

Dual Band Gigabit Wireless Embedded Board

Model: YBT558

Features

- OpenWRT firmware supported
- Qualcomm-Atheros 700MHz Networking Processor AR9558
- 2.4GHz up to 28dBm aggregate power 3 x 3 on-board radio
- Integrated Power-over-Ethernet
- Support 2 x Gigabit Ethernet Port
- Optional: support USB Extension

Applications

- Dual Band, Dual Concurrent AP
- 802.11ac+802.11bgn AP / 802.11an+802.11bgn AP
- Point to Point / Point to MultiPoint
- Base Station
- CPE
- Support Third Party 3G/LTE Module

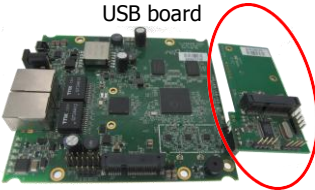

Technical Specifications

System Information						
Processor		Qualcomm-Atheros AR9558				
System Memory		128MB DDR2				
NOR Flash		16MB				
PCIe Slot		9.2mm height miniPCIe slot				
On-board radio power		28dBm(aggregate)				
Antenna Connector		3 x U.FL				
Ethernet		2 X Gigabit ports with Auto-MDI/X				
Extras		Serial Port ¹ , JTAG ² , Reset Button, Surge Arrestor, Watchdog Timer				
Power Solutions		DC:24-56V,Passive PoE:24-56v,IEEE 802.3af/at PoE				
Power Consumption		8.6W				
ROHS Compliance		Yes				
Humidity		Operating: 5% to 95% (non-condensing) Storage: Max.90% (non-condensing)				
Temperature Range		Operating: -20°C to 70°C Storage: -40°C to 90°C				
Dimension		117 x 105 x 17 (mm)				
2.4G On-board Radio	Transmit Power	Data Rate		2.4GHz (aggregate)		
		6Mbps		28dBm		
		54Mbps		24dBm		
		HT20 MCS0		28dBm		
		HT20 MCS7		23dBm		
		HT40 MCS0		28dBm		
	Receiver Sensitivity	HT40 MCS7		23dBm		
		Data Rate		2.4GHz		
		HT20 MCS0		-94dBm		
		HT20 MCS7		-77dBm		
Max of concurrent associations	Encryption	Client Latency	TCP [each client upload and download randomly from 384Kbps to 768Kbps]		UDP [each client upload and download 2Mbps]	
			WPA2-PSK	<100ms	Single radio	Dual radio
	40 clients	70clients (35 per radio)			20 clients	30clients (15 per radio)





1 Serial Port is a 4-pin header (TTL) + Serial Converter is available to change the TTL signals on board to RS232 signals for debugging. Configurations are subject to change without notification

2 JTAG Port is a 14-pin header + JTAG kit is for writing your own developed loader and firmware directly

Optional configuration

<p>USB Extension (USB HUB BOARD-1.00-ST)</p>	 <p>USB board</p>	<p>External board: can support 3 x USB 2.0 ports and 1 x miniPCIe-based USB 2.0 only interface (e.g. 3G modems)</p>
<p>3G/LTE Module</p>		<p>PCIe slot can Support Third Party 3G/LTE Module</p>

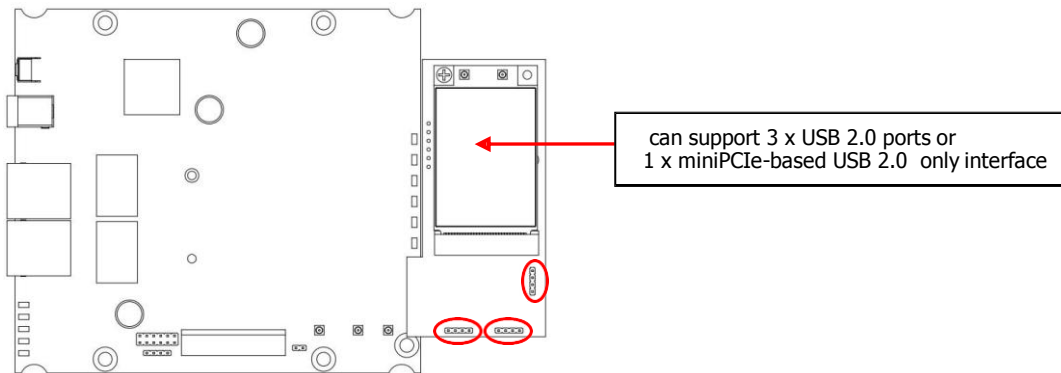
Related Products

802.11ac 5GHz miniPCIe			Gigabit Power over Ethernet
<p>9880</p> 	<p>9882-27</p> 	<p>9880-27</p> 	<p>POE2408</p>  <p>- Output Voltage: 24VDC - Max Output Watts: 19W</p>

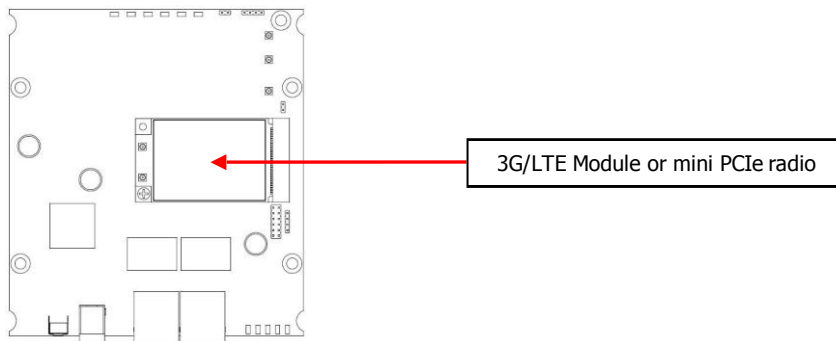
Complex embedded board extended applications list

