Cypress Semiconductor - CY3218-CAPEXP3 CapSense Express(TM) Kit

Product Overview:

The CY3218-CAPEXP3 CapSense Express evaluation kit enables designers to replace mechanical buttons by implementing touch sensing designs in minutes with the newest CapSense Touch Sensing Family, CapSense Express. With Cypress's PSoC Express(TM) visual embedded system design tool and CapSense Express configuration tool, designers configure, monitor, and tune up to 4 I/Os for buttons, LEDs, and other general purpose I/Os over I2C in a real time using a graphical user interface.

The evaluation kit showcases the 8-Pin SOIC CY8C20142-SX2I CapSense Express device providing the following interfaces:

2 CapSense buttons with Monitoring and Tuning for Sensitivity Adjustments

2 status LEDs.

Kit Contents:

The CY3218-CAPEXP3 CapSense Express Evaluation Board contains the hardware essentials you will need to use the Kit. The items in the Evaluation Kit and their use are as follows.

- CY3218-CAPEXP3 CapSense Express Evaluation Board
- CY3240-I2USB Board
- USB Retractable Cable
- Kit Installation CD (includes PSoC Programmer, .NET Framework 2.0, PSoC Express, CapSense Express Extension Pack, and CapSense Express Documentation)
- AAA Battery

Key Features:

- 2 CapSense Buttons
- 2 Status LEDs (Green)
- 1 Power LED (Red)
- I2C Header (on Bottom)
- AAA Battery Holder (on Bottom)

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
CY3218-CAPEXP3	Cypress Semiconductor	1601049	11N4462

Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
ZX40-B-5S-1000-STDA	HRS (HIROSE)	USB 2.0 Cable Assembly	NA	59M3734
TPS61200DRCTG4	TI	Low Input Voltage Synchronous Boost Converter with 1.3-A Switches	1366268	62M0742

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
CY3218-CAPEXP1	Cypress Semiconductor	CapSense Express Evaluation Kit	CY8C20142	1743615	10R6852
CY3218-CAPEXP2	Cypress Semiconductor	CapSense Express Evaluation Kit	CY8C20142	1743613	10R6850
DM164125	Microchip	PICDEM Touch Sense 1 Development Kit	PIC16F677, PIC16F887	1547488	78M5155
STEVAL-IFP004V1	ST	STEVAL-IFP004V1 Digital input termination PCLT2	PCLT2	1694057	45P5437

CAPTOUCHSENSESK	Silicon Labs	Capacitive Touch Sense Starter Kit	C8051F931	1558938	94M6556
KITMPR03XEVM	Freescale	KITPROXIMITYEVM Evaluation Kit	MPR03X	1692726	26R2784

Document List:

Datasheets:

Part Number	Description	Size
CY8C20142	CapSense Express™ Controller - 4 Configurable IOs	341KB
TPS61200	Low Input Voltage Synchronous Boost Converter with 1.3-A Switches	1.21MB

Application Notes:

File Name	Size
AN2292 Capacitance Sensing Layout Guidelines for PSoC CapSense	467KB
AN2318 Capacitance Sensing - EMC Design Considerations for PSoC CapSense Applications	157KB
AN2360 Capacitive Sensing - Power and Sleep Considerations	164KB
AN2393 Capacitance Sensing - Migrating from CSR to CSA	316KB
AN2394 CapSense Best Practices	343KB
AN2397 Design Aids - CapSense Data Viewing Tool	113KB
AN2398 Capacitance Sensing - Waterproof Capacitance Sensing	335KB
AN2403 Capacitance Sensing - Signal-to-Noise Ratio Requirement for CapSense Applications	110KB
AN2408 Capacitance Sensing - Migrating from CSR to CSD	496KB
AN14459 CapSense Device and Method Selection Guide	229KB
AN42137 CapSense Express Software Tool	368KB
AN42851 Proximity Detection in the Presence of Metal Objects	508KB
AN44203 Configuring CapSense Express in Production	96KB
AN44208 CapSense Express - I2C Communication Timing Analysis	208KB
AN44209 CapSense Express Power and Sleep Considerations	594KB

Hardware & Software:

File Name	Size
CY3218-CAPEXP3_Schematic.zip	128KB