



Unlimited Touch, Unlimited Product Possibilities

The Atmel® maXTouch™ family of touchscreen controllers offer superior performance and low power consumption in a single IC. The maXTouch devices support an unlimited number of touches which greatly enhances the user experience and changes 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 stylus, fingernails and gloves, providing easy text entry on a handheld device.

The rich feature set makes the devices suitable for any application – they provide unrivalled performance when used in mobile phones, mobile internet devices and netbooks.

Single-Chip Touch Solution

maXTouch controllers feature Atmel's patented charge transfer technology which enhances the traditional approach to mutual capacitance solutions and combines all aspects of advanced touch sensing onto a single chip:

- Unlimited touches
- Low power consumption
- Fast response — completely redraws screen every 4/1000 of a second (4ms) to eliminate recalibration issues
- Excellent signal-to-noise ratio for superior precision — 3x better than competitive products
- Superior performance for first-touch response — 3x better than competitive products
- Unambiguous, unlimited touch support
- Responsive user interface: > 250 Hz report rate for a single touch
- Extremely low current consumption: < 1.8 mW in "touch-ready" state
- Two touch adjacency of less than 10 mm on a 4.3" touchscreen
- Small footprint with few external components
- Supports stylus, fingernails, and gloves
- Grip and face suppression functionality: avoids false touches
- Size and angle of touch supported
- Screen sizes up to 10.2" are supported by a single chip
- Proximity channel support

