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**Embedded - Microcontrollers - Application Specific: Tailored Solutions for Precision and Performance**

**Embedded - Microcontrollers - Application Specific** represents a category of microcontrollers designed with unique features and capabilities tailored to specific application needs. Unlike general-purpose microcontrollers, application-specific microcontrollers are optimized for particular tasks, offering enhanced performance, efficiency, and functionality to meet the demands of specialized applications.

**What Are Embedded - Microcontrollers - Application Specific?**

Application specific microcontrollers are engineered to

#### Details

Product Status	Active
Applications	-
Core Processor	-
Program Memory Type	-
Controller Series	-
RAM Size	-
Interface	-
Number of I/O	-
Voltage - Supply	-
Operating Temperature	-
Mounting Type	-
Package / Case	-
Supplier Device Package	-
Purchase URL	<a href="https://www.e-xfl.com/product-detail/atmel/atmxt540sxes-ccur">https://www.e-xfl.com/product-detail/atmel/atmxt540sxes-ccur</a>



## 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





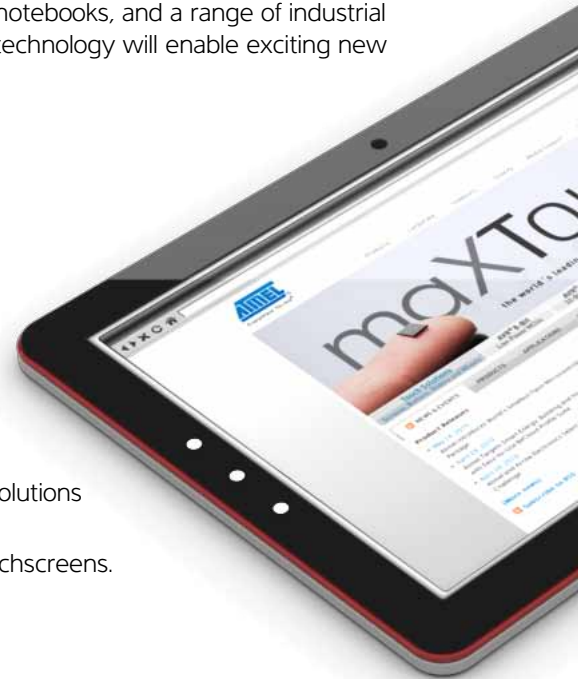
# Atmel maXTouch Solutions for Touchscreens

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](http://www.atmel.com/touchscreens).

**Atmel Corporation**  
2325 Orchard Parkway  
San Jose, CA 95131  
USA  
**Tel:** (+1) (408) 441-0311  
**Fax:** (+1) (408) 487-2600  
[www.atmel.com](http://www.atmel.com)

**Atmel Asia Limited**  
Unit 01-5 & 16, 19F  
BEA Tower, Millennium City 5  
418 Kwun Tong Road  
Kwun Tong, Kowloon  
HONG KONG  
**Tel:** (+852) 2245-6100  
**Fax:** (+852) 2722-1369

**Atmel Munich GmbH**  
Business Campus  
Parking 4  
D-85748 Garching b. Munich  
GERMANY  
**Tel:** (+49) 89-31970-0  
**Fax:** (+49) 89-3194621

**Atmel Japan**  
9F, Tonetsu Shinkawa Bldg.  
1-24-8 Shinkawa  
Chuo-ku, Tokyo 104-0033  
JAPAN  
**Tel:** (+81) (3) 3523-3551  
**Fax:** (+81) (3) 3523-7581

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