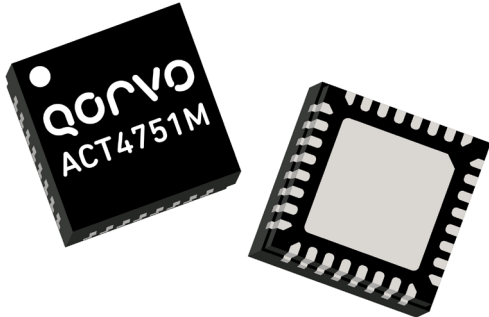


ACT4751 - 40 V USB Fast Charger Power IC

Product Features

- ◆ Certified USB Fast Charger, Reference Designs
- ◆ Qualcomm Certified, Quick Charger 4+ Designs
- ◆ 4.5 to 40 V operational input voltage
- ◆ Programmable output voltage by I2C from 3 to 24V in 12.5mV steps
- ◆ Out of AM radio / spread-spectrum operation
- ◆ 5 V bias, 350 mA buck converter
- ◆ Protections: UVLO, OVP, UVP (Hiccup/Latch-off), OCP, TSD



ACT4751M – Automotive Grade Part

The ACT4751 is available in an AEC-Q100 grade, step-cut, side-wall-plating, 32-pin 5mm x 5mm QFN package with a power optimized footprint and exposed pad for improved thermal performance.

- ◆ AEC-Q100 Grade 1
- ◆ CISPR 25 Class 3

Qorvo's ACT4751 is a programmable DC-to-DC buck converter with bias supply rails for microcontrollers or USB PD controllers. It supports a wide input voltage range from 4.5 to 40 V and uses a synchronous step-down (buck) voltage regulator architecture. It integrates both the high side and low side MOSFETS. These 50 mOhm RDS(on) transistors enable high efficiency to reduce power losses.

ACT4751 is a perfect solution for USB Power Delivery (PD) 3.0 and Programmable Power Supply (PPS) applications. The product integrates a 5 V / 350 mA mini-buck converter and a 20 mA AUX LDO to simplify application system designs. These rails can power up a controller and the 1.5 W VCONN line in active USB-C cables.

Applications

- ◆ USB PD 3.0 Charging Hubs
- ◆ Qualcomm quick charge 4+ / 4, Quick Charge 3.0
- ◆ High power LED lighting

Benefits

- ◆ Ready-to-copy reference designs
 - Evaluation Board: ACT4751EVK1-101
- ◆ All-in-one USB-C charger IC

