

Wireless Embedded Boards

WIRELESS EMBEDDED BOARDS



Cost Effective Solutions

THE WPJ342



WPJ342 is a capable and reliable wireless embedded board based on the Qualcomm Atheros AR9342 CPU. It features a 560MHz network processor and integrates a 2x2 internal on-board radio and 1 miniPCle slot that supports 802.11n radio. Embedded with 64MB memory and 16MB Flash, WPJ342 provides the ideal platform for any applications. WPJ342 has integrated Power over Ethernet (PoE) features that allows WPJ342 to be used in areas where power outlets are not readily available.



Specifications

Qualcomm-Atheros AR9342 System Memory

Processor

64MB DDR2

NOR Flash

PCIe Slot 9.2m height minPCle slot

Ethernet 2 x FE Port with Auto MDI/X

LED Pins, Serial Port, JTAG, Extras Reset Button, Surge Arrestor,

Watchdog Timer

DC Jack & Passive PoE or Power

IEEE 802.3af*

5.5W Power Consumption

RoHS Yes

Compliance

Temperature

Range

Humidity Operating: 5% to 95%

Operating: -20°C to 70°C Storage: -40°C to 90°C

95 x 105 x 18mm (W x D x H) Dimension

Firmware

On-board Wireless

Operating Frequency

Maximum Wireless Speed

On-board Radio

Power On-board Radio

Antenna Connector CompexWRT or OpenWRT

2 x 2 MIMO 802.11n

5.180 - 5.825Ghz

300Mbps

26dBm (aggregate)

2 x U.F L

*802.3af only available on WP342HV models



With a On-board allowing a SIM card slot further expanding its usage beyond its 802.11n capabilities



Powered by Qualcomm Atheros AR9342 Wireless System on Chip (WiSoC)



WPJ342 features on-board single band 2x2 5Ghz 802.11n Wireless with speeds up to 300Mbps



Further expansion of Wireless Capabilities with the Min iPCI-e Slot, also support Cellular Card*



With Dual on-board FE or 10/100 RJ45 LAN Ports, allowing a WAN & LAN configuration or Dual LAN as well.



Passive

WPJ342 support 24V Passive Power over Ethernet



Monitor WPJ342 performance and development with the on-board buzzer and 4 LED Pins.

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WPJ342 EXPANSIONS



Upgrade to 802.3af WPJ342 is available with either Passive PoE or IEE 802.3af Support

Default Passive PoE Model:

- WPJ342LV
- DC Jack 12 24V
- 24V Passive Power Over Ethernet

IEE 802.3af Model:

- WPJ342HV
- DC Jack 24 48V
- IEE 802.3af PoE
- 24V Passive PoE

MINIPCI-E SLOT X 1

Add 3G/4G Radio



WPJ342 support third-party 3G/4G miniPCI-e Radio Modules for Effective Machine to Machine (M2M) communication to widen your network with ease.

Add Wireless Radio



WPJ342 support Compex 802.11n miniPCI-e Radio Modules to enable Dual Band support.

WPJ342 BOARD DIMENSIONS

Item Code	Width	Depth	Height
WPJ342LV 7A5PCW164AR-BP	105 mm	95 mm	13.5 mm
WPJ342HV7A5PCW164AR-BP	105 mm	95 mm	16 mm

WPJ342 EXTERNAL WIRELESS MODULE COMPATIBILITY

Model	Wireless Band	Operating Frequency	Channels	Connector
Compex WLE200NX	802.11a/b/g/n	2.4Ghz / 5Ghz	2 x 2 MIMO	2 x U.FL
Compex WLE350NX	802.11a/b/g/n	2.4Ghz / 5Ghz	3 x3 MIMO	3 x U.FL
Compex WLE200N2-23	802.11b/g/n	2.4Ghz	2 x 2 MIMO	2 x U.FL
Compex WLE250NX	802.11a/b/g/n	2.4Ghz / 5Ghz	2 x 2 MIMO	2 x U.FL

WPJ342 ORDERING INFORMATION

Item Code	Firmware	Processor	Power Solutions	NOR Flash	Memory
WPJ342LV 7A5PCW164AR-BP	CompexWRT	AR9342	DC Jack 12 - 24V + 24V Passive PoE	16MB	64MB
WPJ342HV 7A5PCW164AR-BP	CompexWRT	AR9342	DC Jack 24 - 48V + PoE 802.3af	16MB	64MB

WPJ342 PACKAGING INFORMATION

Carton Dimension	Dimension	Weight	Dimensional Weight
Packaging Box (50pcs)	871 x 320 x 190mm	6.135kg	11kg

Compex Systems Pte Ltd www.compex.com.sg