

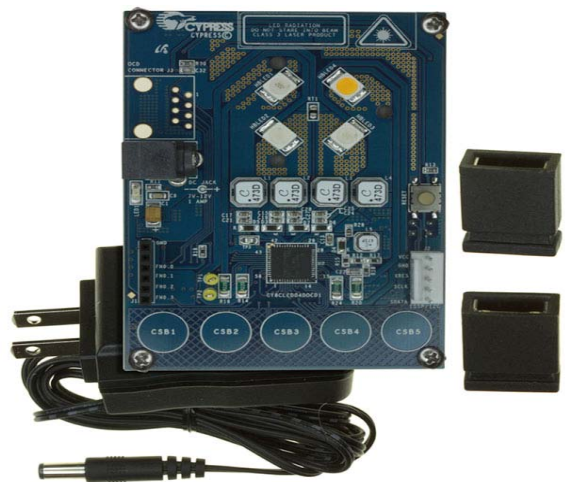


Cypress Semiconductor - CY3268 - CY3268 PowerPSoC Lighting Starter Kit

Product Overview:

The CY3268 PowerPSoC™ Lighting Starter Kit demonstrates the ability of PowerPSoC to create scalable LED management solutions and enables designers to evaluate PowerPSoC. PowerPSoC family of devices features high performance power electronics including 1A, 2 MHz rated power FETs, hysteretic controllers, current sense amplifiers, and PrISM™ technology to create a complete solution for LED power management.

This kit also enables designers to test and evaluate preliminary prototype designs using PowerPSoC and understand the design flow using PSoC Designer™ software for the PowerPSoC device family.



Kit Contents:

Each CY3268 PowerPSoC Lighting Starter Kit contains:

- CY3268 PowerPSoC Board
- 12V, 1A Power Supply
- 2 Jumper Shunts

- Software CD, which includes:
 - PSoC Designer
 - PSoC Programmer
- Kit CD, which includes:
 - Demo Firmware
 - Design Files, and
 - Related Documents

Key Features:

CY3268 PowerPSoC Board Features:

Use the CY3268 PowerPSoC Lighting Starter Kit to understand and evaluate the PowerPSoC Device.

- 4 High Brightness LEDs (300mA rating)
- 5 CapSense™ Buttons
- 1 Power On Indicator LED (Green)
- 1 Reset Switch
- ISSP/I2C Header
- Debug Port

PowerPSoC Features:

- Four low-side 32V n-channel MOSFETs
- Four 32V, 6 MHz current sense amplifiers
- Four 2 MHz hysteretic controllers
- Six fast-response (100 ns) voltage comparators
- Fourteen 8-bit reference DACs
- 32V input voltage regulator
- Adjustable gain on current sense amplifiers
- Buck, boost, or buck-boost options on hysteretic controllers
- Adjustable hysteresis levels

Ordering Information

Products:

| Part Number | Manufacturer | Farnell P/N | Newark P/N |
|-------------|-----------------------|-------------|------------|
| CY3268 | Cypress Semiconductor | 1715139 | 05R8960 |

Associated Products:

| Part Number | Manufacturer | Description | Farnell P/N | Newark P/N |
|---------------------|-----------------------|-------------------|-------------|------------|
| CY8CLED04D01-56LTXI | Cypress Semiconductor | Power PSoC 4CH 1A | NA | 07R8363 |

Similar Products:

| Part Number | Manufacturer | Description | Support Device | Farnell P/N | Newark P/N |
|------------------|-------------------------|--|--------------------------|-------------|------------|
| KITMC33941EVM | Freescale Semiconductor | Evaluation Kit for the MC33941 in Touch Sensing Applications | MC33941 | 1535959 | 30M1269 |
| CY3218-CAPEXP 2 | Cypress Semiconductor | Slider CapSense Express Evaluation Kit | CY8C201A0 | 1601048 | 89M4387 |
| CY3218-CAPEXP 3 | Cypress Semiconductor | Button CapSense Express Evaluation Kit | CY8C20142 | 1601049 | 11N4462 |
| CAPTOUCHSEN SESK | Silicon Labs | Capacitive Touch Sense Starter Kit | C8051F931 | 1558938 | 94M6556 |
| DM183026 | Microchip | mTouch Capacitive Evaluation Kit | PIC16F727, PIC24FJ64GB10 | 1718592 | 08R1525 |
| DM164125 | Microchip | PICDEM Touch Sense 1 Development Kit | PIC16F677, PIC16F887 | 1547488 | 78M5155 |

Document List:

Datasheets:

| Part Number | Description | Size |
|-------------|--|--------|
| CY8CLED04 | 4 Channel Led driver IC | 1.12MB |
| CY3268 | CY3268 Kit documentation | 4MB |

Application Notes:

| File Name | Size |
|--|-------|
| CapSense™ Best Practices - AN2394 | 342KB |
| PCB Guidelines for PowerPSoC as a LED Driver - AN52209 | 387KB |
| PowerPSoC™ Firmware Design Guidelines - AN51012 | 609KB |
| Basic Thermal Guidelines for using PowerPSoC® - AN53781 | 395KB |
| Capacitance Sensing - Layout Guidelines for PSoC CapSense - AN2292 | 453KB |

Hardware & Software:

| File Name | Size |
|--|--------|
| CY3268 Kit documentation – include demo firmware, schematic, design file | 4MB |
| PSoC Designer™ 5.0 Service Pack 5.5 | 243MB |
| PSoC Programmer 3.10 Beta 3 | 5.24MB |