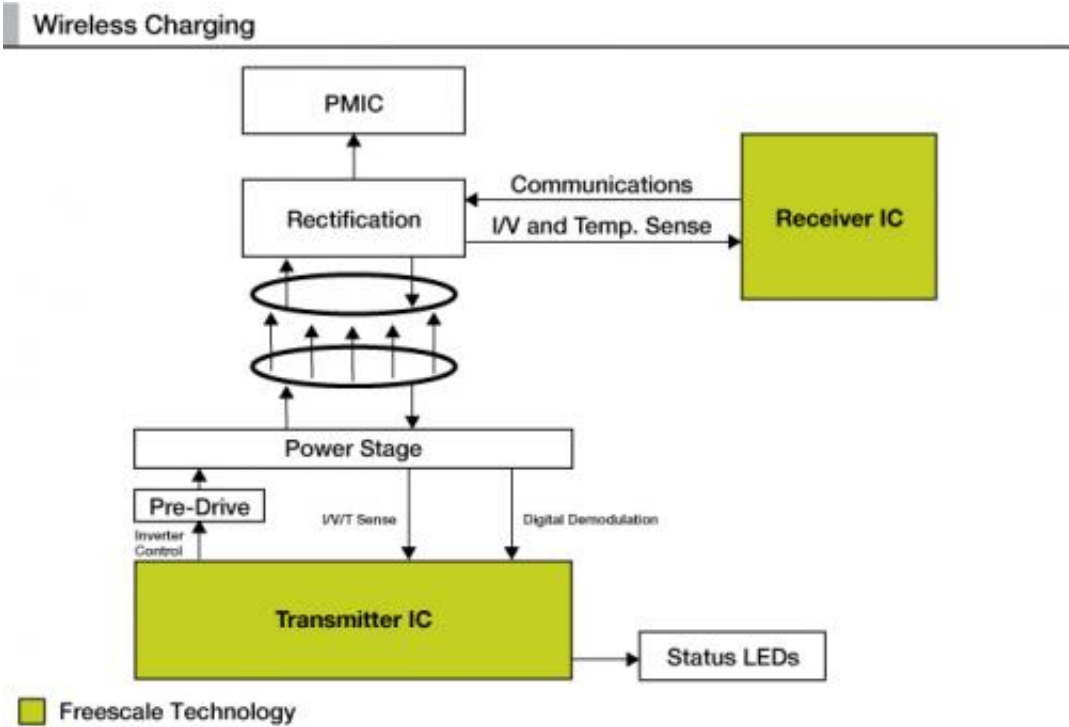


Freescale announces faster wireless charging solution

December 9 2014, by Nancy Owano



Credit: Freescale

Texas-based Freescale Semiconductor announced Monday that it has a solution, available early next year, for faster charging than traditional USB and other popular wired technologies, and it can support charging for big-screen phones, tablets, handheld medical devices and industrial equipment. Ars Technica pointed out that today's Qi charging pads still only put out 5W, the same as a slow wired charger but Freescale's new

entrant, available next year, will deliver a change with a solution that Ars Technica's Ron Amadeo, reviews editor, [said](#) "should be just as fast as a hardwired turbo charger."

A standout feature in the [wireless charging](#) system is that it can deliver efficient [charging](#) of larger form factor devices with higher capacity batteries while enabling faster charging of smaller form factor devices by delivering higher power. They call it the industry's first 15 W Qi-compliant wireless charging solution (three times the power of common 5 W charging solutions). "Today's mobile products offer a broader range of features, functionality and form factors," said Denis Cabrol, global marketing director for the company's MCU group, and in turn developers of wireless charging systems are required to accommodate larger batteries and enable faster recharge speeds. The company engineered the 15 W solution to address these market requirements and unleash design creativity. A tablet with 4000 mAh battery might take over eight hours to charge from a standard USB port. Freescale's solution cuts the time to a few hours.

In an email to Venture Beat, Jim McGregor, analyst at Tirias Research, noted there is only so much power smaller devices can accept based on the receiving coil and thermal limitations on the battery. Nonetheless, he added, Freescale's solution offers a benefit in supporting "two-way communication for more intelligent charging and higher power levels for a [wider](#) range of mobile devices."

This targeted solution includes two 15 W ICs: the WPR1516 receiver chip and accompanying MWCT1012 transmitter chip.

What this means for developers: They can use available corresponding firmware libraries that give them the core functionality required to implement state-of-the-art wireless charging systems. The solution includes an advanced application programming interface that can be

used to modify or adjust library functionality. That would allow for adding custom application code and a tailored end product. The company is promoting its extensive development support as well in this announcement: "Freescale's newest total system solution includes a production-ready reference design and evaluation boards for optimized performance and fast time to market. To support the WPR1516 receiver IC, Freescale provides two evaluation board options for different output power topologies, WPR1500-LDO and WPR1500-BUCK. The MWCT1012 transmit controller IC is supported with the WCT-15W1COILTX reference design."

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