

Semtech's wireless charging expertise, leadership, and versatile feature set ensure design success

Standards

- WPC (Qi®) most well known for inductive standard leading the market on wireless charging for smart phones
- AirFuel Alliance
 - A4WP: known for resonant standard for wireless charging with higher power
 - PMA: inductive based charging standard

Why Semtech?

- Semtech supports multi-standards
- Wireless Power Consortium (WPC) member since 2010
- Major contributor to WPC 65W initiative
- AirFuel board of directors and technical committee leadership
- Major contributor to AirFuel's PMA inductive standard

For more information, visit semtech.com/power-management/wireless-charging-ics/



Wireless Charging Basics



Wireless Charging Transmitters & Receivers

Semtech offers wireless power transmitter and receiver platforms for both direct and indirect charge applications in both standards-compliant and non-compliant systems. Semtech is a member of the Wireless Power Consortium (WPC) and the AirFuel Alliance, and is active in helping shape the future standards for wireless power.

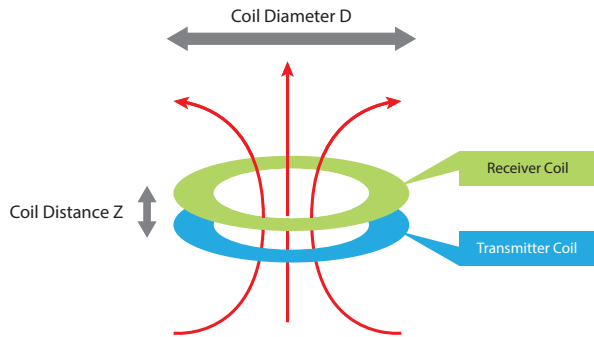
FEATURE	INDUCTION	RESONANCE
Positioning Freedom	Lower	Higher
Efficiency	Higher	Lower
Power to Rx	Higher	Lower
Cost	Low	High
Radiated Emissions	Low	High

LinkCharge® Product Family

PRIMARY TECHNOLOGIES

MAGNETIC INDUCTION (MI)

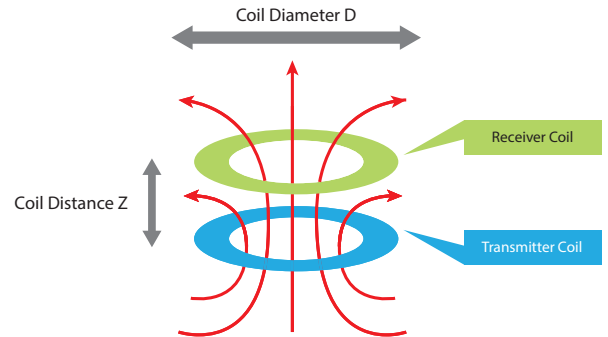
Better efficiency



Tightly coupled coils: Z much smaller than D

MAGNETIC RESONANCE (MR)

Better positioning flexibility



Loosely coupled coils: Z similar to D

LINKCHARGE WIRELESS CHARGING EVM PORTFOLIO



LOW POWER WEARABLE

LinkCharge LP

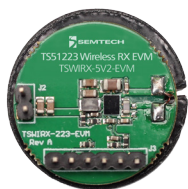
MEDIUM POWER

LinkCharge 5, 10, 15, CT

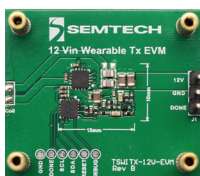
HIGH POWER

LinkCharge 20

TSWIRX-5V2-EVM



TSWITX-12V-EVM



TSDMTX-5V2-EVM



TSDMRX-5V10W-EVM



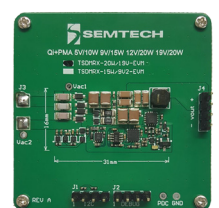
LinkCharge CT



TSDMTX-19V2-EVM



TSDMRX-19V20W-EVM



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