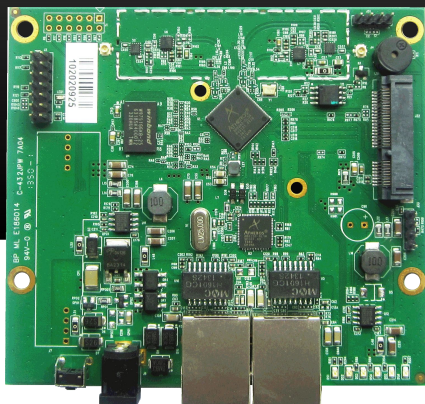




Dual Band Wireless Embedded Board

Model: WPJ342

Revision: 1.02 IL
Date: 2014,10,14

Features

- CompexWRT and OpenWRT firmware supported
- Qualcomm-Atheros 560MHz Networking Processor AR9342
- 5GHz up to 26dBm aggregate power 2 x 2 on-board radio
- Integrated Power-over-Ethernet
- Support 2 x FE Port

Applications

- Dual Band, Dual Concurrent AP
- 802.11a/n+802.11b/g/n AP
- Point to Point / Point to MultiPoint
- Base Station
- CPE
- Support Third Party 3G/LTE Module

Technical Specifications

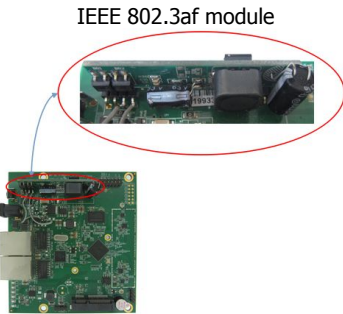
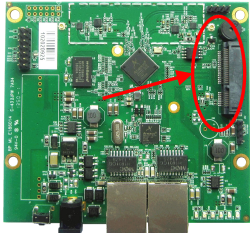
System Information									
Processor		Qualcomm-Atheros AR9342							
System Memory		64MB DDR2							
NOR Flash		16MB							
PCIe Slot		9.2mm height miniPCIe slot							
On-board radio power		26dBm							
On-board radio Antenna Connector		2 x U.F L							
Extras		Serial Port ¹ , JTAG ² , Reset Button, Surge Arrestor, Watchdog Timer							
Power Solutions	Low voltage	DC Jack Input: 12-24V, Passive PoE: 24V							
	High voltage	IEEE 802.3af module(Optional) ³ ,DC Jack input:24-48V, Passive PoE:24-48v, compatible with802 .3af/802.3at PoE switches and injectors							
Power Consumption		5.5W							
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		95 X 105 x 18 (mm)							
5G On-board Radio	Transmit Power	Frequency		Data Rate	5GHz (aggregate)				
		5180MHz	6Mbps		24dBm				
			54Mbps		20dBm				
			HT20 MCS0		23dBm				
			HT20 MCS7		18dBm				
			HT40 MCS0		23dBm				
			HT40 MCS7		18dBm				
		5500MHz	6Mbps		25dBm				
			54Mbps		20dBm				
			HT20 MCS0		25dBm				
			HT20 MCS7		19dBm				
			HT40 MCS0		24dBm				
			HT40 MCS7		19dBm				
		5785MHz	6Mbps		26dBm				
			54Mbps		21dBm				
			HT20 MCS0		25dBm				
			HT20 MCS7		19dBm				
			HT40 MCS0		24dBm				
			HT40 MCS7		19dBm				
	Receiver Sensitivity	Data Rate			5GHz				
		6Mbps			-90dBm				
		54Mbps			-75dBm				
		HT20 MCS0			-90dBm				
		HT20 MCS7			-72dBm				
		HT40 MCS0			-88dBm				
		HT40 MCS7			-70dBm				
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				
			Dual radio		Single radio				
			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

