WISE-3200 Series   IoT Router

Features

- QCA 650MHz CPU with advanced power management capability
- Dynamic clock switching for ultralow power modes
- Full standards based Wi-Fi
- Configurable as a 1x1 or 2x2 solution
- Optional external PA/LNA
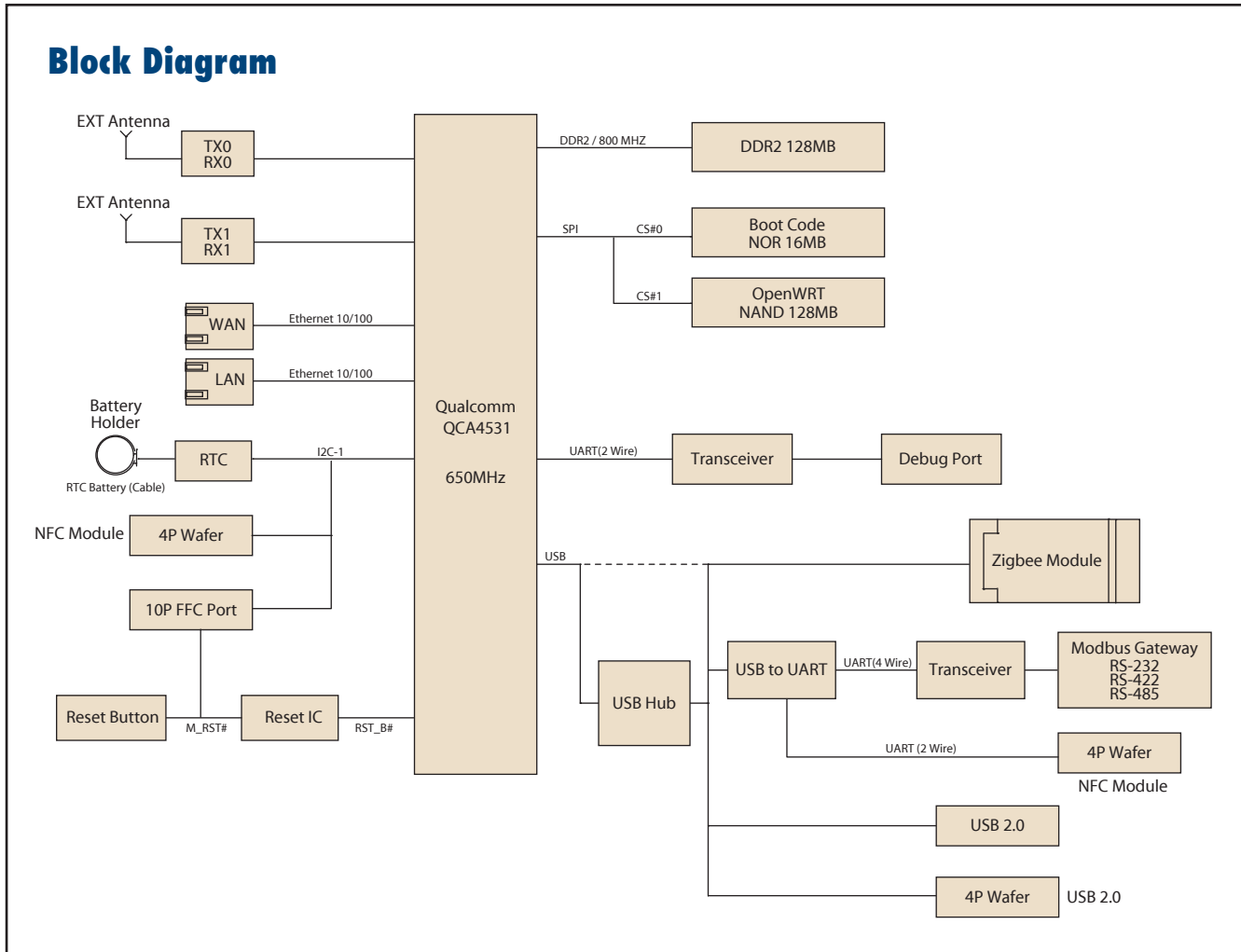- Linux OS/ OpenWRT for easy development
- USB 2.0 host interface

