Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!
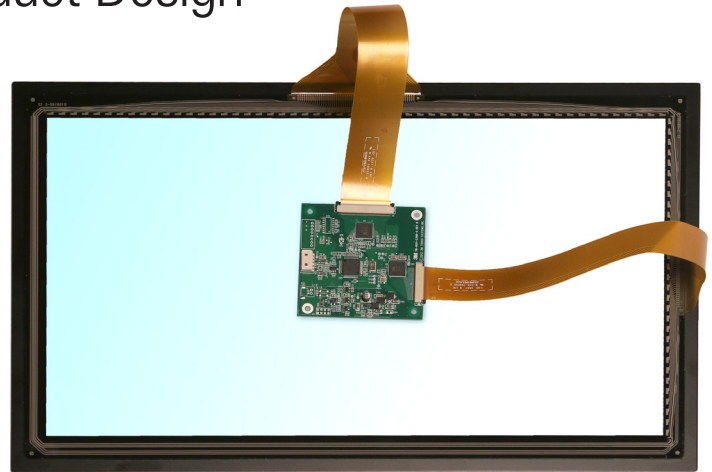
Contact us

Technology for Breakthrough Product Design

With more than 30 years of capacitive touch sensing and manufacturing expertise, 3M has developed a purpose-built multi-touch system for commercial applications that demand high-performance multi-touch functionality with bezel-free designs that deliver a sleek and sophisticated tablet-like industrial design for displays ranging from 15 to 24 inches. The **3M™ Multi-Touch System PCT2455PX**, supported by the proprietary 3M™ Multi-Touch Controller PX5000, is based on projected capacitive touch technology (PCAP) and supports up to 20 simultaneous touch events with an ultra-fast response time of less than 10 milliseconds. This industry-leading touch performance combined with modern design elements, makes the PCT2455PX system an ideal solution for OEM's, ODM's, and integrators looking to design and build breakthrough new products that exceed their customer's expectations.

Designed with commercial applications in mind, the PCT2455PX system's non-active, chemically-strengthened cover glass offers a durable surface that protects the underlying conductive elements while allowing the touchscreen to remain functional with even the most severe surface scratches. This same cover glass is also given an anti-stiction and an anti-glare treatment that helps provide an enhanced user experience by limiting the effects of touch friction and ambient light pollution. In addition to these functional benefits, the PCT2455PX system's bezel-less design helps OEM's bring the sleek, tablet-like industrial design elements to their own devices by eliminating the need for bulky bezels required by other touch technologies. These modern design techniques are an ideal element for commercial display applications that require a fresh, next-generation look and feel.

Recommended Applications

- Gaming and Amusement
- Retail POS
- Point of Information
- Self Service
- Telepresence
- Health Care
- Audio Visual
- Digital Signage
- Retail Brand Experience
- Industrial

Feature	Benefit
3M PCT Fully-integrated System Solution	• Touchscreen and electronics tuned for precise, full multi-touch functionality, even at the edges and corners of the display • Integrated standard systems offered from a single source ensures full system support and warranty • Robust system solution tested to work with many display technologies provides integration and design flexibility
Patented 3M Electronics	• Reports simultaneous multi-touch events while supporting palm rejection at speeds faster than the refresh rate of many industrial displays • High signal-to-noise ratio provides input flexibility including thin gloves and fingertips. • Ultra-high definition touch for smooth draw capability and ability to distinguish multiple fingers in close proximity • Custom ASIC design offers a standard protocol for any size between 15 and 24 inches and facilitates seamless application development
3M PCT with Engineered Cover Glass	• Enables leading edge industrial design solutions with a uniform narrow black border graphics design • No surface components or bezel requirement limits debris build up which results in increased reliability • Easy-to-clean, virtually "no wear" surface provides operation unaffected by surface scratches • Smooth edge finish for improved durability and handling safety • Anti-stiction surface allows for "easy drag feel" for smooth touch performance • Anti-glare for table-top applications or strong ambient lighting environments

3M

System Performance

Touch Inputs	20 touches with palm rejection
Input Method	Finger, thin gloves
Accuracy	>99% of true position
Resolution	4K x 4K
Linearization	Inherently Linear (only video alignment needed)
Tail Connection	Solder-less design
Light Transmission	> 87%

Electronics (3M Multi-Touch Controller PX5000)

Communication	USB HID Digitizer
Dimensions	15.1" and 15.6": 2.75" x 2.75" x 0.37" REF 17" to 24": 3.25" x 2.75" x 0.37" REF
Operating Current	15.1" and 15.6": 5 VDC (95mA max) 17" to 24": 5 VDC (150mA max)
Power Connection	USB Vbus
Connectors	ZIF (touchscreen) Molex (USB COM)
Touch Refresh Rate	Greater than 100 Hz (<10 ms)

Reliability

Surface Obstruction	Withstands most surface contaminants
Chemical Resistance	ASTM-D-1308 and ASTM-F-1598-95
Operating Temperature	0ºC to +50ºC (up to 90% RH from 0ºC to +35ºC (above +35ºC, see specification))
Storage Temperature	-10ºC to +70ºC (up to 90% RH from 0ºC to +35ºC (above +35ºC, see specification))
Humidity	Up to 90% RH from 0ºC to +35ºC, non-condensing (above +35ºC, see specification)

Mechanical

Total Thickness	2.4 mm
Graphics	Black border (standard design)
Display Size	Supported 15" to 24" (standard sizes available)
Durability	Non-active cover glass, no wear mechanism
Sealing	NEMA 4X/IP66, complete water-resistant seal compatible
Cleaning	Water, isopropyl alcohol, or similar non-abrasive cleaners
Regulatory (Agency Approvals)	FCC-B, CE, IEC 60950
RoHS Compliant	Yes

System Warranty

One year on touch system

Operating Systems Supported

Native Driver Support:

Windows XP, Vista, 7, 8; Linux Kernels 3.5 or later for Windows 7 compatible FW; Linux Kernels 3.12 or later for Windows 8 compatible FW.

3M Driver Support:

MT 7 (Windows XP, Vista, 7, 8, XPe, WEPOS, CE, Linux kernels 2.6 and 3.0)

3rd-party Driver:

Mac OS (Intel)

Ordering Information

Diagonal	Format	Part Number
15.08"	4:3	98-1100-0324-5
15.65"	16:9	98-1100-0282-5
17.15"	5:4	98-1100-0284-1
18.61"	16:9	98-1100-0322-9
19.09"	5:4	98-1100-0321-1
20.11"	16:9	98-1100-0320-3
21.62"	16:9	98-1100-0271-8
22.10"	16:9	98-1100-0325-2
23.13"	16:9	98-1100-0274-2
24.11"	16:9	98-1100-0323-7