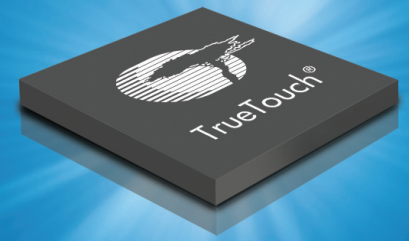


CYPRESS

# TOUCH THE WORLD WITH GEN2

GREAT PERFORMANCE WITH OPTIMIZED COST



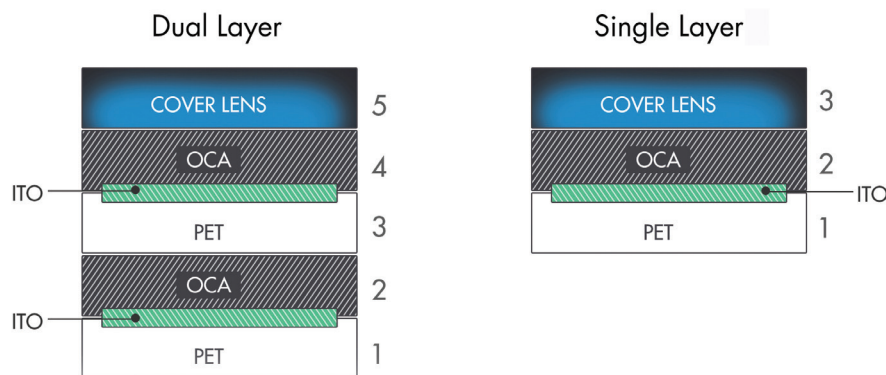
## PRODUCT OVERVIEW

### OVERVIEW

TrueTouch® Gen2 touchscreen controllers from Cypress are cost-efficient, reliable, and versatile for your design needs. Gen2 supports one and two-finger touches with gestures, making it an excellent replacement for resistive touch sensors or mechanical buttons. This part family supports screen sizes up to 3.6" and enables great performance on thin stack-ups. Gen2 also provides the best low-power consumption to maximize battery life, and is available in the industry's smallest packages, saving space in compact designs.

### SLASH THICKNESS AND COST WITH SINGLE-LAYER SENSORS

Device manufacturers can lower system costs by pairing Gen2 with Cypress's Backgammon single-layer sensor. This sensor uses a patented ITO pattern (US Patent No. 8,121,283) that places all sensor intersections on one layer, without overlapping connections or bridges. This saves additional materials cost and lowers the overall height of the stackup, allowing sleeker designs. Backgammon is designed specifically to work with the Gen2 product line, delivering high performance with two-finger touch and gestures at the lowest system cost.



Cypress's Backgammon single-layer sensor trims stack-up height by 50 percent, and minimizes material cost for a high-performance, low-cost solution.

### GEN2 FEATURES

- **Best-in-Class Accuracy and Linearity**, proven in production
- **Lowest Power Consumption** maximizes battery life with 3.6 mW active power and 100 nA deep sleep current
- **Flawless User Interface Experience** with one or two-finger touch, including gestures like tap, double-tap, pinch, zoom, rotate, and hold
- **Single-Layer Sensor Support** to slash stack-up thickness by 50 percent, enabling thin form factors and reducing overall system cost
- **Smallest Packages Available** at 2.2 x 2.3 x 0.4 mm to easily accommodate small designs





## GEN2 AT YOUR FINGERTIPS

The Gen2 product family is an excellent choice for markets such as feature phones, low-end smartphones, wearables, digital still cameras, and white goods. Gen2's low power consumption, cost efficiency, single-layer sensor support, and small package sizes make it a perfect choice for these types of devices as well as future technological innovations. With this product line, Cypress paves a way for design manufacturers to deliver touch-enabled devices to all parts of the world, especially those markets that must be sensitive to price and reliable performance.

## UNMATCHED TOUCH LEADERSHIP

Cypress is a longtime leader in capacitive touch technology and our unmatched portfolio is the product of years of research, development, and invention. TrueTouch controllers deliver a best-in-class user experience, including the world's best charger noise immunity, low power consumption, and excellent accuracy and multi-finger linearity. Cypress also

offers an array of tools and services to assist manufacturers with touchscreen system design: configurable TrueTouch Host Emulator test software; OS and manufacturing support; and in-house experts to get you to market faster. TrueTouch was the first to introduce features like passive stylus and hover functionality to the capacitive touchscreen market with our patented DualSense™ self + mutual capacitance sensing (US Patent Nos. 8,358,142; 8,319,505; and 8,067,948), and we continue to develop innovative new solutions. We also lead all other touchscreen controller manufacturers in IP, with over 300 touch-related patents granted or pending.

## GEN2 PART INFORMATION

Family	Solution	Max Sensor Inputs	Max Screen Size (in.)	Max Fingers Supported	Single Layer Sensor	Packages
Gen2	CY8CTST241	32	3.6	1	Backgammon	32, 48 QFN 30 CSP
	CY8CTST242	32	3.6	2	Backgammon	32, 48 QFN 30 CSP
	CY8CTMG240	32	4.3	2	N	32, 48 QFN 30 CSP

## GET STARTED NOW

Start designing with TrueTouch today! Cypress offers a TST242-based evaluation kit with a 3.5" single-layer (Backgammon) touch sensor. The kit also contains the necessary design files, documentation, and software to get you running quickly. For more information or to request a kit, please email us at [truetouch@cypress.com](mailto:truetouch@cypress.com) or visit [touch.cypress.com](http://touch.cypress.com).

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