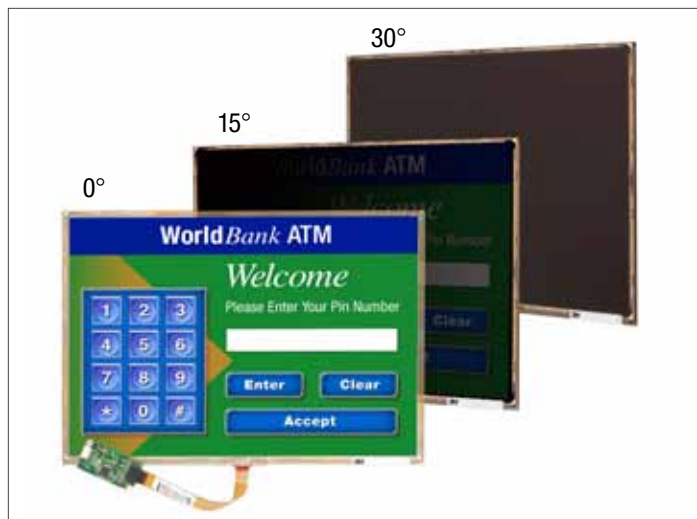# 3M™ MicroTouch™ System SCT3855EX

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

MicroTouch™

3M

System Performance
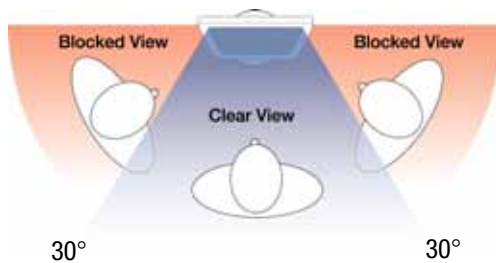
Light Transmission	65.5% Typical
Input Method	Finger contact
Accuracy	>99% of true position
Resolution	1024 x 1024, but capable of 16K x16K when used with EX controllers
Linearization	Factory linearized
Tail Connection	Solder-less design

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 ± 5% 75 mA Serial: 5-12Vdc ± 5% 85 mA
Connectors	5-pin locking AMP (Touch side) 5-pin Molex (COM side)
ESD	±8KV Contact, ±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	-40º C to +70º C for touch screen
Storage Temperature	-50º C to +70º C
Humidity	Up to 90% RH from 0º C to 35º C, non-condensing

30°   30°

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	Yes

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

** Limited MT7 features supported

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