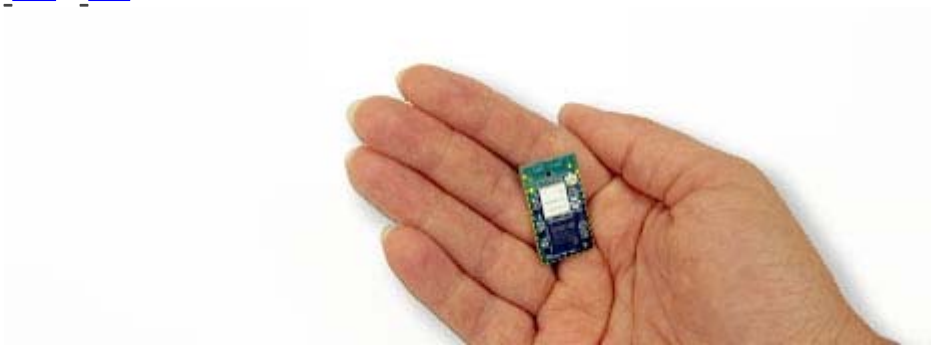

RTX4100-IN

Item no. RTX4100-IN

The RTX4100-IN is a small form factor, single stream, 802.11 b/g/n Wi-Fi module with an on-board low power application processor. The Module can be integrated into devices and application run directly on the 32 bit MCU core. The RTX4100-IN includes a built-in antenna.

The RTX4100-IN Wi-Fi Module enables rapid development of sensors for smart energy, security and automation demonstrators through extensive SW support. The RTX41xx Wi-Fi Module targets a
wide range of application areas including:

- Sensors and multi-input sensors (Industrial / Medical)
- White Goods and Appliances
- Building Automation
- Home Automation / Home Security
- Larger applications (including MMI)
- Actuators
- Portable Units

Key Features:

- Ultra Low Power Wi-Fi (802.11 b/g/n)
  - 5-600uA typical values (depending on QoS)
  - Less than 4µA with OS running in low energy mode
- Very fast sleep to wake-up
- FCC/IC/CE Certified
- Antenna on-board
- Host is on-board (no drivers needed)
  - Memory space for embedded user applications
- Software Support
  - Full BSP options including RTOS and drivers
  - Full IPv4 and IPv6 stack
  - WEP, WPA, WPA2, WPS support
  - Reference applications: Web server, TCP/UDP Server/Client etc.
  - Libraries for easy connection to internet and cloud services
  - RTX application framework
- UART, SPI, I2S interfaces
- Multiple sensor interfaces and ADC/DAC ports
- Tiny: only 18mm x 30mm, including built-in Antenna

The RTX4100-IN Wi-Fi Module contains a Qualcomm / Atheros AR4100 Wi-Fi SIP chip and an Energy Micro EFM32G230 application processor. The application processor has internal Flash and RAM. The Wi-Fi module boots from a serial Flash. The processor is powered by an LDO with low power consumption to keep the total standby current very low. Furthermore, the application processor controls two additional LDO's to power the Wi-Fi module and the serial Flash. The Wi-Fi AR4100 chip can be turned off to enter an ultra-low power mode. A number of I/O's are available to allow for a wide range of applications.

If listed features do not meet application requirements, please contact your sales person for alternative options/configurations. As a design services company, RTX is open to considering a customized module.

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Symmetry Electronics

Codico

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