size | Part Number |
|--------------|----------------|
| 5.7" | 98-0003-3113-6 |
| 6.4" | 98-0003-3107-8 |
| 7" wide | 98-0003-3112-8 |
| 8.4" | 98-0003-3111-0 |
| 8.9" wide | 98-0003-3109-4 |
| 10.4" | 98-0003-3106-0 |
| 12.1" | 98-0003-3108-6 |
| 12.1" wide | 98-0003-3110-2 |
| 15" | 98-0003-3543-4 |
| 15" wide | 98-0003-3379-3 |

Reliability

| | |
|-----------------------|---|
| Surface Obstructions | Withstands most surface contaminants |
| Chemical Resistance | ASTM-D-1308-02 and ASTM-F-1598-95 |
| Liquid Resistance | Liquids on screen do not impede touch performance |
| Operating Temperature | -10° C to 65° C |
| Storage Temperature | -50° C to 85° C |
| Humidity | Up to 90% RH from 0° C to 35° C, non-condensing |
| MTBF | >500,000 hours |

Mechanical

| | |
|--------------------------|--|
| Glass Thickness | 0.125" (3.18 mm) |
| Display Size | Supported 5.7" (144.78 mm) to 15" (381 mm) (standard and wide formats) |
| Surface Scratch | Hardness MoHS 5 or less does not induce a scratch which will cause a functional failure, exceeds 9H Pencil Hardness test |
| Scratch Resistance | Durable hard coat |
| Sealing/Gasketing | NEMA 4/ IP66. Complete water-resistant seal compatible |
| Cleaning | Water, isopropyl alcohol, or similar non-abrasive cleaners |
| RoHS Directive Compliant | Yes |

System Warranty

2 years

3M Touch Systems

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