

NuCurrent Slotted Power Communication DEVELOPMENT KIT

NuCurrent's Slotted Power and Communication development kit is targeted for medium to high power applications that require simultaneous NFC communication and wireless power transmission. The system is designed for OEMs developing both Wireless Power Consortium (WPC) Ki Cordless Kitchen and Medium Power standard applications, but can be applied for systems from kilowatts to milliwatts.

The kit includes a complete set of hardware needed to test and develop slotted power solutions, including boards for both transmitting (Tx) and receiving (Rx) power and data and features a select set of magnetics. Additionally, two tuning PCB's have been included to enable developers to test additional antenna sizes and designs.

Features and Benefits:

- Extensive digital library available for both PC and Embedded platforms
- Capable of 2-4W transmitted and $\geq 1.25W$ received between amplifier and harvester
- uART Data Path
- Typical Applications
 - WPC Kitchen Working Group
 - WPC Medium Power Working Group
- Firmware upgrades via USB 2.0 – no special tools or software required
- Expanded functionality may be available in future revisions
- Services for customization and development available



Fully Assembled Development Kit

NuCurrent Slotted Power Development Kit

Included in Kit	Tx/Rx NFC Communication PCB x2 (Preinstalled) Power Amplifier PCB x1 Power Harvester PCB x1 Receiver Antenna x1 Transmitter Antenna x1 Tuning PCB Assemblies x2 Fixture and Assembly Hardware
Connection Interface	UART 115200 Baud, 8-N-1 UART 460800 Baud 8-N-1 USB Composite Mass Storage (For Firmware Update) *USB CDC, *I2C 400 KHz, *SPI
Operating System	Windows 10 with standard driver (X86_64)
Technical Resources and Documentation	Slotted Power Dev Kit Hardware Manual Software Manual – NFC Slotted Power Desktop Validation Tool (Python Based) Slotted Power Setup Guide
PCB Interface	Programming - MicroUSB UART - 1.27mm pitch pin header
Additional NuCurrent Services	System Design Antenna Design and Simulation Feasibility Studies Software/Firmware Development Certification Support Services

Description	Order Number
NuCurrent Slotted Power and Communication Dev Kit	NC03-S228-EVK-PIB

*Not supported on current version can be made available via firmware update.