

# VSM-WLAN-01 Module User Manual

## GENERAL DESCRIPTION:

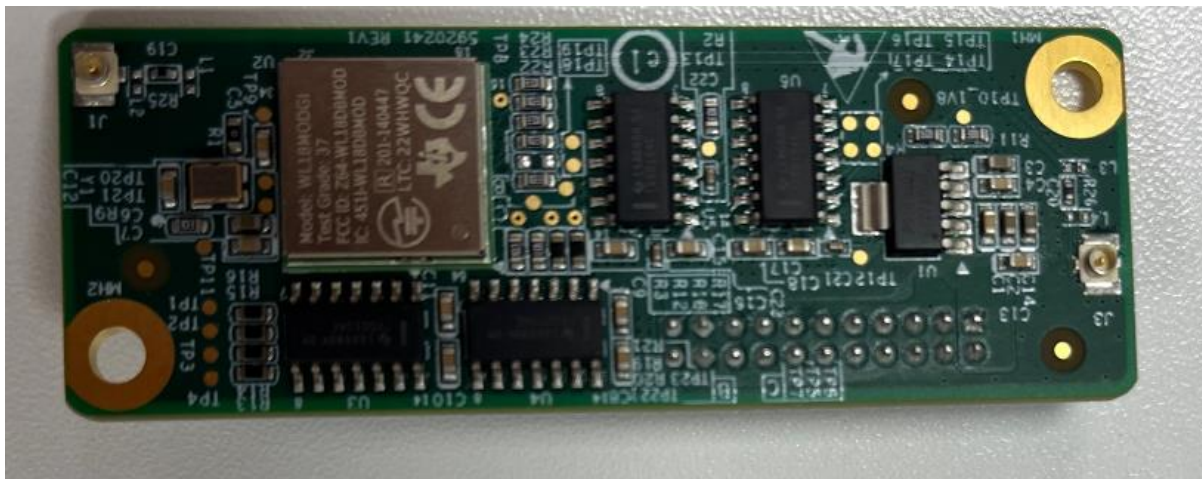
VSM-WLAN-01 Module provides WLAN baseband processor and RF transceiver and support IEEE Std 802.11a, 802.11b, 802.11g and 802.11n. 20- and 40- MHz SISO and 20- MHz 2\*2 MIMO at 2.4 GHz for High Throughput. The VSM-WLAN-01 Module also extends to support Dual-Mode Bluetooth and BLE.

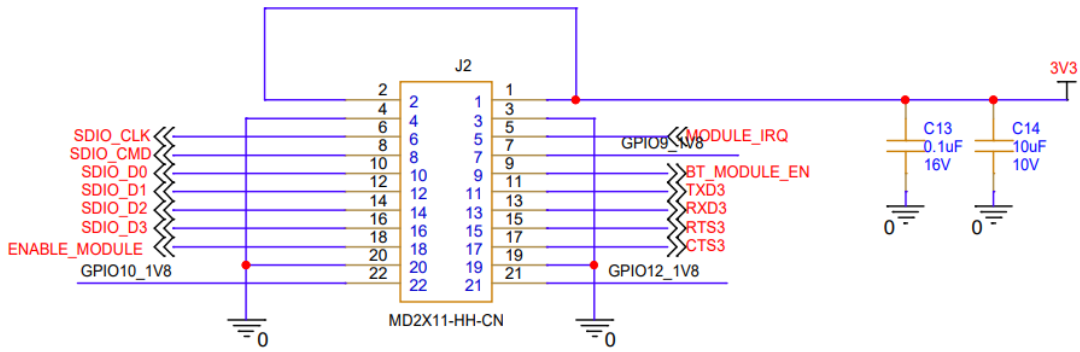
VSM-WLAN-01 Module Peripheral circuit is developed by GE Healthcare and the Wireless chips is used WL1837 from TEXAS INSTRUMENTS. The WL1837 module offers two footprint-compatible dual-band 2.4- and 5-GHz industrial temperature grade variants providing stand-alone Wi-Fi and Bluetooth combo connectivity. WL1837 has been certified for FCC with FCC ID: Z64-WL18DBMOD. GE Healthcare apply independent FCC ID for VSM-WLAN-01 Module and has passed the FCC Certified test with FCC ID: OU5VSM01.

VSM-WLAN-01 Module just will be used in GE HealthCare Portrait Vital Sign Monitor (Portrait VSM). VSM-WLAN-01 Module will be configuration and operation through GEHC VSM main software. VSM-WLAN-01 Module will not be sale and used separately.

## PIN DEFINITION:

The pin definition of VSM-WLAN-01 Module as below picture:



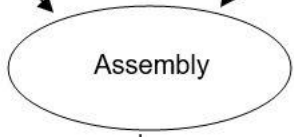


**WLAN ASSEMBLY PROCESS**

The VSM-WLAN-01 Module just can be used in Portrait Vital Sign Monitor , the assembly process as below:

Steps:

- 1.Assemble the WLAN module corresponding pins to the corresponding connector in the WLAN module slot.
- 2.Install two screws on the wireless board.
- 3.Connect two antennas to WLAN module and use the clips to fix the antennas.



## Operational use conditions

Module has professional users use condition limitations; Host product manufacturer please ensure giving such warning like “Product is limited to professional users use” in your product’s instruction.

### Antenna used

Antenna Type	Brand/ manufacturer	Model No.	Max. Antenna Gain
PCB	GE/Pulse	5826903 Rev3	5G:2.38dBi (ANT 1) 1dBi(Ant 2) 2.4G:2.83dBi (ANT 1) 2.84dBi(Ant 2) BT/BLE: 2.83dBi

## FCC regulatory compliance statement

### §15.19 Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### §15.21 Information to user

Warning: changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

### RF Exposure compliance statement

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

### Labelling Instruction for Host Product Integrator

Please notice that 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 FCC ID: OU5VSM01” any similar wording that expresses the same meaning may be used.

§ 15.19 Labelling requirements shall be complied on end user device.

Labelling rules for special device, please refer to §2.925, § 15.19 (a)(5) and relevant KDB publications. For E-label, please refer to §2.935.

### Installation Notice to Host Product Manufacturer

The OEM integrator is responsible for ensuring that the end-user has no manual instruction to remove or install module. The module is limited to installation in mobile application, a separate approval is required for all other operating configurations, including portable configurations with respect to §2.1093 and difference antenna configurations.

### Antenna Change Notice to Host manufacturer

If you desire to increase antenna gain and either change antenna type or use same antenna type certified, a Class II permissive change application is required to be filed by us, or you (host manufacturer) can take responsibility through the change in FCC ID (new application) procedure followed by a Class II permissive change application.

### FCC other Parts, Part 15B Compliance Requirements for Host product manufacturer

This modular transmitter is only FCC authorized for the specific rule parts listed on our grant, host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification.

Host manufacturer in any case shall ensure host product which is installed and operating with the module is in compliant with Part 15B requirements.

Please note that For a Class B or Class A digital device or peripheral, the instructions furnished the user manual of the end-user product shall include statement set out in §15.105 *Information to the user* or such similar statement and place it in a prominent location in the text of host product manual. Original texts as following:

For Class B

*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.*

For Class A

*Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.*