



ATBM603X Series

IEEE 802.11b/g/n 1T1R Wireless Network Controller

Product Brief

Catalogue

Part Number	Feature	Interface
ATBM6031	HT20&HT40	SDIO
ATBM6032	HT20&HT40	USB

Generic features and interfaces

- Include Wi-Fi protocol accelerator, USB or SDIO device interface, low power MCU, peripheral interface and Power-Management Subsystem
- WLAN MAC, a 1T1R capable WLAN baseband, and WLAN RF in a single chip
- Integrated PA, LNA, Balun and T/R switch to maximum reduce BOM cost
- Integrated LDO on chip to simplify power source and reduce BOM cost, only 3.3V power is needed
- Support STA and AP function
- Support BSS, P2P and Miracast function
- Compatible with 802.11 b/g/e/i/n/w specifications
- Compatible with 802.11n Legacy mode, mix mode and green field mode
- Support A-MPDU transmit and receive for throughput improvement
- Support A-MSDU reception
- Support STBC stream reception
- Support Short-GI of 802.11n
- Support both 20MHz and 40MHz bandwidth

- PS-Poll and U-APSD Power Save mechanism at BSS
- Efficient IQ-imbalance, DC offset, phase noise, frequency offset, and timing offset compensations are provided for radio frequency front-end
- Hardware Crypto Engine for Advanced Fast Security, Including WEP, TKIP, AES and 802.11w
- USB interface speed up to 480Mbps for ATBM6032 (USB1.0/1.1/2.0 compliant)
- SDIO 2.0 compliant for ATBM6031
- 32bit CPU core speed up to 160MHz
- I2C master/slave, UART, SPI master/slave, PWM and GPIO interface
- Support 24.0MHz (default) and 40.0MHz crystal with internal oscillator
- 32.768kHz on-chip crystal

Technology

- Power supply: 3.3V only power supply
- Package: 28pin 4x4 QFN

Application

- Digital TV set, Set-Top-Box
- Tablet PC, PAD
- IP Camera
- Wi-Fi Module
- USB Wi-Fi dongle