3 This is a factory option to turn WPJ342 to WPJ342HW, It is compatible with 802.3af/802.3at PoE switches and injectors

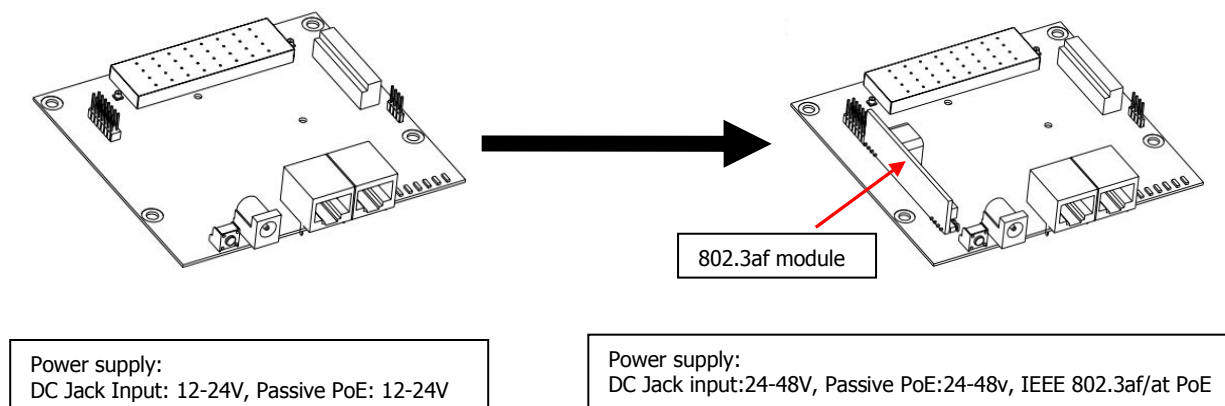
Optional configuration

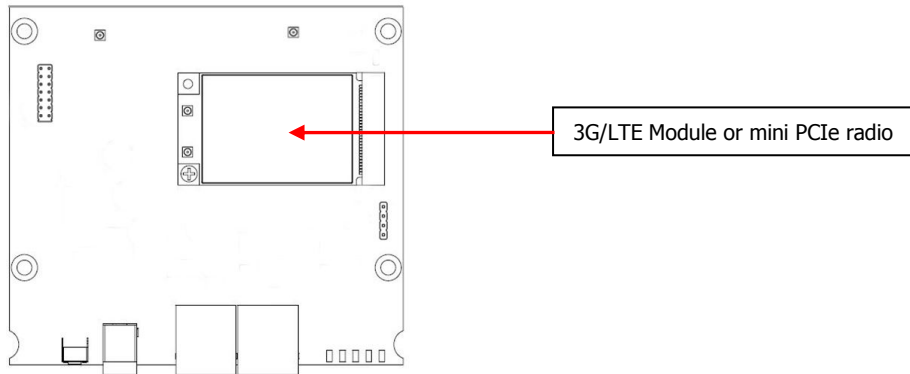
IEEE 802.3af module (P-3AF-M-6A01-SPL)		This is a factory option to turn WPJ342LV to WPJ342HV, It is compatible with .3af/.3at PoE switches and injectors. (DC Jack:24-48V, Passive PoE:24-48v, 802.3af/at PoE)
3G/LTE Module		PCIe slot can Support mini PCIe radio or Third Party 3G/LTE Module

Related Products

802.11 b/g/n 2.4GHz miniPCIe			Passive injector PoE Plus	
WLE350NX 	WLE200NX 	WLE200N2-23 	POE Plus  - Output Voltage: 24VDC - Max Output Watts: 12W	PoE2405  - Output Voltage: 24VDC - Max Output Watts: 12W

Product application:



