

June 20, 2023

## RE: Intel AX211D2W FCC ID: PD9AX211D2 and IC: 1000M-AX211D2

To: Shenzhen MADIGI Electronic Technology Co.,Ltd

With this letter Intel Corporation authorizes MADIGI to sell the AX211D2W Radio Module embedded in MADIGI system bearing the unique model name **MPC 43**, with the system label containing the following statements:

Contains "FCC ID: PD9AX211D2 and "IC: 1000M-AX211D2"

Except for the product label and model name(s), the 802.11a/b/g/n/ac/ax+ BT WLAN radio is 100% identical to the already FCC and Industry Canada approved Intel Corporation model number AX211D2W FCC ID: PD9AX211D2 and IC: 1000M-AX211D2. This device will continue to be manufactured by Intel Corporation or contracted ODMs until the product is "End of Life" by Intel Corporation.

Any alteration to the Intel Corp. model AX211D2W, will void this authorization and the ability of MADIGI to use the FCC and Industry Canada Radio Approvals obtained by Intel (collectively "Approvals"). Furthermore, any alteration to the antenna type and antenna gain defined in Table-1, as well as the antenna location, system information and two way authentication support beyond that reviewed by Intel and approved by the FCC and ISED within hereunder grant dates will void this authorization and the ability of MADIGI to use the Approvals. MADIGI is required to conduct all required system level regulatory testing not covered by the above mentioned testing and approval.

- Module Approval under FCC ID: PD9AX211D2, originally granted using PIFA Antenna on 02/26/2021 for DSS, DTS, UNII and on 04/26/2021 for 6XD and on 03/28/2022 for UNII-4. And granted using Monopole antenna on 6/29/2021 for DSS, DTS, UNII and on 5/31/2022 for 6XD and on 5/22/2023 for UNII-4.
- Module Approval under IC ID: 1000M-AX211D2 using a PIFA antenna originally granted on 03/21/2021 for DSS, DTS, UNII and on 06/22/2022 for 6XD. And Granted using Monopole Antenna on 07/12/2021 for DSS, DTS, UNII and on 07/27/2022 for 6XD.



## Tabel-1 Reference Antenna Gains

Antenna Type	Model Part Number	2.4 GHz	5.2 GHz	5.6 GHz	5.8 GHz	5.9 GHz	6.2 GHz	6.5 GHz	6.7 GHz	7.0 GHz
		Peak Gain in dBi*								
PIFA	SKYCROSS WTCC-PIFA-REF-1	3.24	3.73	4.77	4.97	4.97	4.83	4.3	5.37	5.59
Monopole	Hongbo 260-25083	3.22	3.42	4.77	4.72	4.71	4.75	4.29	4.81	4.74
*All Antenna gains include cable pass loss										

Authorized antennas listed in Appendix A

MADIGI systems categorized as mobile regarding FCC Part 2.1091 and IC RSS-102 section 2.5.2, must satisfy the most conservative SAR conditions shown in Table-2 to demonstrate compliance with the RF exposure evaluation requirements. The most conservative criteria in Table-2 is based on the reported results as granted by FCC and ISED.

## Table-2: Most Conservative SAR conditions

Band	Antenna Type	Minimum Antenna-to- User Separation (mm)	Maximum reported SAR value (W/kg -1g)
2.4/5GHz	Pifa	14mm	0.63
5.9GHz	Pifa	14mm	0.64
6XD	Pifa	14mm	0.29
2.4/5GHz	Monopole	30mm	0.75
6XD	Monopole	20cm	MPE*
5.9GHz	Monopole	20cm	MPE*

\*Use of this antenna meets MPE requirement of KDB447498 and can be used in mobile configurations.



Intel provides this authorization as a service to MADIGI. MADIGI agrees that ultimately it is the MADIGI's responsibility to obtain all appropriate regulatory approvals for MADIGI systems. Intel accepts no responsibility for any MADIGI use of the Approvals inconsistent with or beyond the terms of this authorization and the scope of the Approvals themselves. Any improper use of these Approvals voids this authorization, except for the MADIGI's duty to indemnify and hold harmless set forth below, which duty shall survive indefinitely.

Intel hereby disclaims any and all liability for any improper MADIGI use of these Approvals. In consideration for Intel's obtaining these Approvals to facilitate the MADIGI systems, MADIGI agrees to indemnify and hold harmless Intel and/or its subsidiaries from any and all liability (including but not limited to fines, penalties, attorney's fees, or any other costs and expenses) arising, directly or indirectly, from MADIGI's improper use of the Approvals, this authorization, or any related violation of applicable laws and regulations.

Regards,

Benjamin LAVENANT Wireless Regulatory Engineer CCG Wireless Test & Certification Center

Date: June 20, 2023

Appendix A (mobile platforms authorized by approved antennas)

Platform Antenna will be integrated into	Antenna Transmitter	Antenna Part Number	Antenna Manufacturer	Antenna Type
	Main	SLK-MDJ-4422A-L-260IV-B	Shenzhen Yishengbang Technology	Monopole
MPC 43	Aux	SLK-MDJ-3124-L-150IV-G	Shenzhen Yishengbang Technology	PIFA
Distance to the end user > 20cm				