

CYPRESS

# EZ-PD™ CCG4: Two-Port Type-C Port Controller with Power Delivery



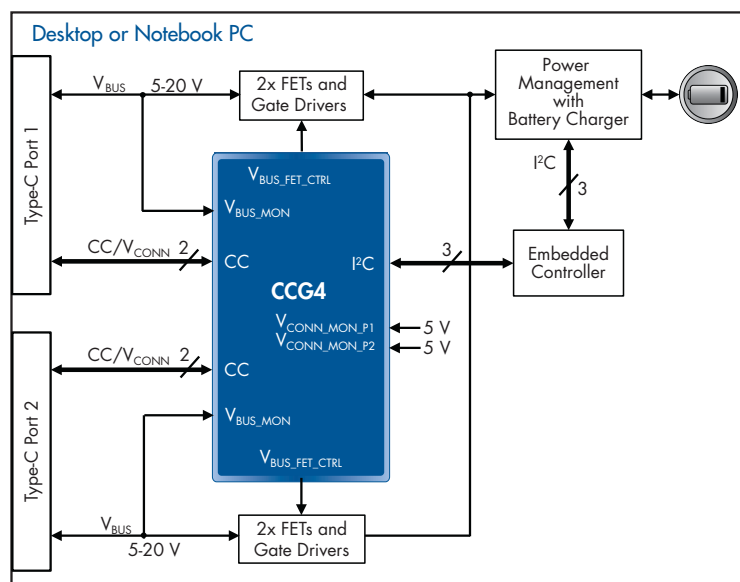
## PRODUCT OVERVIEW

### INTRODUCTION:

EZPD CCG4 is a single-chip two port USB Type-C port controller with Power Delivery (PD). CCG4 is ideal for Notebooks, Desktops and applications that require two Type-C ports, such as Monitors and Docking Stations. CCG4 offers two Type-C ports with integrated  $V_{CONN}$  FETs and 128 KB flash for fail-safe boot up. CCG4 is a fully programmable solution, making it ideal for keeping up with continually changing USB Type-C and PD specifications, including the upcoming PD 3.0 standard.

### TYPE-C DESKTOP OR NOTEBOOK PC

- Provides two Type-C ports with Power Delivery
- Integrated  $V_{CONN}$  FETs for the two ports
- Integrated 128 KB flash for fail-safe boot up and firmware updates
- 4 Serial Interface to connect to Embedded Controller, Muxes, Thunderbolt Controller or Graphical Processing Unit
- Over-Current and Over-Voltage Protection
- 15-kV ESD Protection



Block diagram

### FEATURES

#### TWO TYPE-C PORTS WITH PD

#### FAIL-SAFE BOOT UP AND FIRMWARE UPDATE

#### INTEGRATED $V_{CONN}$ FETS

#### 32-BIT MCU SUBSYSTEM:

- 48-MHz ARM® Cortex® M0 MCU
- 128 KB Flash and 8 KB SRAM
- 4 Serial Interfaces (I<sup>2</sup>C/SPI/UART)

#### POWER:

- Over-Current and Over-Voltage Protection
- 15-kV system level ESD Protection
- Wide operating voltages: 2.7 V – 5.5 V
- Low current: deep sleep – 2.5  $\mu$ A

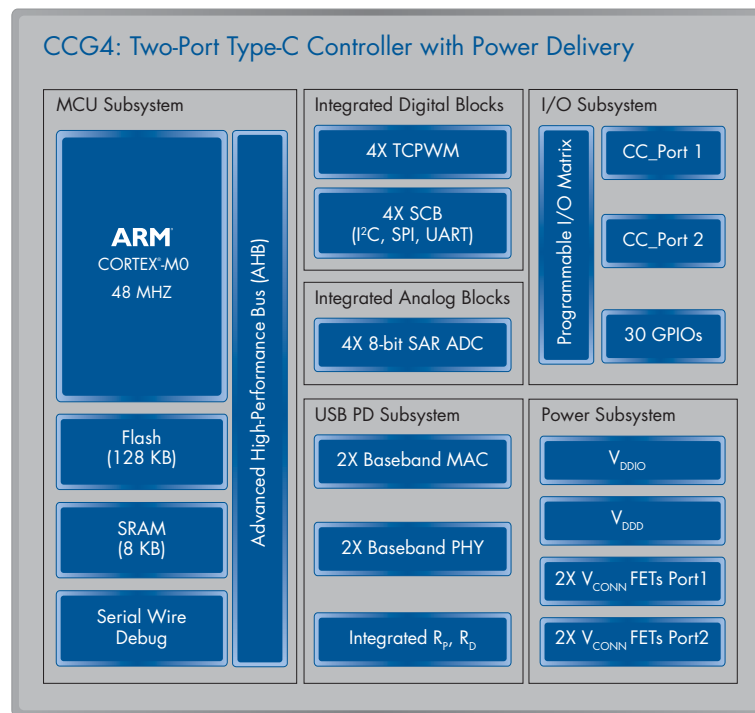
#### PACKAGE:

- 40-QFN



## APPLICATIONS

Desktops | Notebooks | Power Adapter | Monitor/Dock |



EZ-PD CCG4 Block Diagram

## EZ-PD CCG4 PORTFOLIO

Part Number	Application	Number of Type-C Ports	Role	Termination Resistor	Pin/Package
CYPD4225-40LQXIT	Desktops/Notebooks	2	DRP	Rd, Rp	40-QFN
CYPD4235-40LQXIT	Power Adapters	2	DFP	Rp	40-QFN
CYPD4125-40LQXIT	Desktops/Notebooks	1	DRP	Rd, Rp	40-QFN
CYPD4135-40LQXIT	Power Adapters	1	DFP	Rp	40-QFN

## GETTING STARTED

For more information, please contact [ccg4@cypress.com](mailto:ccg4@cypress.com) or visit [www.cypress.com/ccg4](http://www.cypress.com/ccg4)

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