



Ready Play Solutions

## Xtrinsic Capacitive and Resistive Touch-Sensing Platform

### Overview

Freescale Ready Play solutions integrate functionality in different applications, allowing customers to add features while reducing development cost—simplifying design cycles and enabling scalability in applications and systems.

The Xtrinsic capacitive and resistive touch-sensing platform (CRTouch) enables resistive touch screens to handle basic gesture recognition and allows the addition of up to four capacitive electrodes to your system, all packaged on a 5 x 5 mm lead-free 32-pin QFN. It supports four- and five-wire touch screens and communicates over UART and I2C communication protocols. The implementation of these technologies enables the CRTouch to help reduce space, cut software development costs and speed time to market.

### Key Features

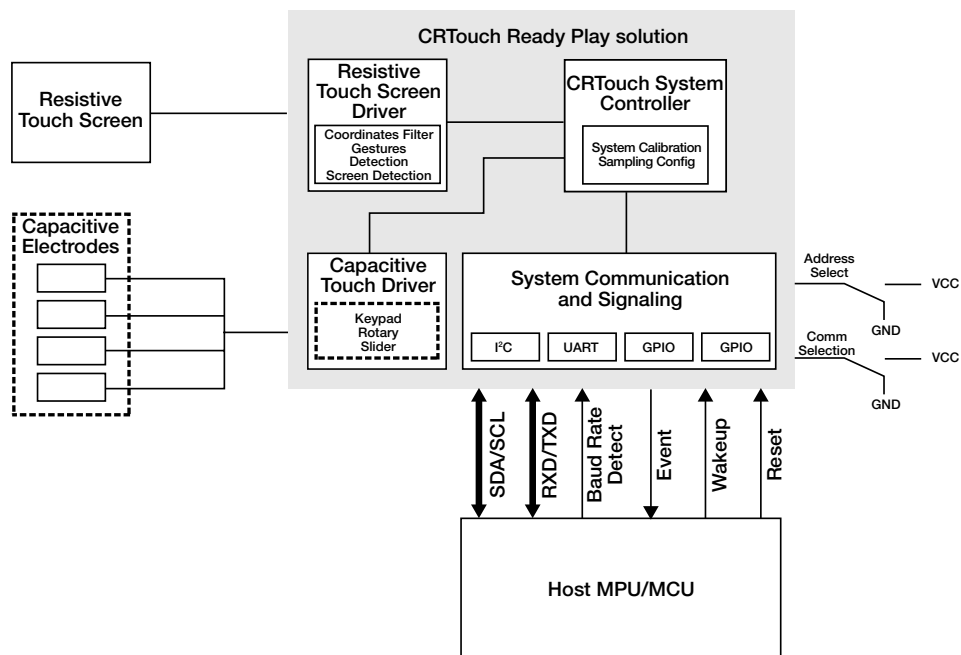
- Standard X, Y resistive touch screen detection with optional calibration and built-in filter for improved stability
- Four- and five-wire pressure detection
- Two touch gesture detection on a four wire screen
- Zoom in/out
- Rotate direction indication and angle measurement
- Four capacitive electrodes independent from touch screen may be configured as keypad, rotary or slider
- UART and I<sup>2</sup>C communication available
  - Two selectable I<sup>2</sup>C addresses
  - UART baud rate auto detection mechanism
- Event indicator signal for host processor
- Configurable sample rate with up to 200 points per second
- Linux®, Android® and PEG integration example code available
- 1.8- to 3.6-volt operation
- 32-pin QFN package
- -40°C to +105°C operating temperature
- Normal run, sleep and shutdown modes for reduced power consumption



## Target Applications

- Control panels
- Human-machine interface
- Keyboard replacement
- Point-of-sale terminals
- Signature capture devices
- Kiosks

## Xtrinsic Capacitive and Resistive Touch-Sensing Platform



## Ordering Information

	Description	MSRP (USD)
<b>Part Number</b>	CRTOUCHB10VFM	\$1.82 10 KU
<b>Development Tools</b>	EVBCRTOUCH	\$85
<b>Tools and Software</b>	GUI	No cost

## Freescale: A Leader in Sensing Solutions

Expanding on more than 30 years of sensor innovation, Freescale's Xtrinsic sensing solutions are designed with the right combination of high-performance sensing capability, processing capacity and customizable software to help deliver smart, differentiated sensing solutions. With Xtrinsic sensors, our vision is to offer a diverse and differentiated product portfolio to meet the expanding needs of the automotive, consumer and industrial segments. Xtrinsic solutions offer ideal blends of functionality and intelligence designed to help our customers differentiate and win in highly competitive markets.

For current information about the Xtrinsic CRTouch platform, please visit [freescale.com/CRTouch](http://freescale.com/CRTouch)



Freescale and the Freescale logo are trademarks of Freescale Semiconductor, Inc., Reg. U.S. Pat. & Tm. Off. Ready Play and Xtrinsic are trademarks of Freescale Semiconductor, Inc. All other product or service names are the property of their respective owners. © 2012 Freescale Semiconductor, Inc.

Document Number: CRTOUCHFS REV 1