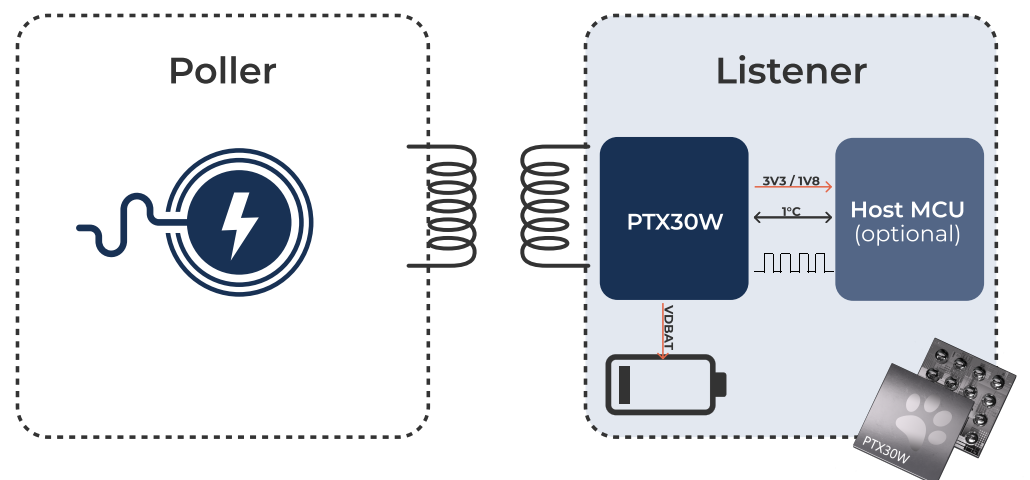




PTX30W: Panthronics groundbreaking, innovative, and fully integrated NFC Wireless Charging Listener chip

- Compact standalone NFC wireless charging listener integrating NFC tag with digital interface, power harvesting, and battery charger
- Fully autonomous listener operation with on-chip power regulation control
- Protocol following NFC Forum wireless charging specifications

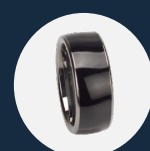
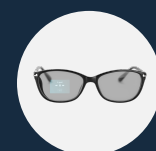


PTX30W is the first ever device to provide fully integrated wireless charging listener solution.

PTX30W targets to provide customers with increased system efficiency and a compact design.

Applications:

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



Requirement	Product feature	Product benefit
BOM reduction	Integrated NFC Tag, active rectifier, limiter, battery charger and dedicated core	All functionalities integrated into 16 pin WL-CSP package 1.78x1.78mm
Standalone operation	Integrated protocol handling	NFC Forum WLC protocol with negotiated mode
Lithium battery charging	Integrated linear battery charger	Charging current from 5mA to 250mA
Overpower protection	Integrated detuning circuit	Prevent dissipation of over power on the IC, by detuning the antenna
Minimized power dissipation	Advanced power regulation	Power regulation algorithm based on battery voltage measurement
Shipping mode	Integrated power down mode	Shipping mode with current consumption < 100nA
Data exchange	Integrated dedicated data exchange buffer	Bidirectional data exchange based on NFC Type A 106kbps
GPIO control	Multifunction GPIOs	Two GPIOs which can be configured for different functions
NDEF message	Type 2 Tag NDEF	NDEF message exchange with a mobile phone