Model	Extended applications			
	USB signal	USB External board (USB HUB BOARD-1.00-ST)	802.3af PoE pass-thru	802.3af PoE power supply
YBT344	Support 1× USB 2.0 port	support 3 x USB 2.0 ports and 1 x miniPCIe-based USB 2.0 only interface	Optional (PSE pass-thru module)	support
YBT558	Support 1× USB 2.0 port or PCIe slot Support Third Party 3G/LTE Module	support 3 x USB 2.0 ports and 1 x miniPCIe-based USB 2.0 only interface		support
YBT342	Support 1× USB 2.0 port or PCIe slot Support Third Party 3G/LTE Module			Optional (802.3af module)
YBT531	Support 1× USB 2.0 port or PCIe slot Support Third Party 3G/LTE Module			Optional (802.3af module)
YBT7161B	Support 2× USB 2.0 port		Optional (PSE pass-thru module)	support
YBT7161A	Support 2× USB 2.0 port			support

Product application:

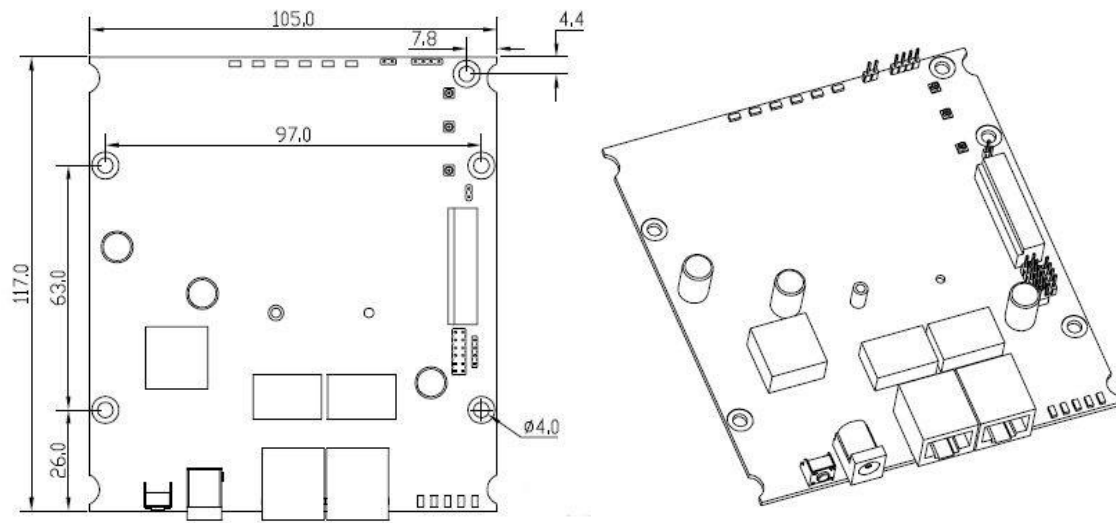


YBTJ558 with USB External board

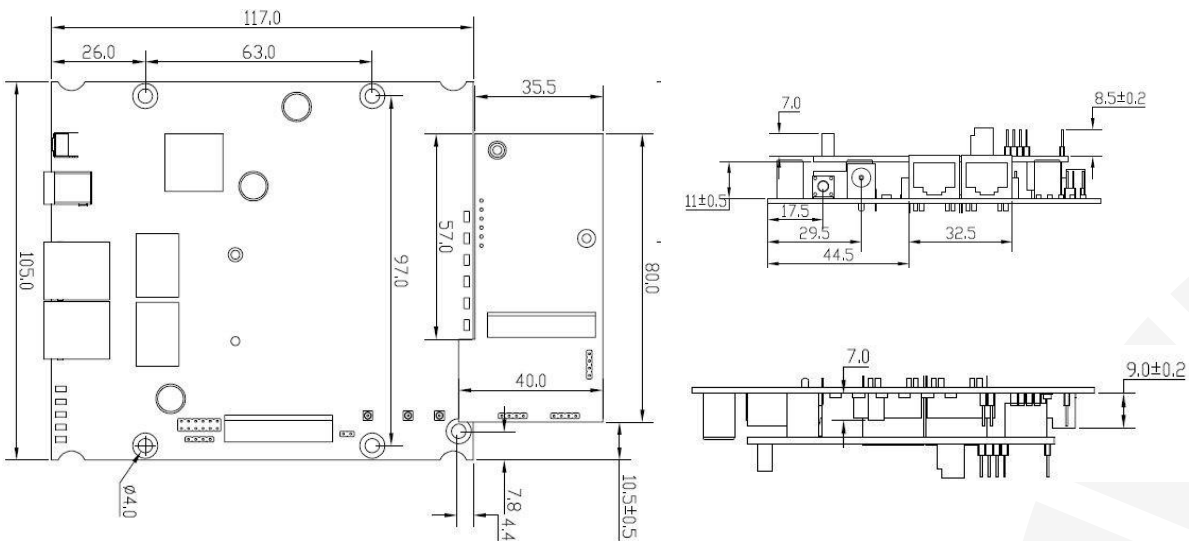


PCIe slot can Support mini PCIe radio or Third Party 3G/LTE Module

Dimension Drawing



Dimension Drawing with USB external board



Ordering Information

Item Code	Version	Processor	L/H voltage Power Solutions	NOR Flash	Memory	Socket Height
YBT558	Open-WRT	QCA9558	High Voltage (48V)	8MB	128MB	9.2mm
USB HUB BOARD-1.00-ST	USB External board					
Carton Dimension	Dimension	Weight	Dimensional Weight			
Packing BOX (50pcs)	871*320*190mm	7.08 kg	11 Kg			