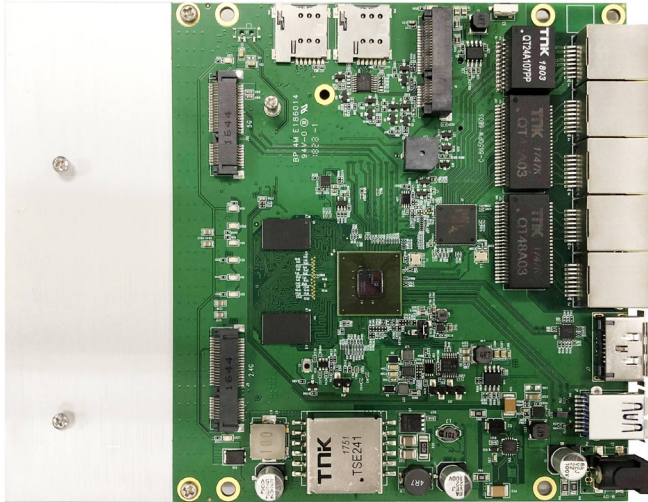


Multi-function IPQ8065 Embedded Board with 1.7GHz CPU 1x USB 3.0 / Supports 4x4 802.11ac / 5x Gigabit LAN / 3x Mini PCIe 2.0 Slots

Model: WPQ865 6B04



KEY FEATURES

- Qualcomm Atheros IPQ8065 ARM Dual Core CPU
- 1 GB DDR3 System Memory
- 5x Gigabit LAN RJ45 with Auto MDI-X
- 1x USB 3.0 Port
- 2x SIM Card Slot

APPLICATIONS

- Optimized for 4x4 MU-MIMO 802.11ac Module Support
- Tri Band MU-MIMO 802.11g/n/ac Access Point
- Dual Concurrent MU-MIMO 802.11a/n/ac Access Point
- Wireless Base Station
- 3G/LTE AP

