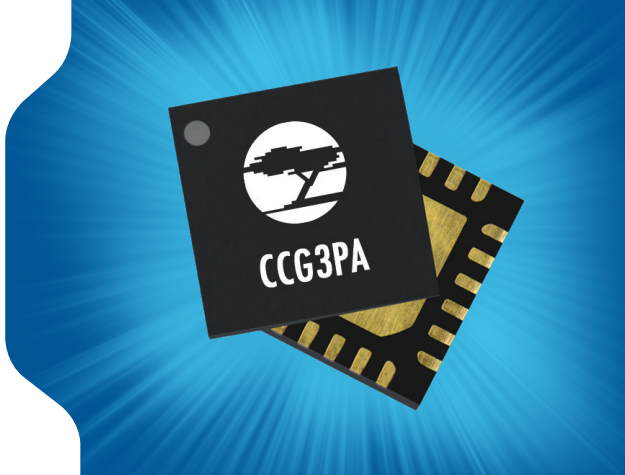


CYPRESS

EZ-PD™ CCG3PA: USB TYPE-C PORT CONTROLLER WITH POWER DELIVERY



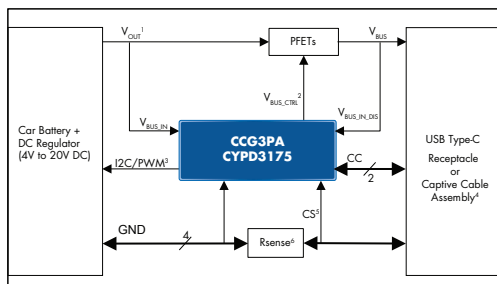
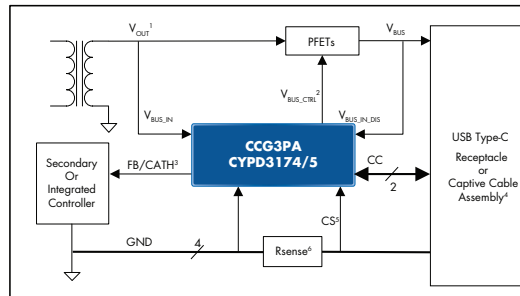
PRODUCT OVERVIEW

INTRODUCTION:

EZ-PD CCG3PA is a single-chip USB Type-C port controller with Power Delivery (PD). CCG3 is ideal for various applications such as power adapters, mobile chargers, car chargers and power banks. CCG3PA is a one-chip solution that integrates VBUS voltage regulation a 30V-tolerant regulator, VBUS to CC short protection, a high-voltage PFET gate driver and ESD protection. CCG3 is a fully programmable solution, that supports Power Delivery 3.0 Programmable Power Supply and Quick Charge 4.0 standards.

Type-C Power Adapter/Mobile Charger

- Integrates 30V-tolerant regulator, including VBUS PFET Gate Drivers, OVP and OCP circuitry
- Integrates voltage regulation and low-side current sense to support PD3.0 PPS and QC4.0
- Integrates VBUS to CC short protection and ESD protection

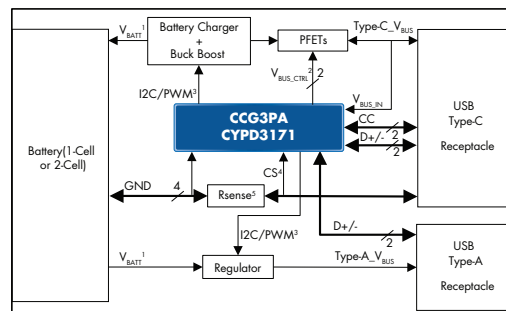


USB Type-C Car Charger

- Integrates 30V-tolerant regulator, including VBUS PFET Gate Drivers, OVP and OCP circuitry
- Supports PWM/I2C/GPIO interface to control VBUS
- Integrates VBUS to CC short protection and ESD protection

Type-C PowerBank

- Integrates VBUS PFET Gate Drivers, OVP and OCP circuitry and low-side current sense
- Supports PWM/I2C/GPIO interface to control VBUS
- Integrates VBUS to CC short protection and ESD protection
- CCG3PA controls USB Type-C and Type-A port, reducing BOM cost for Power Bank



FEATURES

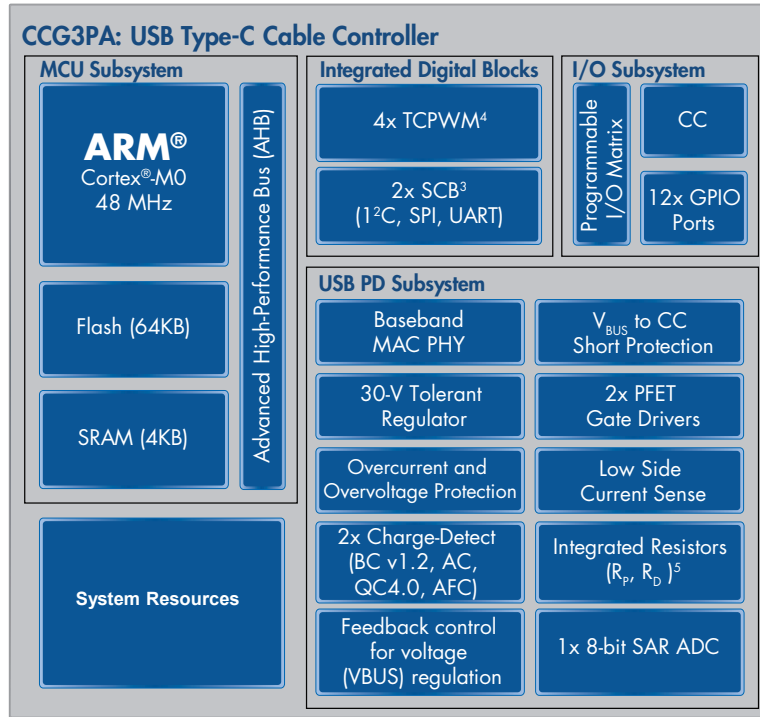
- USB Power Delivery 3.0 PPS
- Qualcomm QC 4.0
- Integrates Voltage Regulation and Current Sense Amplifier
- Integrates 30V-tolerant regulator
- VBUS to CC Short protection
- Integrates VBUS gate drivers
- OVP and OCP
- 64KB Flash Memory
- ESD on VBUS, CC and DP/DM

PACKAGES:

24-pin QFN (16 mm²), 16-pin SOIC (60 mm²)

APPLICATIONS

Mobile Chargers | Power Adapter | Car Chargers | Power Bank



EZ-PD CCG3PA Block Diagram

EZ-PD CCG3PA PORTFOLIO

Part number	Application	Role	Termination Resistor	Pin/Package
CYPD3171-24LQXQ	Power Bank	DRP	R _{pr} , R _D , R _{D-D_B}	24-pin QFN
CYPD3174-16SXQ	Power Adapter	DFP	R _p	16-pin SOIC
CYPD3175-24LQXQ	Mobile Chargers, Car Chargers	DFP	R _p	24-pin QFN

GET STARTED NOW

For more information, please contact ccg3pa@cypress.com or visit www.cypress.com/ccg3pa

Cypress Semiconductor Corporation

198 Champion Court, San Jose CA 95134
 phone +1 408.943.2600
 toll free +1 800.858.1810 (U.S. only)

© 2017 Cypress Semiconductor Corporation. All Rights Reserved. Cypress and Cypress logo are registered trademarks of Cypress Semiconductor Corp. ARM and Cortex are registered trademarks of ARM Limited. All other trademarks are the property of their respective owners.

002-18908 Rev**

