Test Report: PMP41169

CISPR 25 Class 5, 400kHz-Rated, 90W Automotive Dual USB Type-C® and USB PD Charger Reference Design

Description

This reference design is a 90W automotive charger for dual USB Type-C® and USB power delivery (PD) with 60W maximum power per port. The TPS25772-Q1 is used as a dual USB Type-C PD controller with a buck-boost regulator. The TPS55x89-Q1 is used as a buck-boost regulator for another port. The board is compliant with the stringent CISPR 25 Class 5 conducted and radiated electromagnetic interference (EMI).

Features

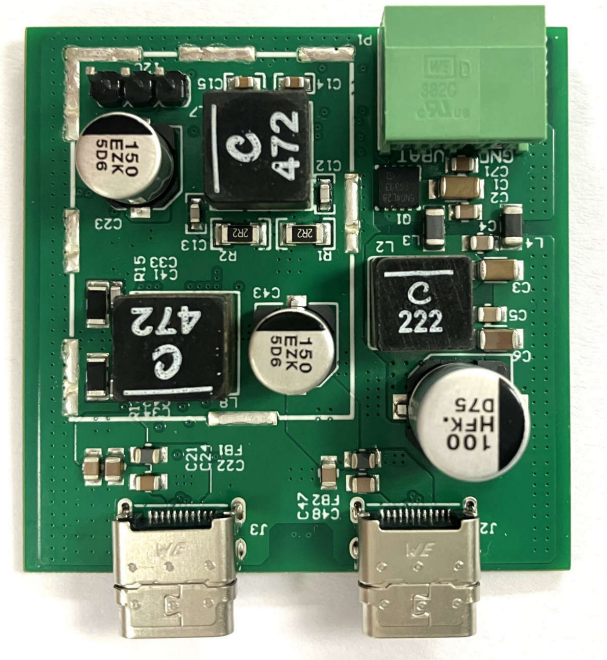
- USB Type-C PD charger with one port maximum 60W, dual port 90W output
- Compliance with the CISPR 25 Class 5 EMI standard
- Cost efficient without common mode inductor
- High efficiency with 96.6% peak efficiency
- Compact form factor: 45mm × 45mm × 10mm

Applications

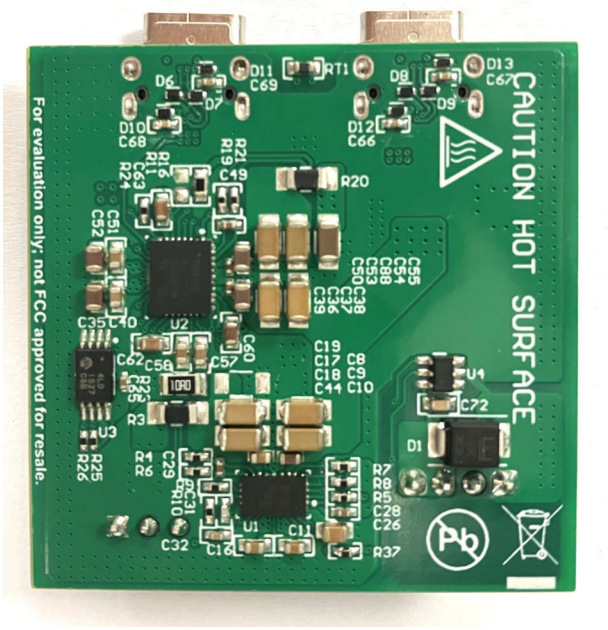
- Automotive USB charging

Resources

PMP41169	Design Folder
TPS25772-Q1	Product Folder
LM74700-Q1	Product Folder



Top of Board



Bottom of Board

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