Specifications

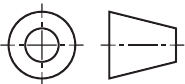
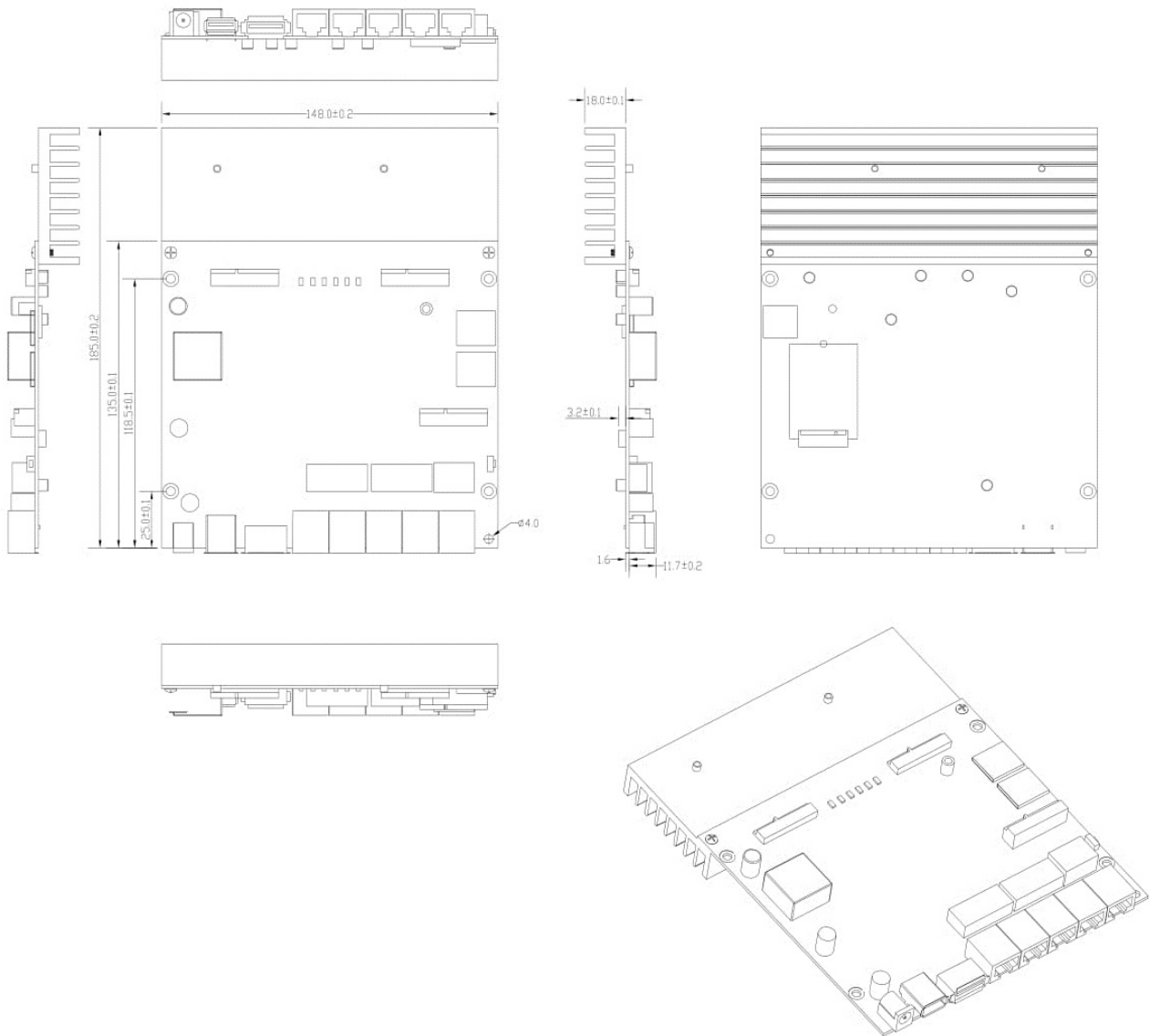
Chipset	Qualcomm Atheros Dual Core Krait ARMv7 CPU IPQ8065 1.7GHz CPU
Reference Design	Qualcomm Atheros AP161
System Memory	1GB (2x 512MB) DDR3
NAND Flash	256MB
NOR Flash	32MB
Expansion	1x Mini PCI Express v2.0 Slot at 9.2mm Height 2x Mini PCI Express v2.0 Slot at 4.0mm Height 2x SIM Card Slot (Optional 2x e-SIM) 1x microSD Card Socket
Interface	5x Gigabit Ethernet LAN RJ45 Port (Auto MDI-X) 1x eSATA Port 1x USB 3.0 Port 1x Serial Port 4 Pin Connector ¹ 1x NGFF (M.2) Slot
Reset Button	1x F/W Reset Button, 1x H/W Reset Button
LED	9x LED Indicators
Power Over Ethernet	1x IEEE 802.3af/at POE, 36V to 57V, up to 70W (4-pair power feed) on WAN Port
DC Power	1x DC Jack Connector : 12V, 4A
Operating Voltage	5V, 3.3V
Power Consumption	4.5W (Board Only)
Supported Operating System	CompexWRT or OpenWRT ² /LEDE
RoHS Compliance	Yes
Environmental Temperature	Operating : -20°C to 70°C, Storage : -40°C to 90°C
Environmental Humidity, non-condensing	Operating : 5% to 95%, Storage : Max. 90%
Dimensions (W × H × D)	PCBA 137mm × 148mm × 17.5mm, Heatsink 60mm × 148mm × 30mm
Other Features	Surge Suppressor, Watchdog Timer, Buzzer

1. The Serial Port is a 4-pin header (TTL). A Serial Converter is available to change the TTL signals on board to RS-232 signals for debugging.

