



UMTS TD-CDMA Module and Reference Design

Create new user devices for UMTS TD-CDMA networks with IPWireless-developed modules and reference designs for RF and air-interface.

The IPWireless UMTS TD-CDMA modem module and reference designs allow third party developers to create new user devices to address the rapidly growing UMTS TD-CDMA market. The module provides a low capital expenditure market entry for handsets and other mobile, portable, or stationary consumer devices, which allows developers to focus their innovation and creativity on the areas that affect subscribers most: the user interface, applications and product design. IPWireless has developed the module by combining its own advanced TD-CDMA ASICs and signal processing software with state-of-the-art RF chipsets from IPWireless partners. The module combines baseband, CPU processing, RF and power management functions.

- > Small and low power, essential for battery operated products
- > 4th generation ASIC design with the IPWireless System on a Chip 2 (SoC2)
- > Includes IPWireless-designed power management ASIC
- > Proven in IPWireless-developed UMTS TD-CDMA handset prototype
- > Available in multiple frequency bands between 1.9GHz and 3.6GHz
- > Fully supported with development board and documentation
- > Module can be customized for form factor to suit individual applications

Key Features:

Mobility

- > Fully proven modem design with low power ASIC design
- > Supports full handover within the coverage area, even moving at vehicular speeds, for truly mobile products

Broadband

- > Supports peak data rates of up to 3Mbps downlink and 1Mbps uplink

Applications

Suitable for both mobile and portable devices including:

- > Mobile handsets
- > PCMCIA cards and Mini-PCI Express card modems for use with laptop computers and Internet Gateway products
- > Compact Flash and SD Card format modems for use with handheld computing devices, digital cameras, e.g.
- > Embedded in other consumer devices that would benefit from mobile

Support

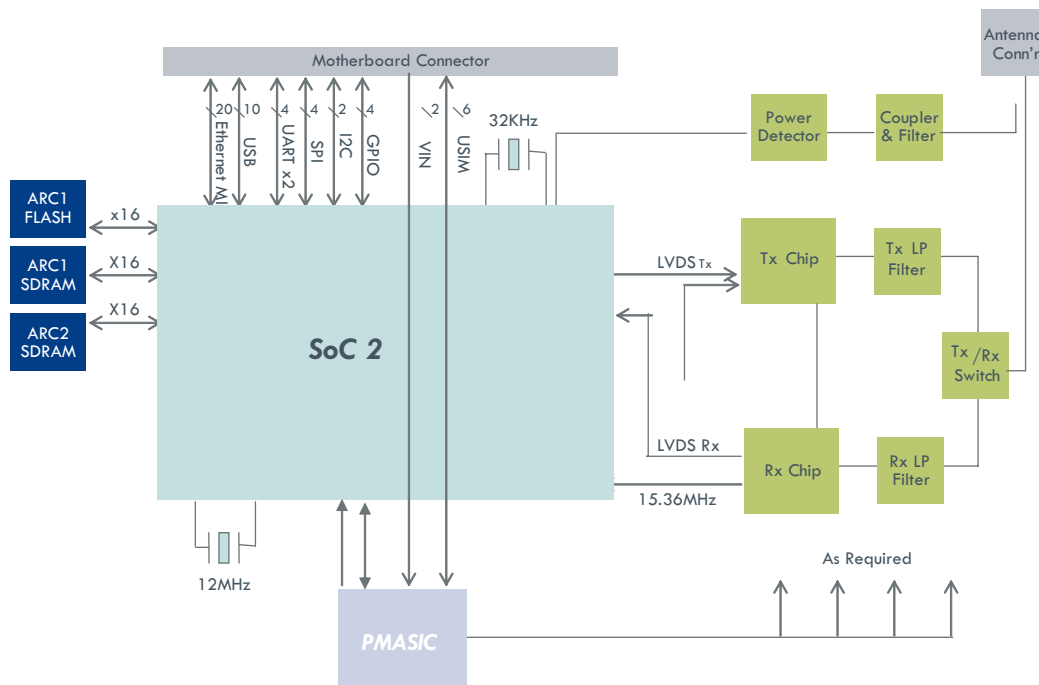
- > Access to IPWireless technology through license agreement
- > Module supplied complete with development kit of module, developer's board, software and documentation
- > On-line and telephone support
- > Support for device type approval



TD-CDMA Chipset Specifications

Operating Frequencies	1900, 2010 or 2500 MHz bands in paired and non-paired frequency configurations	
TDD Transmitter Power	+24 dBm (+1/-3dB) up to 2.68GHz	
TDD AWGN Receiver Sensitivity	-110dBm (+/- 2dB) / code for 7.68Mcps, TFCS1 Cell Edge Flag 2 - measured as per code power	
Baseband ASIC	IPWireless SoC2, to 3GPP	
Power Supply	2.8 to 5 volts at 1 Amp peak	
Size	Less than 60 cc	
Weight	Less than 30 grams	
Operating Temperature Range	Normal Operation: +15°C to +35°C Extreme: -10°C to +55°C , degraded performance near limits Storage: -20°C to +65°C	
Relative Humidity	Operating: 25% to 75% (non-condensing)	
Interface	USB PHY PCMCIA/CF Ethernet MII UART and USIM	USB v1.1 SDIO Bluetooth 1.2 Enhanced Data Rate client

TDD Module Architecture:



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