Introduction

WISE-3200 is the Qualcomm MIPS QCA 4531 hardware platform which is operating with OpenWRT. WISE-3200 series support the different configuration with Ethernet, Wi-Fi, Zigbee and 4G/LTE communication. For EPD-023 and EPD-053, we select 2.4GHz Wi-Fi or Ethernet in up-link and zigbee in down-link with WISE-1840. For EPD-137 and EPD-327, we select 4G/LTE in up-link. The Advantech WISE-3200 Industrial Router is design for smart city, Industrial 4.0 applications.

Specifications

Processor System	CPU	MIPS QCA 4531 650 MHz Processor
	RAM	DDR2 128MB
	SPI Flash	16MB Boot code & 128MB OpenWRT
Ethernet	WAN	1 x 10/100Mbps for WAN
	LAN	1 x 10/100Mbps for LAN
Security		WEP 64 bit, WPA_PSK, WPA2_PSK, WPA_PSK/WPA2_PSK (Mixed Mode) Password protected access
Connectivity	Wifi	IEEE 802.11b/g/n 2T2R
	Zigbee	IEEE 802.15.4
Expansion	Mini PCIe	1 x full size mini PCIe module
IO (Edge)	Antenna x1	WiFi
	LED x2	Power on, WiFi & Zigbee module on
	Button x1	Reset button
	Com port x1	RS232/422/485
	USB x1	USB 2.0
	RJ45 x2	WAN/LAN
Power	Power Supply Voltage	12
	Power Type	DC-in
	Power Consumption	3W
Environment	Operational Temperature	-20 ~ 70 °C
	Non-Operational Temp.	-40 ~ 85 °C
	Operating Humidity	5% ~ 95% Relative Humidity, non-condensing
Mechanical	Dimensions (L x W x H)	143 x 101 x 30 mm
Weight		215 g
Operating System		Linux kernel 4.4.6, OpenWrt GCC 4.8.3 (for QCA MIPS SoCs)
Network sub-system	L2/L3 multilayer switch/router	- DHCP Client - Access control list mask rules - Hardware network address translation (NAT) engine.
	WiFi	- Channel Number selection - 5MHz - 40MHz channel bandwidth selection - Support updating different SSID / Password - Support Router/AP/Bridge/Client Mode
Network connectivity	Uplink	WiFi 2.4G / WAN
	Downlink	WiFi 2.4G / LAN
	Operating Humidity	5% ~ 80% Relative Humidity, non-condensing
Certification		FCC/NCC

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Block Diagram

Ordering Information

Part No.	Description
WISE-3220IOS-21A1T	Wireless EPD 2.4G WiFi Network IoT Router
WISE-3240IOS-41A1T	Wireless EPD 2.4G WiFi/Zigbee Network IoT Router
WISE-3270IOS-71A1T	Wireless EPD 2.4G WiFi/LTE Network IoT Router

Packing List

Part No.	Description
96PSA-A36W12W7-5	Adapter A/D 100-240V 36W 12V x1
1750002842	Wireless 2.4G Antenna R-AN2450-5701RS R/P SMA. M10.9cm
1750008818-01	4G/LTE Antenna Dipole 4dBi Full Band
1750006264	4G/LTE AntennaSMA(F)/MHF 15cmConnector

Optional Items

Part No.	Description
1700001524	Power Cable 3-pin 180cm, USA type
170203183C	Power Cable 3-pin 180cm, Europe type
170203180A	Power Cable 3-pin 180cm, UK type
1700008921	Power Cable 3-pin PSE Mark 183cm
WISE-1840WTB-TD010	MINI PCIE Card for Zigbee host control except EU
WISE-1840WTB-TD01E	MINI PCIE Card for Zigbee host control for EU
EWM-C117	Mini PCIE LTE 4G,3G WCDMA/DC-HSPA+, 2G Card