

CYPRESS PRODUCT SELECTOR GUIDE
TRUETOUCH TOUCHSCREEN SOLUTIONS
SEPTEMBER 2009

AUTOMOTIVE • CAPSense™ CAPACITIVE TOUCH SENSING • CLOCKS AND
BUFFERS • LIGHTING AND POWER CONTROL • MEMORIES • OPTICAL AND
IMAGE SENSING • PHYSICAL LAYER DEVICE • PSoC® PROGRAMMABLE
SYSTEM-ON-CHIP • TRUETOUCH™ TOUCH SCREEN SOLUTIONS • USB
SOLUTIONS • WEST BRIDGE® PERIPHERAL CONTROLLERS • WIRELESS/RF



TRUE TOUCH TOUCHSCREEN SOLUTIONS

Cypress, the leader in capacitive touch sensing solutions, is revolutionizing the touchscreen market. Cypress's TrueTouch™ touchscreen solutions, powered by PSoC™ Programmable-System-on-Chip technology, offer unmatched flexibility and the broadest portfolio available.

The projected capacitive TrueTouch Solutions give designers a choice between different usage models, different touchscreen vendors, and different LCD vendors. They also enable designers to accommodate last minute changes—something no other touchscreen product can deliver.

Cypress's portfolio consists of 3 levels of solution, single-touch for basic touch integration, multi-touch gesture for mid-level capabilities, and multi-touch all-point for the utmost in touch interaction.



Single-Touch projected capacitive touchscreen controllers (CY8CTSTxxx) support Single-Touch touch-screen applications with up to 44 X/Y sensor inputs and screen sizes 8.4" and below. They allow for single touch gestures such as tap, double tap, click-and-drag, X/Y navigation, and drawing.



Multi-Touch Gesture projected capacitive touchscreen controllers (CY8CTMGxxx) support Single-Touch and Multi-Touch Gesture touchscreen applications with up to 44 X/Y sensor inputs and screen sizes 8.4" and below. They perform traditional touchscreen functions including interpreting single touches, and gestures such as tap, double-tap, pan, pinch, scroll, and rotate.



Multi-Touch All-Point projected capacitive touchscreen controllers (CY8CTMAxxx) support Single-Touch and Multi-Touch All-Point (simultaneously interpreting any number of independent points on the screen) touchscreen applications with up to 37 X/Y sensor inputs and screen sizes 7.3" and below. They allow functions such as keyboard implementations, inputting multiple locations into a GPS, playing video games on a mobile handset, and making multiple adjustments to sound and/or video settings on a PMP.

All screen sizes are at a 4:3 nominal screen ratio.

Key Applications: Cell phone handsets, GPS navigation devices, portable media players

TrueTouch

Technology	Part Number	Max Sensor Inputs	Max Screen Size (in)	Average Scan Speed per Sensor (ms)	Min Voltage (V)	Flash (B)	SRAM (B)	Comm I/F
Single-Touch	CY8CTST110	24	4.3	0.5	2.7	8K	512	I ² C, SPI, UART
Single-Touch	CY8CTST120	44	8.4	0.5	3.0	16K	1K	I ² C, SPI, UART, USB
Single-Touch	CY8CTST200A	33	5.6	0.4	1.8	32K	2K	I ² C, SPI, UART, USB
Multi-Touch Gesture	CY8CTMG110	24	4.3	0.5	2.7	8K	512	I ² C, SPI, UART
Multi-Touch Gesture	CY8CTMG120	44	8.4	0.5	3.0	16K	1K	I ² C, SPI, UART, USB
Multi-Touch Gesture	CY8CTMG200A	33	5.6	0.4	1.8	32K	2K	I ² C, SPI, UART, USB
Multi-Touch Gesture	CY8CTMG201A	33	5.6	0.4	1.8	16K	2K	I ² C, SPI, UART, USB
Multi-Touch All-Point	CY8CTMA120	37	7.3	0.12	3.0	16K	1K	I ² C, SPI, UART, USB

CONTACT US

CYPRESS HEADQUARTERS

Cypress Semiconductor Corporation

198 Champion Court
San Jose, CA 95134 USA
Tel: +1 (408) 943-2600
Fax: +1 (408) 943-6848
Toll-free: +1 (800) 858-1810 (U.S. only)

www.cypress.com

FOR MORE INFORMATION ON CYPRESS SOLUTIONS:

AUTOMOTIVE

www.cypress.com/go/automotive

CLOCKS AND BUFFERS

www.cypress.com/go/clocks

IMAGE SENSORS

www.cypress.com/go/image

LASER NAVIGATION

www.cypress.com/go/laser

LIGHTING AND POWER CONTROL

www.cypress.com/go/lighting
www.cypress.com/go/control

MEMORIES

www.cypress.com/go/memory

PHYSICAL LAYER DEVICES

www.cypress.com/go/phy

PSOC TECHNOLOGY

www.cypress.com/go/PSoC

CAPSENSE TECHNOLOGY

www.cypress.com/go/CapSense

TRUETOUCH TECHNOLOGY

www.cypress.com/go/TrueTouch

USB CONTROLLERS

www.cypress.com/go/usb

WEST BRIDGE CONTROLLERS

www.cypress.com/go/westbridge

WIRELESS/RF

www.cypress.com/go/wireless

CYPRESS EDUCATION— UNIVERSITY ALLIANCE

www.cypress.com/go/university

ONLINE TECHNICAL SUPPORT

www.cypress.com/go/support

CyPros® CERTIFIED CONSULTANTS

www.cypress.com/go/cypros

CYPRESS ONLINE STORE

www.cypress.com/go/buyonline

THIRD-PARTY USER FORUM

www.PSoCdeveloper.com

ABOUT CYPRESS

Cypress delivers high-performance, mixed-signal, programmable solutions that provide customers with rapid time-to-market and exceptional system value. Cypress offerings include the PSoC Programmable System-on-Chip, USB controllers, general-purpose programmable clocks, and memories. Cypress also offers wired and wireless connectivity solutions ranging from its CyFi Low-Power RF solution, to West Bridge and EZ-USB FX2LP controllers that enhance connectivity and performance in multimedia handsets. Cypress serves numerous markets, including consumer, computation, data communications, automotive and industrial. Cypress trades on the NYSE under the ticker symbol CY. Visit Cypress online at www.cypress.com.