



Broadband Data Link for WPC and PMA



Power Transfer Systems

Product Design Study CCE7300

CREATIVECHIPS®

M I C R O E L E C T R O N I C S



System Features

Power transmission according to Wireless Power Consortium (WPC) and Power Matters Alliance (PMA) standards.

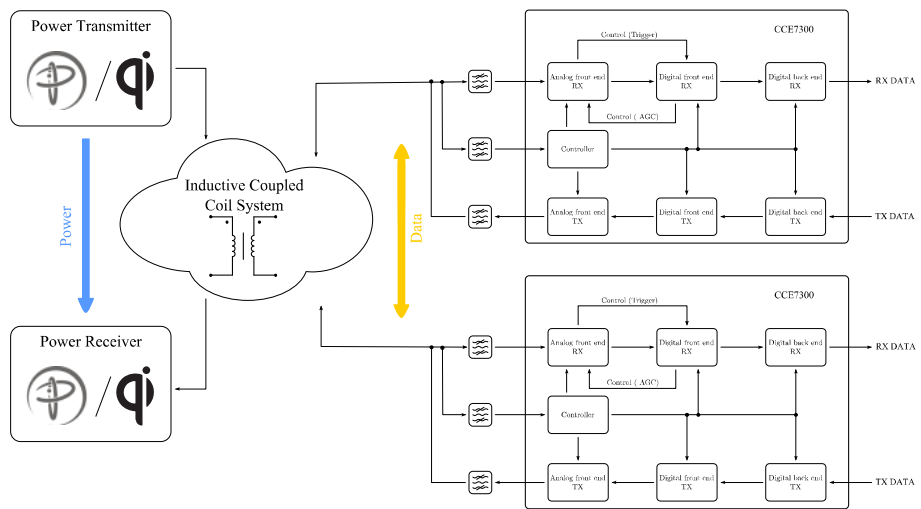
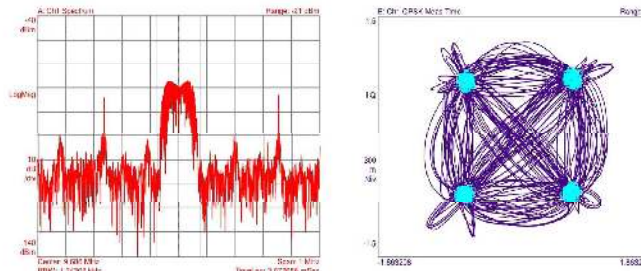
- Dual mode operation supported

Broadband data communication link according to a software defined radio, direct sampling approach including:

- Data / energy decoupling mechanism
- Interference cancellation
- Automatic gain adjustment
- Carrier / timing synchronization
- Channel equalization

System Verification Results

Demonstrator setup confirms a robust data transmission of up to 10Mbit/s over the inductive coupled coil system in parallel to WPC or PMA power transmission.



Applications

- Mobile devices (smartphone, touchpad, etc.)
- Cordless kitchen appliances
- Car connectivity
- Home cinema
- Military
- Power tools
- Aerospace (intelligent tray table)
- Lifestyle (wearable technology)
- Medical (implant charging / data extraction)



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