

ZR7 Bluetooth And ANT+ Wireless Module

Hardware Integration Guide Version 1.0 April 2, 2018



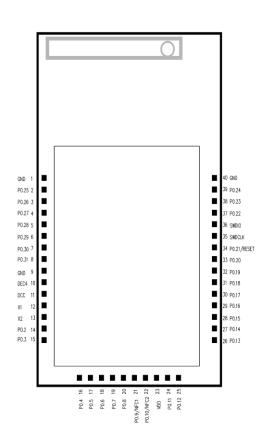
Specification

| Category | Feature | Implementation |
|-----------------------|--------------------|--------------------|
| RF | Bluetooth | 4.2 Single Mode |
| | | |
| | ANT+ | Broadcast |
| | | |
| | Frequency | 2.402-2.480 GHz |
| | | |
| | | |
| FW Upgrade | nRF Toolbox | Over the air |
| | | |
| | Via JTAG interface | Via JTAG interface |
| Supply Voltage | | 1.7 – 3.6V |
| Physical | | 18.25mm X 11mm |
| Operating Temperature | | 0 to 50°C |
| Storage Temperature | | -10 to 60°C |

Pin Definitions

| Pin number | Pin Name | TYPE | Description |
|------------|----------|--------------|-------------------------|
| 1 | GND | POWER | GND PIN |
| 2 | P0.25 | Digital I/O | General purpose I/O PIN |
| 3 | P0.26 | Digital I/O | General purpose I/O PIN |
| 4 | P0.27 | Digital I/O | General purpose I/O PIN |
| 5 | P0.28 | Digital I/O | General purpose I/O PIN |
| | AIN4 | Analog input | SAADC/COMP/LPCOMP input |
| 6 | P0.29 | Digital I/O | General purpose I/O PIN |
| | AIN5 | Analog input | SAADC/COMP/LPCOMP input |
| 7 | P0.30 | Digital I/O | General purpose I/O PIN |
| , | AIN6 | Analog input | SAADC/COMP/LPCOMP input |
| 8 | P0.31 | Digital I/O | General purpose I/O PIN |
| 0 | AIN7 | Analog input | SAADC/COMP/LPCOMP input |
| 9 | GND | POWER | GND PIN |
| 10 | DEC4 | | NC |
| 11 | DCC | | NC |
| 12 | X1 | | NC |
| 13 | X2 | | NC |
| 14 | P0.2 | Digital I/O | General purpose I/O PIN |
| 14 | AIN0 | Analog input | SAADC/COMP/LPCOMP input |
| 15 | P0.3 | Digital I/O | General purpose I/O PIN |
| | AIN1 | Analog input | SAADC/COMP/LPCOMP input |
| 16 | P0.4 | Digital I/O | General purpose I/O PIN |
| 10 | AIN2 | Analog input | SAADC/COMP/LPCOMP input |
| 17 | P0.5 | Digital I/O | General purpose I/O PIN |
| 17 | AIN3 | Analog input | SAADC/COMP/LPCOMP input |
| 18 | P0.6 | Digital I/O | General purpose I/O PIN |
| 19 | P0.7 | Digital I/O | General purpose I/O PIN |
| 20 | P0.8 | Digital I/O | General purpose I/O PIN |
| 21 | P0.9 | Digital I/O | General purpose I/O PIN |
| | NFC1 | NFC INPUT | NFC antenna connection |
| 22 | P0.10 | Digital I/O | General purpose I/O PIN |
| | NFC2 | NFC INPUT | NFC antenna connection |
| 23 | VDD | POWER | POWER supply pin |
| 24 | P0.11 | Digital I/O | General purpose I/O PIN |
| 25 | P0.12 | Digital I/O | General purpose I/O PIN |

| 26 | P0.13 | Digital I/O | General purpose I/O PIN |
|-----|--------|---------------------|-----------------------------------|
| 27 | P0.14 | Digital I/O | General purpose I/O PIN |
| 28 | P0.15 | Digital I/O | General purpose I/O PIN |
| 29 | P0.16 | Digital I/O | General purpose I/O PIN |
| 30 | P0.17 | Digital I/O | General purpose I/O PIN |
| 31 | P0.18 | Digital I/O | General purpose I/O PIN |
| 32 | P0.19 | Digital I/O | General purpose I/O PIN |
| 33 | P0.20 | Digital I/O | General purpose I/O PIN |
| 0.4 | P021 | Dinital I/O | General purpose I/O PIN |
| 34 | RESET | Digital I/O | configurable as pin reset |
| 35 | SWDCLK | WDCLK Digital input | serial wire Debug clock input for |
| | | | debug and programming |
| 36 | SWDIO | WDIO Digital I/O | serial wire Debug I/O for debug |
| | | | and programming |
| 37 | P0.22 | Digital I/O | General purpose I/O PIN |
| 38 | P0.23 | Digital I/O | General purpose I/O PIN |
| 39 | P0.24 | Digital I/O | General purpose I/O PIN |
| 40 | GND | POWER | GND PIN |



This device is intended only for OEM integrators under the following conditions:

In accordance with FCC Part 15C and RSP-100, this module is listed as a Modular Transmitter device.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

The antenna of this transmitter must not be co-located or operating in conjunction with any other antenna or transmitters within a host device, except in accordance with FCC multi-transmitter product approval procedures.

FCC Label Instructions

The final end product must be labeled in a visible area with the following "Contains Transmitter Module FCC ID: <u>QSWDZRCS1</u>"

Any similar wording that expresses the same meaning may be used.

Additionally, there must be the following sentence on the device, unless it is too small to carry it:

"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."

USER MANUAL

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