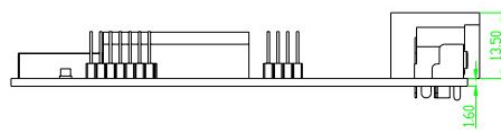
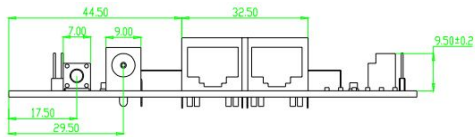
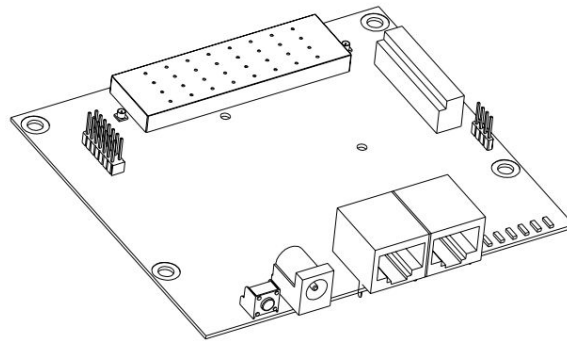
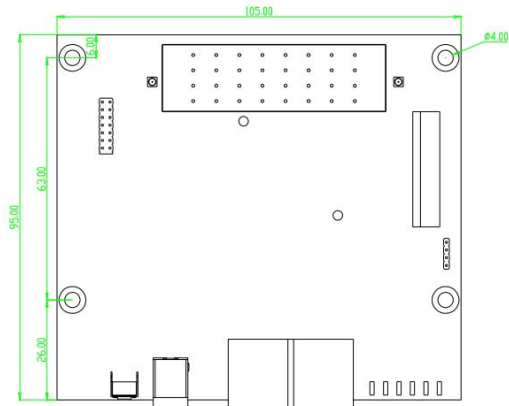


PCIe slot can Support mini PCIe radio or Third Party 3G/LTE Module

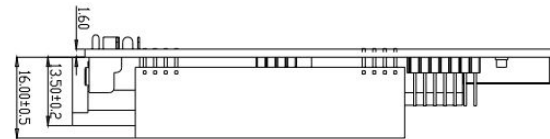
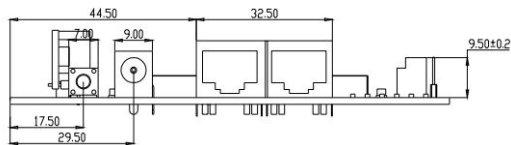
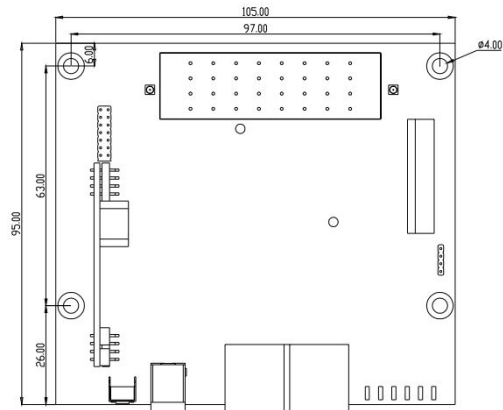
Complex embedded board extended applications list

Model	Extended applications			
	USB signal	USB External board (USB HUB BOARD-1.00-ST)	802.3af PoE pass-thru	802.3af PoE power supply
WPJ344	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
WPJ558	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
WPJ342	Support 1× USB 2.0 port or PCIe slot Support Third Party 3G/LTE Module			Optional (802.3af module)
WPJ531	Support 1× USB 2.0 port or PCIe slot Support Third Party 3G/LTE Module			Optional (802.3af module)
WP546	Support 2× USB 2.0 port		Optional (PSE pass-thru module)	support
WP543	Support 2× USB 2.0 port			support

Dimension Drawing



Dimension Drawing with 802.3af module



Ordering Information

Item Code	Version	Processor	L/H voltage Power Solutions	NOR Flash	Memory	Socket Height
WPJ342LV 7A5PCW1664AR-B-P	CompexWRT	AR9342	Low Voltage (24V)	16M	64M	9.2mm
WPJ342HV 7A5PCW1664AR-B-P	CompexWRT	AR9342	High Voltage (48V)	16M	64M	9.2mm
P-3AF-M-6A01-SPL	802.3af/at POE module					