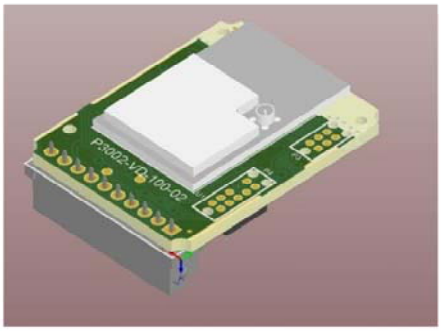
VDWIFI-RTH

WiFi 802.11 b/g/n Module Family - Product Brief



Features

- IEEE 802.11 b/g/n Compliant Transceiver
- ARM KM4 32-bit CPU
- Integrated 32Mbit serial flash
- UART/GPIO interfaces to Host Controller
- Integrated PCB trace antenna
- Input voltage range:DC 5V to 15V (See variant table)
- FCC certified

RF/Analog

- Frequency Range: 2.4GHz ISM radio band
- Channels: 1-11
- Modulation: DSSS, OFDM for WLAN

Package

- Plug-in daughter card with onboard 10pin receptacle (standard)
- Other connector and interface options available
- Compact Module design

Applications

- Consumer Electronics
- iOT
- Industrial Controls
- Remote Device Management
- Fitness and Health Care
- White Goods / Appliances
- Gateways / Bridges
- Home Automation

Options

- Apple HomeKit Support
  - Onboard MFi co-processor
  - Custom firmware to support specific HomeKit services & characteristics
- Amazon Alexa Support
- Google Home Support
- Integration of custom application firmware

Ordering P/N:

PN	HomeKit	Input Power	Input Connector	Host Interface	Connectivity
VDWIFI-RTH	Y	5V-15V	10 Pin	UART	Ayla

Connector Pin-out (10-position receptacle):

Pin No.	Pin Name	Description
1	VDC_Main	VDC (5V – 15V)
2	GPIO_17	GPIO_17
3	GPIO_4	GPIO_4
4	GPIO_3	GPIO_3
5	Reserved	Reserved
6	GPIO_2	GPIO_2
7	Reserved	Reserved
8	UART_TXD	Module UART Data Output
9	UART_RXD	Module UART Data Input
10	GND	GND

Note

Warning: Changes or modifications to this device not expressly approved by Viper Design LLC could void the user's authority to operate the equipment.

Class B Device

"NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- *Reorient or relocate the receiving antenna.*
- *Increase the separation between the equipment and receiver.*
- *Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.*
- *Consult the dealer or an experienced radio/TV technician for help."*

RF Exposure

This equipment complies with radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with Maximum distance 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme aux limites d'exposition aux radiations dans un environnement non contrôlé. Cet équipement doit être installé et utilisé à distance minimum de 20 cm entre le radiateur et votre corps. Cet émetteur ne doit pas être co-localisées ou opérant en conjonction avec tout autre antenne ou transmetteur."

Low Power License-Exempt Device

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Labels

Host Device must contain the following label on the outside of the unit:

Contains FCC ID: 2AB7YVDW24DRTH Contains IC: 20699-VPW24DRTH

General Statements

(1)PCB Antenna with maximum gain is 1.2dBi.

Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
Viper	VDWIFI-RTH	PCB	N/A	0 dBi	WLAN Antenna

(2)Any change of antenna type is not allowed,WIFI module only use PCB antenna.

(3)Host containing WIFI modules must comply with FCC Rule requirements.

Revision History

Version	Action
0.1	First draft; Initial Release

The modular can be installed or integrated in mobile or fix devices only. This modular cannot be installed in any portable device.

If the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: “Contains Transmitter Module FCC ID:2AB7YVDW24DRTH Or Contains FCC ID: 2AB7YVDW24DRTH”

If the ISED number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: “Contains Transmitter Module IC:20699-VPW24DRTH Or Contains IC: 20699-VPW24DRTH”

When the module is installed inside another device, the user manual of the host must contain below warning statements;
1. This device complies with Part 15 of the FCC Rules and RSS Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product.

Any company of the host device which install this modular with Single modular approval should perform the test of radiated emissionand spurious emission according to FCC part 15C : 15.247 and 15.209, RSS-247 requirement,Only if the test result comply with FCC part 15C : 15.247 and 15.209 , RSS-247 requirement, then the host can be sold legally.