

RT3350

802.11n Wireless Router-on-a-Chip

Single-Chip Router Solution Offer Five Times Greater Throughput than Legacy 802.11b/g with Lower Cost, Smaller Footprint, and Lower Power Consumption



- 1x1 802.11n all-in-one router-on-a-chip with RF front-end module integrated
- Intelligent NIC (iNIC) design available providing existing wireless LAN platforms an easy upgrade path to 802.11n

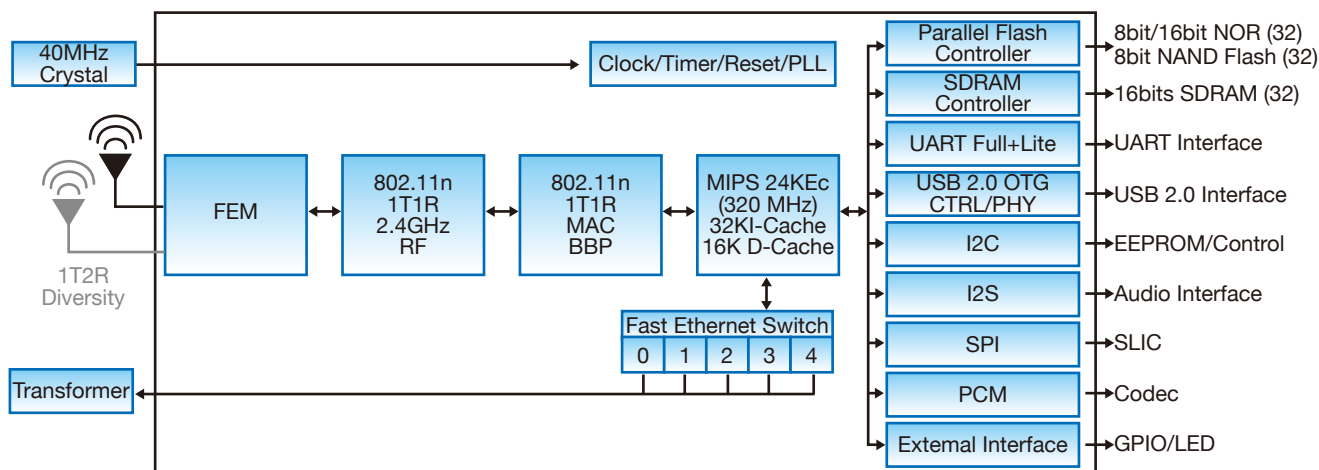
Overview

The RT3350 router-on-a-chip includes an 802.11n media access controller (MAC) and baseband, a 2.4GHz radio, a 320 MHz MIPS® 24K™ CPU core, a 5-port Fast Ethernet switch and physical layer devices (PHYs), various options for system memory, and a high-performance power amplifier which outperforms competitor's solutions that use external power amplifiers. The RT3350 requires fewer and less expensive external components than competitor solutions, and includes everything needed to build a router from a single WLAN chip. The RT3350 is also available with interfaces capable of incorporating a 3.5G modem, or to function as a print server.

Features

- Embedded MIPS24KEc (320 MHz) with 32K I-Cache and 16K D-Cache
- 16-bit SDRAM DRAM up to 32 Mbytes
- NOR/NAND Parallel Flash
- SPI Flash
- USB OTG
- I2C, I2S, SPI, PCM
- UART Full + Lite
- Hardware NAT, QoS, TCP/UDP/IP checksum offloading
- 1T1R 2.4 GHz with 150Mbps PHY data rate
- Tx Power: 14dBm Rx Sensitivity: -76 dBm@54Mbps
- 20/40 MHz channel bandwidth
- Legacy 802.11b/g and High Throughput 802.11n modes
- L-SIG TXOP
- Reverse Data Grant (RDG)
- Maximal Ratio Combining (MRC)
- 16 Multiple BSSID
- Security: WEP-64/WEP-128/TKIP/AES/WPA/WPA2/WAPI
- QoS: WMM/WMM-PS
- WPS (WiFi Protected Setup) PBC, PIN
- Voice Enterprise : 802.11k+r
- Mesh Network: 802.11s
- AP Firmware: Linux 2.6 SDK, VxWorks 5.5 bsp
- iNIC Driver: Linux 2.4/2.6

Block Diagram



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