

GE MDS LLC 175 Science Parkway Rochester NY 14620 E5MDS 585-242-9600

Date: 02-FEB-2022

## TO:

Federal Communications Commission (FCC) Authorization and Evaluation Division 7435 Oakland Mills Road, Columbia, MD 21046

Innovation, Science and Economic Development Canada (ISED) 3701 Carling Ave.
Ottawa, Ontario Canada K2H8S2

**RE:** Class 2 Permissive Change to the MDS LN400 Transceiver (E5MDS-LN400 and 101D-LN400) – change applies to only the range 406.1 to 470MHz

Applicant: GE MDS LLC

Product: MDS LN400 Transceiver

Model: MDS LN400 FCC ID: E5MDS-LN400 IC ID: 101D-LN400

Dear FCC and ISED,

GE MDS LLC requests a Class 2 Permissive Change to the GE MDS LN400 modular transceiver. This change for the LN400-L4E build variant of the LN400 transceiver only applies to operation in the frequency range of 406.1 to 470MHz.

While the original grant for FCC: E5MDS-LN400 / IC:101D-LN400 is still applicable as-is, changes to the transceiver due to end-of-life component availability were verified for continued compliance. The modem IC was changed to use a pin-for-pin compatible replacement from the original manufacturer and other improvements were made to the receiver and digital circuitry during the process.

The integrated modem IC is described in section 4.6.1 of the Theory of Operations where the use is unchanged from previous filings. The pin-for-pin compatible replacement from the original manufacturer ensures future availability with their current shipping product.



The change to the digital circuitry was to replace the buffer IC used in the 50MHz clock circuit due to the end-of-life of the original part. This did not change the base clock frequency of the product which still operates at 50MHz called out in section 4.5 of the Theory of Operations.

The receiver change was to allow for an alternate RX path offering inline use of an external receive filter if desired. No on-module filtering or frequency changes to the overall system were made.

All FCC & ISED emission testing has been completed and passed at NTS labs in December of 2021. Test reports are on file.

If you have any questions or need further information from us, please do not hesitate to contact me via email (<u>Justin.Smith3@ge.com</u>) or phone (585 472-1715).

Sincerely,

Justin Smith Principal Engineer GE MDS LLC

Justin.Smith3@ge.com

585-472-1715