Product Overview

NCV6500: WPC / ®Airfuel-MI Wireless Power Transmitter IC

For complete documentation, see the data sheet.

The NCV6500 is a power management controller designed for wireless battery charging transmitter. It provides the essential building blocks for an inductive based transmitter design which is fully compliant with standards like WPC-Qi or Airfuel-MI. The NCV6500 includes local supply generation, full NMOS H-bridge drivers, on chip clock generation including phase shifting and duty cycle control, demodulation detectors and protection circuitry. In combination with a microcontroller a cost effective medium power transmitter can be built.

Features

- Compliant with the latest Wireless Power Consortium (WPC) specification
- Fully integrated NMOS H-bridge gate drivers
- Scalable power with external NMOS
- On-chip modulation/demodulation circuit for in-band communication
- Over-voltage & over-current protection
- Thermal protection
- Power transfer efficiency > 75%
- AEC-Q100 grade 3 qualified
- I²C serial bus control

Applications

- Automotive
- Consumer Electronics
- Industrial
- Medical

End Products

- In-vehicle Wireless Charging Dock
- Wireless Charging Mats for Portable devices
- Power Tool Charger
- Charging Dock for WiFi / Bluetooth Speaker

Part Electrical Specifications

Product	Pricing ($/Unit)	Compliance	Status	Type	Number of Cells Charged	V_{CC} Min (V)	V_{CC} Max (V)	I_D Max (µA)	Package Type
NCV6500MNTBG		AEC Qualified PPAP Capable Pb-free Halide free	ProductPreview						QFN-48

For more information please contact your local sales support at www.onsemi.com.

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