

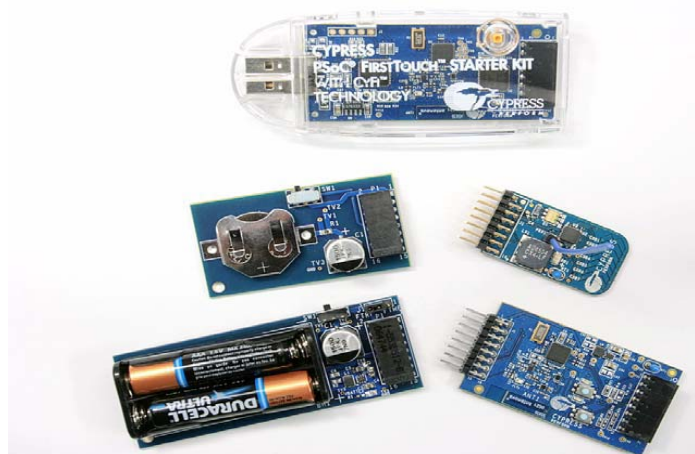


## Cypress - CY3271 - PSoC First Touch Starter Kit

The CY3271 is designed to quickly evaluate the flexibility, integration, and mixed signal capabilities of Cypress Programmable System-on-Chip (PSoC). This evaluation is aided by wide variety of sample projects.

You can use the sample projects to explore:

- PSoC's programmable analog and digital blocks to interface to common sensors (such as thermistors) and actuators (such as LEDs). In addition, you can also create common serial interfaces (for example, SPI and I2C)
- PSoC Designer Integrated Development Environment (IDE) to create embedded designs using two methods: traditional chip-level designs that involve writing code, and code free system level designs.
- Cypress 2.4 GHz CyFi Low-Power RF technology to easily add reliable, simple, and power efficient wireless connectivity to your embedded designs.



### Kit Contents:

- One PC dongle with RF
- One RF expansion card with power amplification for long-range applications
- One multifunction expansion card
- Two battery packs (2xAAA and CR2032)

### Key Features:

#### PC Bridge (FTPC)

- Program all PSoC devices in the CY3271 kit
- Act as a bridge between all boards in the CY3271 system and the PC, using a USB-to-I2C interface
- Feature a CyFi low-power RF transceiver (with RF output power up to +20 dBm). When this is combined with an onboard PSoC, it acts as the Hub in CyFi wireless networks.

## RF Expansion Card (FTRF)

The RF Expansion Card (FTRF) features a PSoC device and a CyFi transceiver (with RF output power up to +20 dBm). FTRF serves the following functions:

- Combined with one of the power packs, it can act as a standalone CyFi wireless node with an onboard thermistor for temperature measurements.
- With its female expansion header, it can be used as a CyFi low-power RF module to add wireless connectivity to boards that are connected to it. For example, connecting the MultiFunction Expansion Card (FTMF) into the FTRF Card enables you to wirelessly transmit the values of the sensors on FTMF to the PC.
- Its male interface header features an I2C interface and unused GPIOs. This enables you to use

## Multifunction Expansion Card (FTMF)

The Multifunction Expansion Card (FTMF) features a PSoC device, and several sensors and actuators that enable easy experimentation:

- 7-element CapSense slider
- CapSense proximity sensor
- Thermistor
- Ambient light level sensor
- Red or green or blue triple LED cluster
- Speaker

The FTMF interface header also features an I2C interface and four unused GPIOs for prototyping in your own system.

## AAA Power Pack (AAA)

The AAA Power Pack houses 2 AAA batteries, and can be used to power either the FTRF, FTMF, or both of them in series.

## CR2032 Power Pack (CR2032)

The CR2032 Power Pack houses a CR2032 coin cell battery, and can be used to power the FTRF for ultra low-power wireless applications.

## Ordering Information:

### Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
CY3271	Cypress Semiconductor	1672996	15P8162

## Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
CY3271-EXP1	Cypress Semiconductor	Environmental Sensing Kit for CY3271	1672997	15P8163
CY3271-RFBOARD	Cypress Semiconductor	RF Expansion Kit for CY3271	1693297	45P6339

## Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
CY3653	Cypress Semiconductor	Wireless USB PSoC Development Kit	PSoC	1761192	19M6278
1322XDSK-DBG	Cypress Semiconductor	1322x Developers Starter Kit	MC13224V	1693479	09P7847
AMB2560	Amber Wireless	Wireless 2.4 GHz USB Stick		1642369	12P7179
ATA2270-E K1	Atmel	RFID APPLICATION KIT 125KHZ	U2270B, TK5530, TK5551	1551852	94M6248

## Document List:

## Datasheets:

Part Number	Description	Size
CY3271	<a href="#">PSoC FirstTouch Starter Kit with CyFi Low-Power RF</a>	2.87 MB

## Application Notes:

File Name	Size
<a href="#">Guidelines for Evaluating WirelessUSB(TM) RF System - AN5028</a>	100 KB
<a href="#">PSoC Designer(TM) Device Selection Guide - AN2209</a>	744 KB
<a href="#">Implementing Ambient Light Sensing using PSoC® and Analog Ambient Light Sensors - AN52491</a>	426 KB
<a href="#">Sensing - A Thermistor-Based Thermometer, PSoC Style - AN2017</a>	107 KB

## Other Resources:

File Name	Size
<a href="#">Rapid Intro to CyFi</a>	-
<a href="#">CY3271 Kit Guide.</a>	2MB

