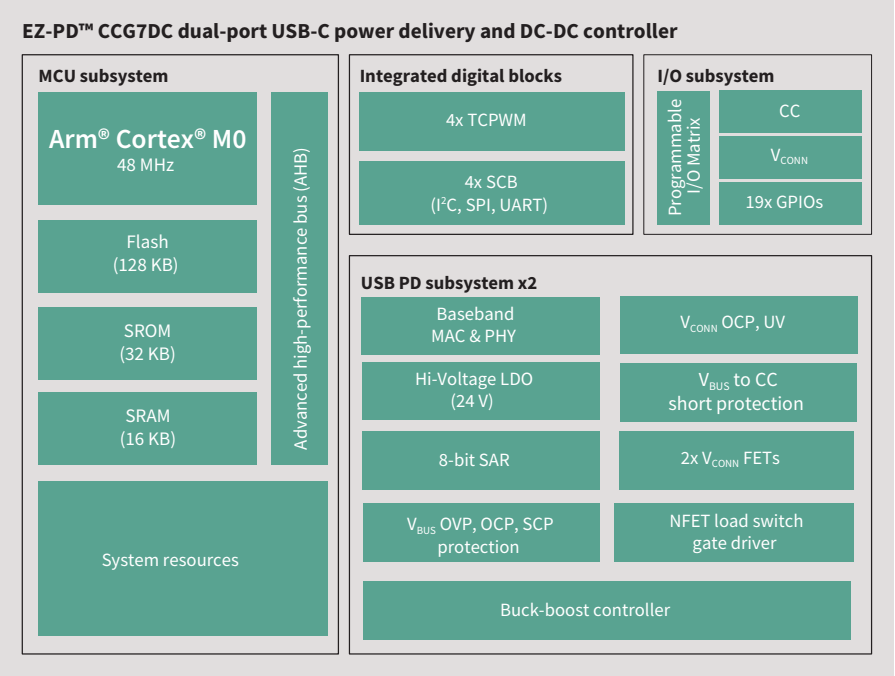
Product brief

EZ-PD™ CCG7DC

Two-port USB-C PD + DC-DC controller

EZ-PD™ CCG7D is a highly integrated dual-port USB Type-C Power Delivery (PD) + Buck-Boost controller. It complies to the latest USB Type-C and PD specifications and is targeted for multi-port consumer charging applications and cigarette lighter adapter (CLA). EZ-PD ™ CCG7D integrates VBUS NFET gate drivers, Buck-Boost NFET gate drivers, VCONN FETs, High Side Current Sense Amplifier (HSCSA) and supports a wide input voltage range (4-24 V, 40 V tolerance).







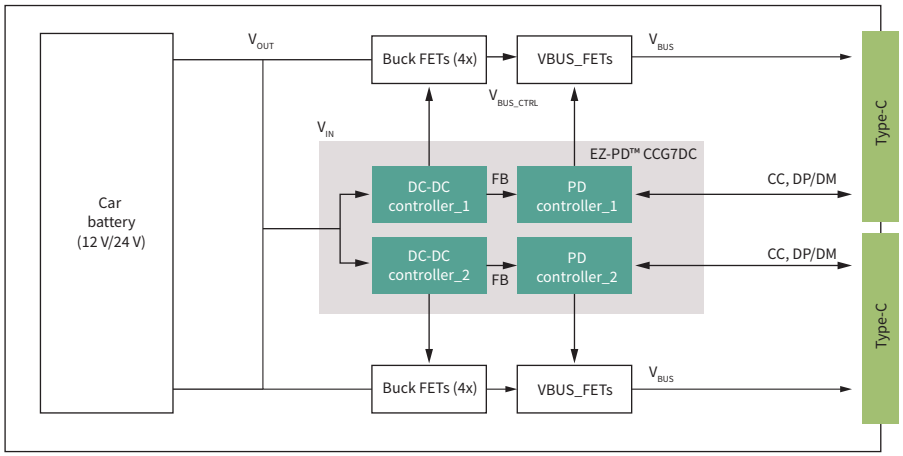
Key features

- Integrates 2 USB-C PD controllers + 2 DC-DC controllers in one single chip
- Charging protocols: supports latest USB-C PD v3.0 with PPS, QC4+, QC4.0, Samsung AFC, Apple 2.4A, BCv1.2
- DC-DC controller: configurable switching frequency of 150kHZ-600kHZ, wide input voltage range of 4-24 V (40 V tolerant) and programmable spread spectrum frequency for low EMI
- Arm® Cortex®-M0 with Flash allows users to implement customer features
- Integrates VBUS NFET gate drivers, buck-boost NFET gate drivers, VCONN FETs and High Side Current Sense Amplifier (HSCSA)
- Protection Features: OVP, UVP, SCP, OCP, OTP and VBUS-CC
- Advanced features: dynamic load sharing, signed field firmware upgrade and optimised buck input voltage
- Package: 68-pin QFN with wettable flank (8mm x 8mm)

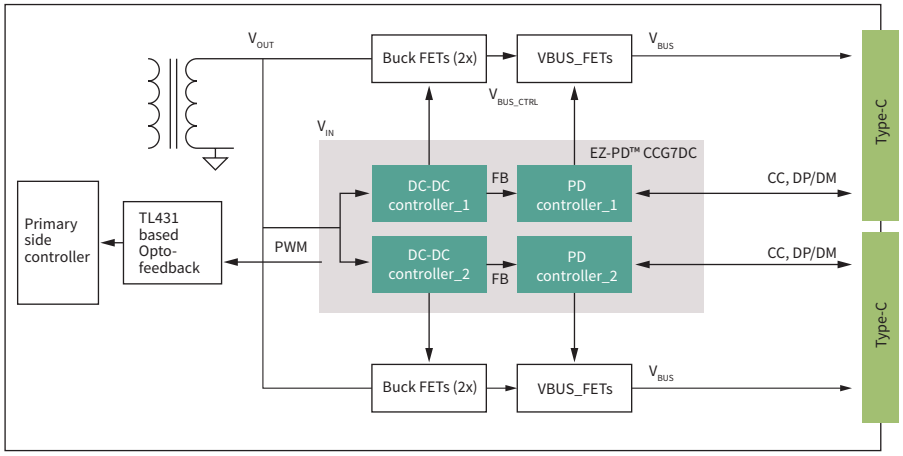
EZ-PD™ CCG7DC

Two-port USB-C PD + DC-DC controller

Two-port USB-C car cigarette lighter adapter (CLA) using EZ-PD™ CCG7DC



Two-port USB-C power adapter using EZ-PD™ CCG7DC



Key features

- Enables high power density designs by integrating 2 DC-DC controllers + 2 USB-C PD controllers in one single chip
- Dynamic load sharing enables intelligent redistribution of power between two ports
- Optimized buck input voltage using TL431 provides optimized efficiency for AC-DC designs
- Supports USB-C PD3.0 with PPS and other legacy protocols including Apple 2. 4A, Samsung AFC, QC4.0, BC1.2 at no additional BOM cost

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