

Murata 1DX Integration Guide

Neurio Technology ULC

2022-12-02

Murata 1DX Integration Guide

FCC ID of this product is as follows.

- **FCC ID: W72-1DX**

For Neurio Technology ULC integration use in host product(s) only.

Device cannot be sold to general public.

Contents

1. Voltage
2. Antenna
3. Notice

1. Supply Voltage

		Min.	Typ.	Max.	Unit
Specification Temperature Range		-10	+25	+55	Deg C
Specification Voltage	VBAT	3.2	3.6	4.2	V
	VDDIO	1.71	1.8 or 3.3	3.63	V

2. Antenna

Please perform antenna design that follows the specifications of the antenna

The concrete contents of a check are the following three points.

- 1) It is the same type as the antenna type of antenna specifications.
 - Confirm the same size as the Gerber file.
- 2) An antenna gain is lower than a gain given in antenna specifications.
 - Measure the gain, and confirm the peak gain is less than the application value (1.4dBi)
- 3) The emission level is not getting worse.
 - Measure the spurious, and confirm degradation of less than 3dB than spurious value of worst of report used for the application. However it is spurious defined below.

3. Notice

For Neurio Technology ULC integration use in host product(s) only. Device cannot be sold to general public.

The following statements are required by FCC/IC to be included on the product and in the Installation manual.

Contains Transmitter Module FCC ID: W72-1DX

Or

Contains FCC ID: W72-1DX

- Please describe the following warnings in the manual.

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.
FCC CAUTION Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

※When the product is small, as for these words mentioned above, the posting to a manual is possible.

3. Notice

- When installing it in a mobile equipment. Please describe the following warning to the manual.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

- When installing it in a portable equipment.
 - It is necessary to take a SAR test with your set mounting this module.
 - Class II permissive change application is necessary using the SAR report.

Note)

- Portable equipment : Equipment for which the spaces between human body and antenna are used within 20cm.
- Mobile equipment : Equipment used at position in which the spaces between human body and antenna exceeded 20cm.

3. Notice

This device is intended only for Neurio Technology integration use under the following conditions:

- 1)The antenna must be installed such that 20 cm is maintained between the antenna and users, and
- 2)The transmitter module may not be co-located with any other transmitter or antenna.
- 3)The use of an antenna with gain less than 1.4 dBi.

As long as 3 conditions above are met, further transmitter test will not be required. However, designers are still responsible for testing their end-product for any additional compliance requirements required with this module installed.

IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or colocation with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, it will be necessary to re-evaluate the end product (including the transmitter) and obtain a separate FCC authorization.

3. Notice

End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following:

“Contains FCC ID:XXXXXXXXXX”. The grantee's FCC ID can be used only when all FCC compliance requirements are met.

Manual Information To the End User

The designer must be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.