



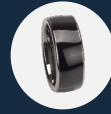
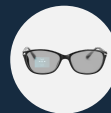
PTX130W: NFC WIRELESS CHARGING IC

Next generation of industry's most efficient NFC transmitter for wireless charging applications

- Industry best output power, harvesting 1W on the listener, enabling fast charging
- Improved on-chip efficiency by 18% compared to previous generation
- Power negotiation for power dissipation optimization
- Data exchange between poller and listener allowing additional functionalities
- Simple antenna structure using standard single layer FPC technology

Applications:

- Stylus
- Smart ring
- Smart glasses
- Wearable devices
- Hearing aid
- Medical sensors



Pantronics 

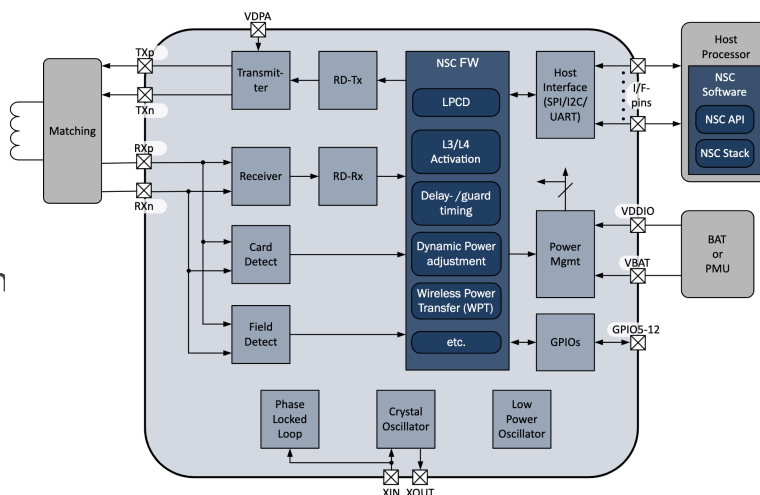
PTX130W

is a new generation of a powerful and efficient NFC controller for NFC wireless charging of battery powered devices. It not only provides wireless charging capabilities, but also serves as a complete NFC reader, complying with all NFC standards.

Pantronics provides turnkey NFC wireless charging solution, combining PTX130W NFC wireless charging poller with NFC wireless charging listener.

Features

- Low Power Detection with 100µA current consumption (2Hz polling)
- On impedance change detection
- Operation according to NFC Forum Wireless charging



Market Requirements

High harvesting power capability

More flexibility in positioning Poller and Listener

Simple integration
Consistent manufacturing:
Same performance across devices

Compliant with international regulations

FW upgrade via NFC

Panthronics Differentiator

Able to harvest up to 1W on the listener
Twice more than best competitor solution

Direct antenna connection with removal of EMI filters enable constant system matching

DiRAC: Direct antenna connection reducing the BoM count and area

NFC WLC is based on NFC, globally adopted standard
PTX architecture rely on patented Sinewave PA (removing EMI filters)

- Data exchange based on globally adopted standard
- Transparent data channel between Poller and Listener based on globally adopted NFC standards.

Customer Benefits

Allows **fast charging** and charging of batteries with higher **capacity**

- More placement flexibility between charger and device antennas
- Allows to **remove bulky magnets**

- **50% less effort for RF matching** and certification of a device
- Less components allow to **assure marginal NFC performance variation** between devices **during production**

- NFC is compliant with international regulation
- Faster time through certification enabled by signal's 3rd harmonics reduction due to PTX NFC architecture

Enabling additional use cases:

- **FW upgrade through NFC** on non BLE/WiFi connected device (either on poller or listener side)
- General data exchange between Poller and Listener

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