60W USB-C PD3.0 Charger w/PPS

Innovation

This design demonstrates the potential of a 4-switch synchronous buck boost controller along with a fully compliant USB Type-C r1.4 and PD3.0 adaptive source charging controller.

Value Advantage

This solution is fully autonomous and does not rely on an external MCU. It is fully compliant with the latest PPS standards including v1.2 ECRs.

- ✓ 4.5V-32V input and 5V, 9V, 12V, 15V, 20V output for USB PD applications
- ✓ Four integrated drivers
- ✓ HV protection on the controller

Current Proposition

NCV81599 - USB Power Delivery 4-Switch Buck Boost Controller

FUSB3307 - USB Power Delivery 3.0 Adaptive Source Charging Controller

Roadmap

Future developments include further integration of ON Semiconductor's USB-C PD technology. Other efforts include adding HV and moisture protection to controllers.

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NFC/RF EEPROM

Innovation

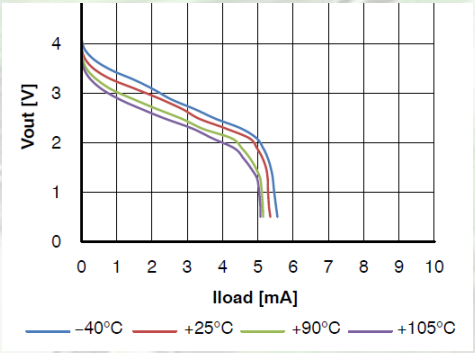
The N24RF04/16/64 Family are RFID/NFC Tags with EEPROM Memory on board

- ISO/IEC 15693 RF Protocol
- Read/writeable EEPROM (EEPROM can be locked/password protected)

Flexibility

- Capable of read/write using RF power, without battery
- Capable of read/write via I^2C (from µC)
- Capable of powering other devices from extra RF power (Energy harvesting option)
- Anti-Collision Support

Energy Harvesting Power Output (field strength 2.4 A/m)



Portfolio

EEPROM Density	Without Energy Harvesting	With Energy Harvesting
4 kb	N24RF04	N24RF04E
16 kb	N24RF16	N24RF16E
64 kb	N24RF64	N24RF64E

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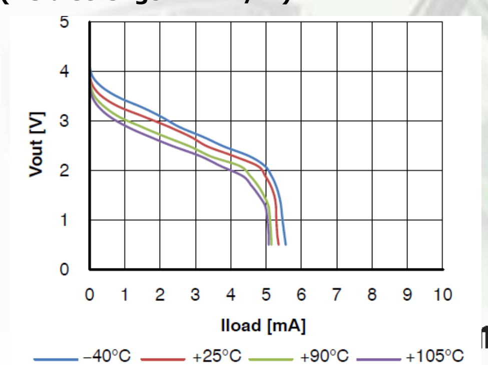

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Other Features