# 3M<sup>™</sup> MicroTouch<sup>™</sup> System SCT3855EX

## Privacy Solution to Protect Confidential Information

With more than 20 years of surface capacitive and light control film technology expertise, 3M Touch Systems has combined these two core competencies to create an integrated viewer privacy touch solution. The 3M MicroTouch System SCT3855EX is integrated with Vikuiti Advanced Light Control Film (ALCF) privacy technology from 3M to simplify the OEM's supply chain. Combining two unique 3M technologies provides OEMs with a fully warranted solution that has been specifically designed and manufactured for use where privacy and touch are essential, such as secure financial transactions. With this integrated solution, 3M bonds the Vikuiti ALCF film during the optimal manufacturing process to ensure robust sealability while facilitating integration. Most aftermarket applications, require a notch for the tail location which can lead to imperfections in the lamination and may void the touch warranty.

Vikuiti ALCF is composed of invisible microlouvers that function like vertical blinds by blocking out display screen views from the side while allowing unrestricted viewing to users in front. Seen from outside the 60 degree viewing angle, the screen appears dark; seen from the front, the screen is bright and clear.

The fully integrated solution combines the benefits of Vikuiti ALCF with that of the 3M MicroTouch System SCT3250EX, which includes an all glass sensor solution with scratch-resistant top coat and advanced 3M electronics. Using 3M's proprietary optical bonding process, optical characteristics are enhanced by eliminating the air gap between the Vikuiti ALCF film and touchscreen. With no air gap, internal light refractions and reflection are minimized resulting in increased light transmission. In addition, the all glass solution has no moving parts and



#### **Recommended Applications**

- Banking
- · Self Check-in Kioks
- Rental Kiosks
- Self-service Kiosks
- ATMs
- Point-of-Information
- Healthcare
- Security Checks

no surface components which improves system reliability and sealability. When mated to industry-leading 3M electronics, fast and accurate touch response with touch accuracy exceeding 99% can be achieved for the life of the system.

Feature	Benefit	
Fully Integrated Privacy Solution	<ul> <li>Provides user privacy when displaying sensitive information outside of the 60 degree viewing angle</li> <li>Simplifies the supply chain with an integrated "viewer privacy" touch solution from one source</li> <li>Fully warranted integrated design facilitates ease of integration and reliable sealability against moist</li> </ul>	
All Glass Solution with	High light transmission provides superior display performance	
3M <sup>™</sup> ClearTek <sup>™</sup> Hard Coat	Enhanced surface durability maintains optical and functional performance	
3M™ MicroTouch™ Electronics EX	3M ASIC creates industry-leading fast and accurate touch response	
	<ul> <li>High electrostatic discharge (ESD) performance for demanding applications</li> </ul>	
	<ul> <li>High mean time between failures (MTBF) provides reliable system performance over the life of the touch solution</li> </ul>	
Scratch-Resistant Top Coat	Low surface energy resists surface scratching that maintains optical properties	
	<ul> <li>Smooth surface allows better drag and draw performance and feel</li> </ul>	
	Durable finish for easy-to-clean surface reduces maintenance time	





### 3M™ MicroTouch™ System SCT3855EX Specifications

#### System Performance

Light Transmission 65.5% Typical
Input Method Finger contact
Accuracy >99% of true position

Resolution 1024 x 1024, but capable of 16K x16K

when used with EX controllers

Linearization Factory linearized
Tail Connection Solder-less design

#### Electronics (3M MicroTouch Controller EX)

Communication USB, Serial, USB HID Digitizer

Dimensions 1.30" x 2.55" x 0.45"

33.0 x 65.0 x 11.4 mm

Operating Current USB: 75 mA (typical)

Serial: 85 mA (typical)

Sleep Current < 500 uA

Power Connection USB:  $5Vdc \pm 5\%$  75 mA

Serial: 5-12Vdc ± 5% 85 mA

Connectors 5-pin locking AMP (Touch side)

5-pin Molex (COM side)

 $\pm$ 8KV Contact,  $\pm$ 27KV Air

Point Speed (PPS) 200 pps Minimum Touch Time 5.4 ms

MTBF >700,000 hours

#### Reliability

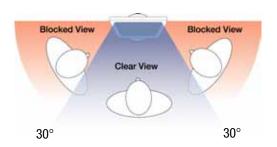
Surface Obstructions Withstands most surface contaminants
Chemical Resistance ASTM-D-1308-02 and ASTM-F-1598-95
Liquid Resistance Liquids on screen do not impede touch

performance

Operating Temperature -40° C to +70° C for touch screen

Storage Temperature -50° C to +70° C

Humidity Up to 90% RH from 0° C to 35° C, non-condensing



#### Mechanical

Glass Thickness 1.49" (3.78 mm)

Display Size 12.1" to 19" standard (<12.1" custom)

Viewing Angle 60 degrees

Louver Angle 7 degrees (typical) – Moire' prevention
Surface Scratch Hardness MoHS 7 or higher to induce a

functional failure

Scratch Resistance 3M™ ClearTek™ hard coat

Sealing NEMA 4X / IP66, complete water-resistant seal compatible Cleaning Water, isopropyl alcohol, or similar non-abrasive cleaners

RoHS Directive

Compliant

#### System Warranty

3 years on integrated touch/film system with "unlimited touches"

#### Operating Systems Supported

Windows 7 (32-and 64-bit)\*
Windows Vista (32-and 64-bit)
Windows XP (32-and 64-bit)

Windows 2000, Server 2003, Server 2008 (32-and 64-bit)

Windows 98, 95, ME, NT 4.0, NT 3.5, 3.1x (32-bit)

Windows CE, XPe, WePOS (32-bit) Linux Kernel 2.6, Kernel 2.4 (serial only)\*\*

Apple OSX (UPDD driver)\*\*

\* 3M MicroTouch System SCT3250EX HID is Windows 7 Logo Compatible

#### Standard Part Numbers

Display Size	USB Part Number	Serial Part Number
12.1"	98-0003-3607-7	98-0003-3607-7
15"	98-0003-3610-1	98-0003-3609-3
17"	98-0003-3613-5	98-0003-3612-7
19"	98-0003-3616-8	98-0003-3615-0

#### **3M Touch Systems**

Subsidiary of 3M Company 501 Griffin Brook Park Drive Methuen, MA 01844 U.S.A.

1-888-659-1080 www.3M.com/touch



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)

IMPORTANT NOTICE TO PURCHASER: Specifications are subject to change without notice. These 3M Touch Systems' Products and software are warranted to meet their published specifications from the date of shipment and for the period stated in the specification. 3M Touch Systems makes no additional warranties, express or implied, including but not limited to any implied warranties of merchantability or fitness for a particular purpose. User is responsible for determining whether the 3M Touch Systems Products and software are fit for User's particular purpose and suitable for its method of production, including intellectual property liability for User's application. If the Product, software or software media is proven not to have met 3M Touch Systems' warranty, then 3M Touch Systems' option, to repair or replace that Product quantity or software mediator to refund its purchase price. 3M Touch Systems has no obligation under 3M Touch Systems' warranty for any Product, software or software media that has been modified or damaged through misuse, accident, neglect, or subsequent manufacturing operations or assemblies by anyone other than 3M Touch Systems. 3M Touch Systems shall not be liable in any action against it in any way related to the Products or software for any loss or damages, whether non-specified direct, indirect, special, incidental or consequential (including downtime, loss of profits or goodwill) regardless of the legal theory asserted. (7/02)

<sup>\*\*</sup> Limited MT7 features supported