Atmel maXTouch

Solutions for Touchscreens

Unlimited Touch, Unlimited Product Possibilities

The Atmel® maXTouch™ family of touchscreen controllers offers superior performance and low-power consumption. maXTouch devices support an unlimited number of touches, greatly enhancing the user experience and changing the way users interact with electronic products. Built-in gestures and the ability to ignore unintentional touches result in a user interface that is intuitive and reliable.

Touching the Leading Edge

maXTouch controllers are extremely responsive, providing real-time characteristics for demanding applications such as handwriting recognition and video games. The high level of resolution and excellent signal-to-noise ratio provided by maXTouch controllers means touchscreens can be used with fingernails and gloves, providing easy text entry on a handheld device.

The rich feature set makes these controllers suitable for any application. They provide unrivalled performance in small-screen mobile phones and Internet devices, and unleash the full potential of a new generation of large-screen tablets, smartbooks, netbooks, and PCs.

Single-Chip Touch Solution for Small Screens

The maXTouch microcontroller family sets the standard in capacitive touchscreen technology for smartphones and small-format devices, providing the industry's highest-performing, lowest-power multi-touch components. maXTouch controllers feature patented charge transfer technology from Atmel, which enhances the traditional approach to mutual capacitance solutions, and combine all aspects of advanced touch sensing onto a single chip:

- Unambiguous, unlimited touch support
- Extremely low current consumption: < 1.8mW in "touch-ready" state
- Responsive user interface: > 250Hz report rate for a single touch
- Superior performance for first-touch response
- Excellent signal-to-noise ratio for superior precision
- Small footprint with few external components
- Two-touch adjacency of less than 10mm on a 4.3in (10.9cm) touchscreen
- Patented algorithms for superior multi-touch experience, including grip and face suppression
- Compatible with the latest Windows™ Phone 7 and Android™ operating systems
- Proximity channel support

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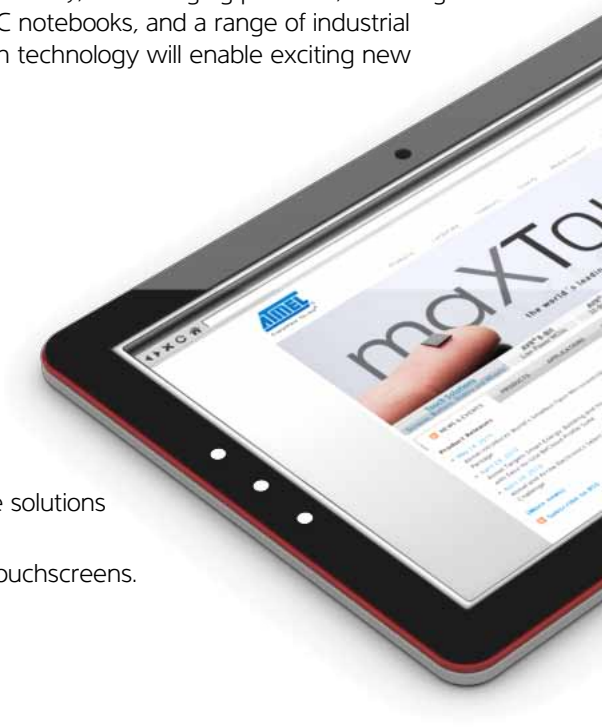
The Atmel® maXTouch™ solution has been adopted by several major handset manufacturers, and is used in several bestselling smartphones.

Atmel maXTouch Technology Enables the Big Screen

maXTouch technology now supports large format touchscreens, up to 15.6in (39.6cm), for emerging products, including touch-enabled tablets, smartbooks, mobile Internet devices (MIDs), netbooks, PC notebooks, and a range of industrial applications. With true unlimited touch functionality and stylus support, maXTouch technology will enable exciting new software applications and user interactions on one screen. MaXTouch provides:



- True multi-touch capability with support for up to 16 fingers
- Fastest report rate in the industry (>150Hz) for smooth finger tracking and a responsive touchscreen with low latency
- Industry-leading power consumption to preserve battery life
- Rejection of unintended touches (grip suppression, palm rejection, etc.)
- Stretch/pinch and rotate gestures
- Support for stylus, finger tip, and gloves
- Handwriting and shape recognition
- Industry-leading accuracy, linearity, and signal-to-noise ratio
- System flexibility through choice of COF or COB layout
- Software driver for various operating systems (Linux, Android, Windows)
- Partnerships in place with leading ITO and module vendors to enable complete solutions

For more information on Atmel Touchscreen Technology, visit www.atmel.com/touchscreens.

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