

radino40 DW1000

Integration instructions for host product manufacturers according to KDB 996369 D03 OEM Manual v01

2.2 List of applicable FCC rules

47 CFR Part 15 Subpart C §15.247

47 CFR Part 15 Subpart F §15.519

2.3 Specific operational use conditions

External antenna: "Decawave WB003"

Operating temperature: -40 to 85 °C

Supply voltage: 2.8 – 3.6V

2.4 Limited module procedures

not applicable

Not a "limited module".

2.5 Trace antenna designs

The antenna trace must be kept as short as possible. The antenna feed of the PCB antenna "Decawave WB003" must be placed as close as possible to pin 31 of the radino40 module. The PCB antenna must be placed on the TOP layer of the carrier PCB.

2.6 RF exposure considerations

The radino40 DW1000 BLE and UWB transmitters meets all requirements for SAR or RF Exposure, intended or unintended, under FCC rules. The BLE radio falls well below the limit determined for <5mm separation (a "body-worn" device) and, for a UWB radio operating above 6GHz, there are currently no exposure limits specified.

If the final host / module combination is intended for use as a portable device the host manufacturer is responsible for separate evaluations/approvals for the SAR requirements from FCC Part 2.1093 and RSS-102.

2.7 Antennas

Model No. of antenna: Decawave WB003

Type of antenna: Ultra-wideband Omni-directional Planar antenna, integrated on the carrier PCB according to reference design.

The mounting of the antenna is fixed to the radio module and no other antenna should be used.

2.8 Label and compliance information

The final end product must be labeled in a visible area with the following

Contains FCC ID: 2AWXURADINO40DW1000

2.9 Information on test modes and additional testing requirements

Testing of the host product with all the transmitters installed is recommended, to verify that the host product meets all the applicable FCC rules. The radio spectrum and RF Exposure is to be investigated with all the transmitters in the final host product functioning to determine that no emissions exceed the

highest limit permitted for any one individual transmitter as required by Section 2.947(f). A formal application for certification submission containing the results of this investigation is not required. The host manufacturer is responsible to ensure that when their product operates as intended it does not have any emissions present that are out of compliance that were not present when the transmitters were tested individually.

If the host product uses any transmitters that have not been FCC certified as modular transmitter, it is necessary to obtain the required certification for that transmitter.

Host products using a modular transmitter are subject to all the applicable individual technical rules as well as to the general conditions of operation in Sections 15.5, 15.15, and 15.29 to not cause interference.

2.10 Additional testing, Part 15 Subpart B disclaimer

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.

Changes or modifications to this unit not expressly approved by the party responsible for

compliance could void the user's authority to operate the equipment.

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.

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.