



IDTP9030

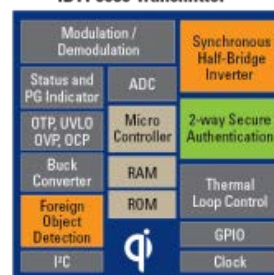
Single-Chip Wireless Power Transmitter

The IDTP9030 is the industry's most integrated wireless power transmitter, reducing solution footprint by 80 percent and bill-of-materials (BOM) cost by 50 percent compared to existing solutions. The Qi certified IDTP9030 also features multi-mode operation, supporting both Qi as well as customer proprietary protocols with dynamic detection and switching between protocols. Value-added proprietary features include advanced multi-layered Foreign Object Detection (FOD) for safety, 2-way secure authentication between base and mobile, and power delivery up to 7.5W for faster charging times.

Features

- True single-chip for wireless power transmitter solutions
- 5W specification, with up to 7.5W power delivery in proprietary mode
- Fully Qi certified
- Multi-mode capable with dynamic switching capability
- Wide operating input voltage 10V to 20V
- Integrated high-efficiency half-bridge inverter
- Proprietary base-to-mobile communication for authentication
- Programmable option for added security and encryption up to 64-bit for 2-way authentication
- Total System Efficiency >73% when used with IDTP9020 Power Receiver IC
 - DC-AC efficiency > 90%
 - DC-DC buck efficiency > 90%
- Proprietary advanced multi-layered foreign object detection(FOD) for safety
- Over-temperature/voltage/current protection
- Compact 6x6-48 TQFN package

IDTP9030 Transmitter



Product Specification

Function	Input Voltage Range (V)	Output Power Max (W)	Advanced Features	Temp. Range	Lead Count (#)	Pkg. Type	Pkg. Dimensions
Power Transmitter	10.00 - 20.00	7.5	Multi-mode, Adv. Foreign Object Detection (FOD), Back-channel Communication, 2-way Authentication	-40 to 85°C	48	VFQFPN	6.0 x 6.0 x 0.75

Product Options

Orderable Part ID	Part Status	Pkg. Code	Pkg. Type	Lead Count (#)	Temp. Grade	Pb (Lead) Free	Order
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P9030-0NTGI8	Active	NTG48	VFQFPN	48	I	Yes
P9030-0NTGI	Active	NTG48	VFQFPN	48	I	Yes

Documents

	Title	Type ▲	Format	File Size	Date
	IDTP9030 Preliminary Datasheet (Short Form)	Datasheet	PDF	700 KB	03/15/2012
	IDT Wireless Power Introduction	Overview	PDF	1.14 MB	03/12/2012
	IDTP9030 Wireless Power Transmitter product brief	Product Brief	PDF	1.02 MB	08/30/2012
	IDT Wireless Power Solution Product Brief	Product Brief	PDF	2.46 MB	05/23/2012

Related Videos