2. For more information on OpenWRT, please refer to the Firmware / Software Section on Page 3.

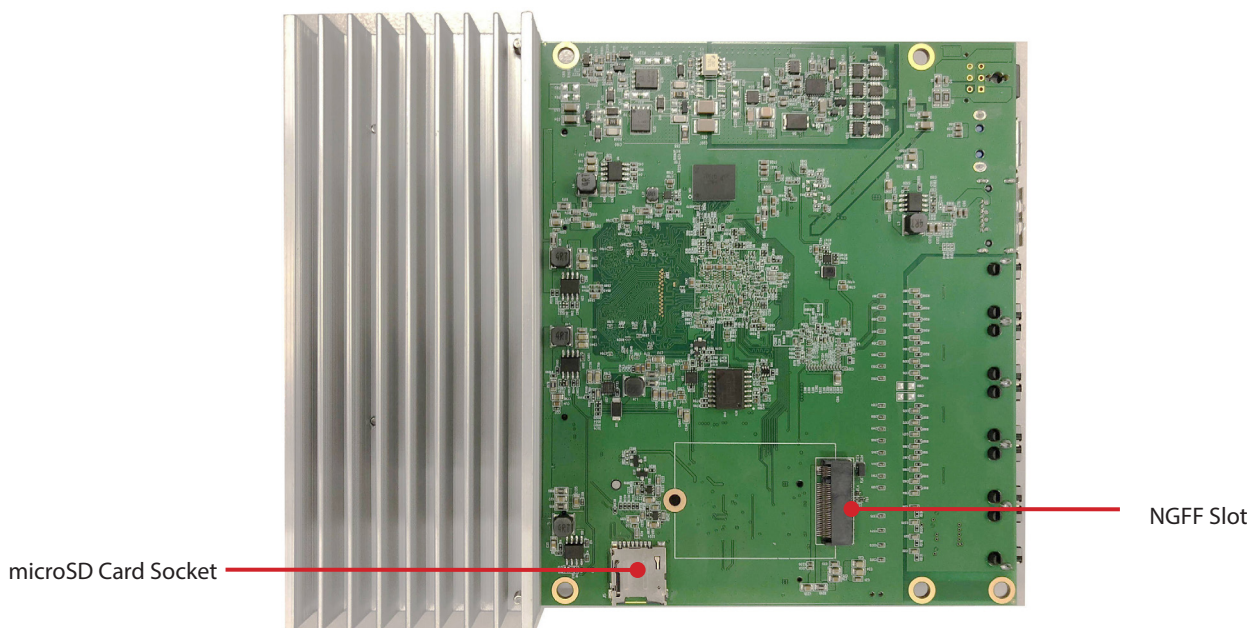
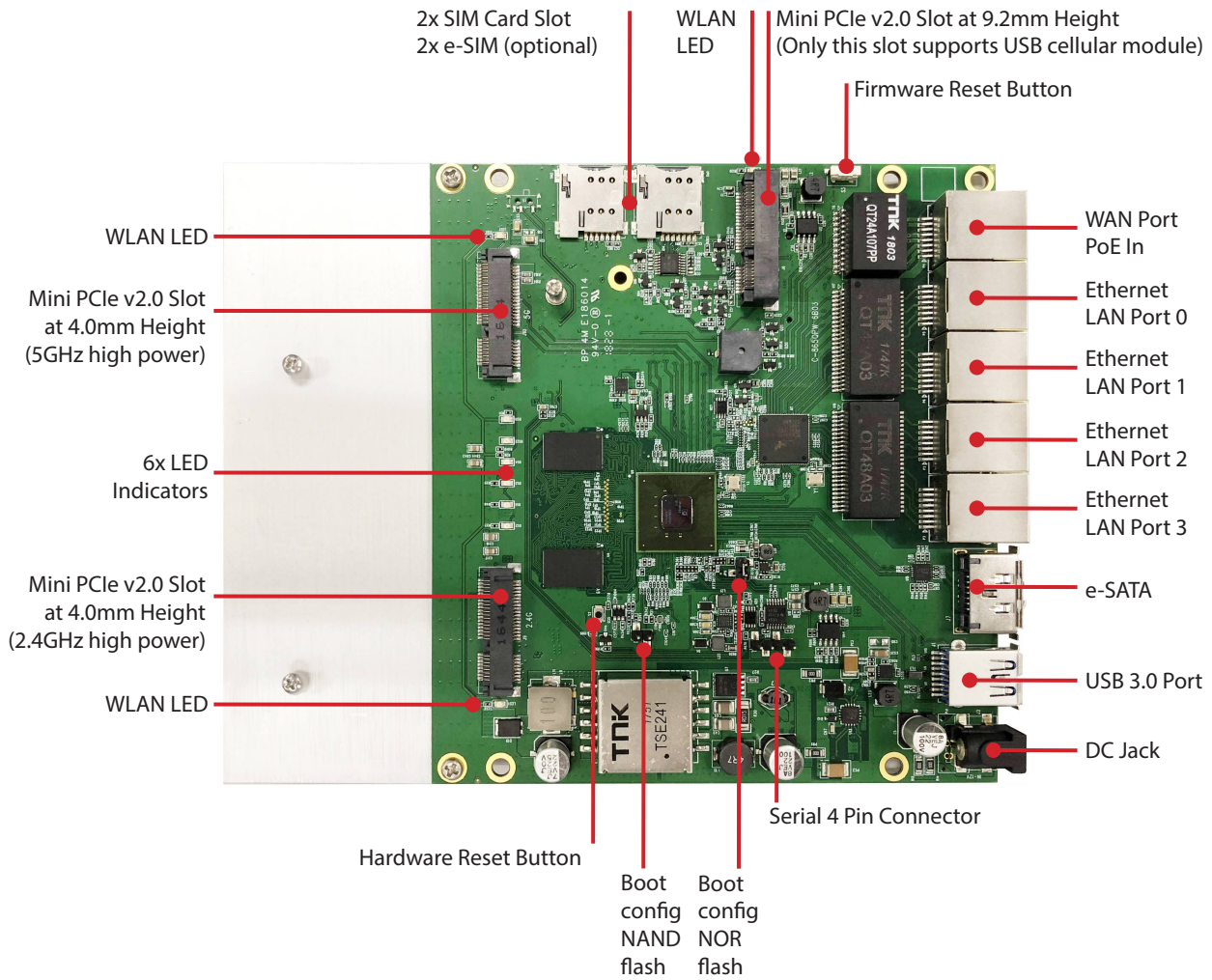
*Configurations are subject to change without notifications.

