

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!



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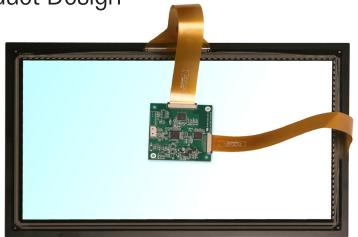


3M[™] Multi-Touch System PCT2455PX

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 bezelless 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[™] Multi-Touch System PCT2455PX Specifications

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 0°C to $+50^{\circ}\text{C}$ (up to 90% RH from 0°C to $+35^{\circ}\text{C}$

Temperature (above +35°C, see specification))

Storage -10°C to $+70^{\circ}\text{C}$ (up to 90% RH from 0°C to $+35^{\circ}\text{C}$

Temperature (above +35°C, see specification))

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

(above +35°C, 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 FCC-B, CE, IEC 60950

(Agency Approvals)

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

 $\label{eq:FW} \text{FW; Linux Kernels 3.12 or later for Windows 8 compatible FW.}$

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	

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: RoHS 2011/65/EU means that the product or part does not contain any of the substances in excess of the maximum concentration values ("MCVs") in EU RoHS Directive 2011/65/EU, unless the substance is in an application that is exempt under EU RoHS. The MCVs are by weight in homogeneous materials. This information represents 3M's knowledge and belief, which may be based in whole or in part on information provided by third party suppliers to 3M. (3/13)

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