

DR342-NAS

Access Point Host Board Wireless motherboard integrated with 5G radio

Features

- Featuring with industrial-grade Atheros's AR9342(533 MHz) chipset
- Integrated with 2x 2 5G high power (up to 30dBm aggregate) Radio Card
- 5.180GHz to 5.825GHz Frequency Range
- 1x10/100/1000Mbps Gigabit Ethernet
 Port
- 2 x 5G MMCX Connectors
- 20M/40M Bandwidth
- Support LTE/3G application (Optional)
- RoHS compliance ensure a high level protection of human health and the environment from risks that can be posed by chemicals



Applications

- Security Surveillance
- Commercial radio coverage
- Hotel Wireless application
- Country coverage
- Forest fire protection engineering
- Some special scene application

Product Description

DR342-NGS27 based on Atheros/AR9342 chipset is an enterprise wireless motherboard integrated with 2x2 5G high power (up to 30dbm aggregate) Radio card designed specifically to provide users with mobile access to high-bandwidth video streaming, voice, and data transmission for office and challenging RF environment in factories, warehouses establishment. It can be easily ungraded to the latest version of firmware by just a few clicks on the GUI.

Absolute Maximum Rating

| Parameter | Rating | Unit |
|-----------------------------|---------------------------|------|
| Supply Voltage | 0 to +56 | V |
| Operating Temperature Range | -40 to +70 | °C |
| Storage Temperature Range | -65 to +105 | °C |
| Operating Humidity Range | 5 to +95 (non-condensing) | % |
| Storage Humidity Range | 0 to +90 (non-condensing) | % |

Operating Conditions

| Parameter | Rating | Unit |
|-------------------------|------------|------|
| Supply Voltage(DC Jack) | +12 to +56 | V |
| POE | +24 to +56 | V |
| Temperature | -40 to +70 | °C |

Hardware Specifications

| Symbol | Parameter | | |
|----------------------|--|--|--|
| CPU | Atheros AR9342 530MHz processor frequency | | |
| System Memory | 64M DDR2 | | |
| NOR Flash | 16MB | | |
| Switch IC | Atheros AR8035-AL1AR 1 GIGA port PHY/RGMII switch | | |
| Power IC | TI/TPS5436 | | |
| Power consumption | 6W(Board Only) | | |
| 1000MLAN port | Pin 4/5 and pin 7/8 connect to the anode or cathode respectively | | |
| POE define | POE input | | |
| Antenna Connector | 2 x 5G MMCX connectors | | |
| Power Connector | 1 x DC JACK D(center)=2.1mm Max 50V DC | | |
| Power Solution | DC Jack Input: 12-56V, Passive POE: 24 -56V | | |
| LAN Connector | 1 x 1000M LAN port | | |
| ROHS Compliance | YES | | |
| Reset Button | RT push button | | |
| Dimension | 99mm x 85mm x 16mm | | |
| Socket Height | Mini PCIE 9.2mm | | |

| Operating Mode | Data Rate | Power | | Tolerance |
|----------------|-------------|---------|----------|-----------|
| | | 1 Chain | 2 Chains | TOIErance |
| 802.11a | 6 Mbps | 27dBm | 30dbm | ±2dB |
| | 54 Mbps | 23dBm | 26dbm | ±2dB |
| 802.11n HT20 | MCS0, MCS8 | 27dBm | 30dbm | ±2dB |
| | MCS7, MCS15 | 22dBm | 25dbm | ±2dB |
| 802.11n HT40 | MCS0, MCS8 | 27dBm | 30dbm | ±2dB |
| | MCS7, MCS15 | 22dBm | 25dbm | ±2dB |

Radio RX Specifications

| Operating Mode | Data Rate | Sensitivity |
|----------------|-------------|-------------|
| 802.11a | 6 Mbps | -94dBm |
| | 54 Mbps | -75dBm |
| 802.11n HT20 | MCS0, MCS8 | -92dBm |
| | MCS7, MCS15 | -73dBm |
| 802.11n HT40 | MCS0, MCS8 | -90dBm |
| | MCS7, MCS15 | -70dBm |

Dimension Drawing