Mechanical Dimensions



All dimensions are in mm.

Component and Connector Map



Customization Options

The WPQ865 can be customized for volume applications. Contact our sales representatives for more information.

Custom Embedded Board layout

For more customization, contact us at sales@compex.com.sg

Firmware / Software

The WPQ865 is shipped with CompexWRT firmware.
SDKs with QCA binary drivers are available for software developers.

Supported Operating System

- CompexWRT
- OpenWRT¹
- LEDE

1. OpenWRT SDK is available without any technical support by Compex unless otherwise stated.

Ordering Options

Item Code	Model	Description
WPQ865 6B03PR32F1GBR	WPQ865 6B03	Embedded board with heatsink
WPQ865 6B04PR32F1GBR	WPQ865 6B04	Embedded board with heatsink
SUA3004RWEF	Power Adapter	EU power plug supplying 12V, 4A DC Jack
SUA3004RWUF	Power Adapter	EU power plug supplying 12V, 4A DC Jack
POEGAT25-EU	POEGAT25	Gigabit IEEE802.3at 25W PoE injector with EU Power Plug
POEGAT25-US	POEGAT25	Gigabit IEEE802.3at 25W PoE injector with US Power Plug
P-SERIAL CONVERTER	Serial Converter	Onboard 4-pin to COM port bridge