# MT510 Chipset

FOR 5-WIRE RESISTIVE TOUCHSCREENS

The *MT510 Chipset* for 5-wire resistive touchscreens is designed for high volume integrations and is also available as a complete controller-board solution for low volume projects or to accelerate product introduction and time-to-market. In addition, the MT510 Chipset provides engineers with the industry's most compact 5-wire chipset available.

## MT510 Chipset and Controller

The MT510 chipset provides features critical for today's devices, such as low power consumption, compact components, mouse emulation, and custom configurations. Combined with the superior optics and durability of the TouchTek5 (5-wire) touchscreen, it's ideal for Internet appliances, mobile computing devices, point-of-sales systems and industrial controls. Utilizing either the MT510 Chipset or the 5-wire controller (part # 44-114), engineers



The industry's most compact 5-wire controller.

realize the ease-of-integrating a complete touch controller solution and the confidence of specifying proven touch technology from the industry's touch leader for more than a decade.

#### **Key Features**

The MT510 chipset combines the Burr-Brown ADS7845E touchscreen controller, along with a processor preprogrammed with MicroTouch proprietary firmware. The MT510 chipset or complete controller provides a comprehensive controller solution from the touch experts. OEMs will save time-to-market and engineering resources with either of these controller solutions, enabling them to focus their efforts on perfecting their product, instead of designing a touch controller from scratch.

Using the complete MT510 solution enables these important engineering savings:





Image on the left is a stylus-drawn circle without MT510's noise and point filtering features. Image on the right is a stylus-drawn circle utilizing MT510's noise reduction and point filtering firmware.

*Noise Reduction* – The MT510 includes firmware that minimizes the inevitable noise created by electronic components in close proximetry.

**Point filtering** – Inherent in resistive technology is the controller's interpretation of a direct touch to the spacer dot that separates the two conductive layers. The MT510 Chipset interprets the sequence of touches in a drawn line and corrects any points that are obviously outside the intended touch pattern.

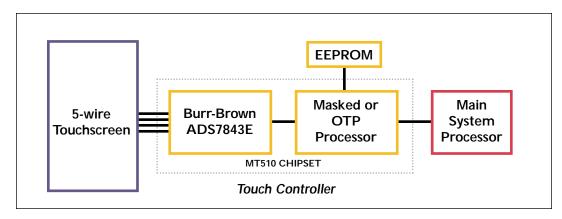


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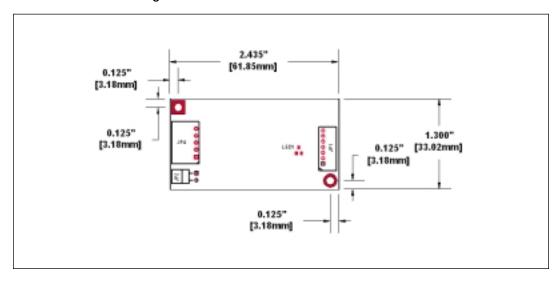
*Saves Time* – OEMs can bring their touch-enabled products to market faster by enhancing their touchscreen integration with an MT510 solution. The MT510 contains firmware components that handle all the touch details that can make a critical difference in touch controller preformance, such as noise reduction and point filtering.

*Saves Space* – The MT510 chipset can be integrated into an existing circuit board or embedded system optimizing the use of limited product space. And, if space permits, the MT510 controller board solution can be used.

## TouchTek5 and MT510 Controller Touch Solution



# MT510 Controller Diagram



# MT510 Chipset Developer's Kit



#### MT510 Chipset Developer's Kit

Available for engineers designing in the MT510 Chipset, the MT510 Chipset Developer's Kit provides all the necessary components that enable engineers to quickly and easily design MicroTouch electronics into their system:

The kit contains the following components:

- *Design Documentation Binder* includes the chipset design guide, schematics, product specifications, firmware commands, and supporting component specifications
- Touchscreen Drivers and Utility Programs
- One Touchscreen TouchTek5 (5-wire) resistive
- One Touchscreen Controller MT510 5-wire resistive controllers
- Three Cables one RS-232 serial communications cable; two power tap cables DIN and Mini-Din configurations
- *Firmware* five Burr-Brown ADS7845E touchscreen controller components; five programmed 87C52 Microcontrollers containing MicroTouch firmware.

The MT510 Chipset Developer's Kit is part number 49-555 and costs \$500. Contact your MicroTouch Applications Engineer or Sales Representative for required non-disclosure and licensing agreements.

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## CORPORATE PROFILE

Global company committed to the innovation and application of touchscreen technology

Founded in 1982

Public company (NASDAQ: MTSI)

1999 sales of \$157.5 million

#### The MicroTouch Difference

When you partner with MicroTouch for your touchscreen needs, you benefit from the industry's best combination of service, warranties, and support.

#### **Five Year Warranty**

MicroTouch 5-wire products come with a five year warranty on all touchscreen components.

### **Around-the-World Service and Support**

When you need product information quickly or new software drivers, you can reach us through our Technical Assistance telephone support line, Web site, or e-mail. We're never out of touch.

#### A Commitment to Quality

MicroTouch's headquarters manufacturing facility is ISO 9001-certified. Our numerous quality groups, inspections, and executive involvement are just some of the MicroTouch quality initiatives that ensure the product you receive is the most reliable in the industry.



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