## imall

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

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



### MicroTouch

# MicroTouch<sup>™</sup> TouchPen System

## for ClearTek™II Touch Screens

#### **Product Highlights**

- Dual input mode (pen stylus or finger touch) with vibrant optics
- Pen-only input mode for handwriting recognition, signature capture, on-screen annotation applications, or to avoid unintended touches.
- Excellent draw precision and touch accuracy
- Based on high-performance
  EXII ASIC platform

#### **Extended Touch Solutions**

The **MicroTouch**<sup>••</sup> **ClearTek**<sup>••</sup>**II TouchPen System** extends the input flexibility of MicroTouch<sup>••</sup> ClearTek<sup>••</sup>II capacitive touch screens by supporting both touch and pen input. TouchPen's tethered stylus offers handwriting recognition, signature capture, and on-screen annotation capabilities. It is an excellent solution for applications with dense menus or with detailed images too small to touch with a finger.

#### **Flexible Input Modes**

The TouchPen system can be set up in dual mode (pen or finger touch input) or pen-only mode.

In dual mode, the touch screen accepts touch from both the tethered pen or from a user's finger for ease of use in a multitude of point-of-sale signature capture applications. In dual mode, while accepting input from the pen, all other input is ignored – supporting palm rejection in a very sophisticated manner.

In pen-only mode, only pen inputs are accepted, making it an ideal solution for applications where unintended touches may create problems.

#### **Making the Difference**

The TouchPen System is based on the MicroTouch<sup>™</sup> EX II 3700SP, a serial RS232 controller, which takes advantage of the EX II ASIC electronics platform. The EX II 3700SP controller offers a wide operating temperature range, high touch resolution, expanded regulatory approvals, improved ESD and EMI reliability. Adding to its application flexibility, the EX II 3700SP offers the capability to upgrade its firmware, even after installation and deployment.



## MicroTouch<sup>™</sup> TouchPen System for ClearTek<sup>™</sup> II Touch Screens

#### **TouchPen System**

System Components	Any standard ClearTek II touch screen combined with an add-on kit containing a tethered-pen controller, pen stylus, and cable kit	
Mean Time Between Failure	Controller: >600,000 hours MTBF Pen: 4 million hours MTBF	
Operating Temperature Range	-15° C to +70° C	
Operating Humidity Range	<36° C @ 0-90% RH, non-condensing	
Storage Temperature Range	-30° C to +70° C	
Storage Humidity Range	<36° C @ 0-90% RH, non-condensing	
Power Requirements	12Vdc (sourced from the controller through the J1 connector)	
<b>Ninimum Touch Duration</b>	<14 milliseconds	
ouch Resolution*	2048 x 2048	
Electro Static Discharge ESD Susceptibility)	22Kv Air, 8 Kv Contact	
lost Cable	96" (2.4m) long	
Regulatory Compliance	UL/cUL, FCC-B, CE, VCCI, AS/NZS 3548 ClearTek II TouchPen is compliant with the European Union 2002/95/EC Directive on Restriction of Hazardous Substances (RoHS)	

#### TouchPen Controller (EXII-3710SP)

Sensor Connection		
<b>Communications Protocol</b>		
Controller Dimensions		
System Warranty		

6-pin Molex connector Serial RS 232 4.80" x 1.35" (121.9 mm x 34.3 mm) 5 years

#### TouchPen Stylus (69-502)

Pen Material	ABS plastic, lightly textured surface, offered in black
Pen Dimensions	6" (152.4mm) length without stain relief, 0.42" (10.67mm) diameter.
Pen Cabling	3.5' (1.07 meters) tether, strain relief to 20 lbs. (7.71 kg) pull force.
Pen Tip (Conductive)	Replaceable pen tips (order part number 2604634)
Pen Connector	8-pin Rj 45 phone jack
Resolution	2048 x 2048 or greater touch point per axis within the calibrated area

#### TouchPen System Cable Kit for ClearTek II (69-901)

**Inclusive Part Numbers** 

69-502, Stylus 7311273, Serial RS-232 cable, 96" (2.4m) 7311420, Cable, TouchPen controller to RJ45 7319522-03, ClearTek II adapter cable

 The maximum number of addressable coordinates generated by the controller NOTE: TouchPen stylus, pen tips, and controller cables available separately

#### **3M Touch Systems** 300 Griffin Brook Park Drive

Methuen, MA 01844 U.S.A. 1-888-659-1080

www.3M.com/touch

For more information on 3M touch products, call 888-659-1080



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)

NOTICE: Given the variety of factors that can affect the use and performance of a 3M Touch Systems Product (the "Product"), including that solid state equipment has operation characteristics different from electro mechanical equipment, some of which factors are uniquely within User's knowledge and control, it is essential that User evaluate the 3M Touch Systems Product and software to determine whether it is suitable for User's particular purpose and suitable for User's method of application. 3M Touch Systems' statements, engineering/technical information, and recommendations are provided for User's convenience, but their accuracy or completeness is not warranted. 3M Touch Systems products and software are not specifically designed for use in medical devices as defined by United States federal law. 3M Touch Systems products and software should not be used in such applications without 3M Touch Systems' express written consent. User should contact its sales representative if User's opportunity involves a medical device application.

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' sole obligation and User's and Purchaser's exclusive remedy, will be, at 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 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 qoodwill) reqardless of the legal theory asserted. (7/02)