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SAR EXCLUSION DOCUMENT

Document 75952029-24 Issue 01
ID: Not Applicable

2400 MHz Transmitter: Bluetooth HOS Driver ID

ISED RSS-102 Issue 5: Exemption Limits for Routine Evaluation – SAR Evaluation (RSS-102 Section 2.5.1)

Up to 6 GHz – Separation Distance ≤200 mm

The SAR evaluation exemption is determined by comparison of the output power level (adjusted for tune-up tolerance) for the specified comparison distance to the limit given in RSS-102 Table 1.

SAR Exclusion Result:

Frequency (MHz)	Power Output mW	Antenna Gain Ratio	Duty Cycle %	Maximum Power (Tune up value) * (mW)	Test Separation Distance (mm) **	Exemption Limit *** (mW)	SAR Test Exclusion (Yes/No)
2400	3	1.7783	10	0.44670896	10	7	Yes
2480	3	1.7783	10	0.44670896	10	7	Yes

*Maximum power tune up value including tolerance and is the higher of the maximum conducted or equivalent isotropically radiated power (EIRP) source-based, time-averaged output power of the device.

**Test separation distance refers to the minimum test separation distance based on the smallest distance between the antenna and radiating structures or the outer surface of the device, according to the most conservative exposure condition for the applicable module or host platform test procedure requirements, to any part of the body or extremity of a user or bystander.

*** Select power from RSS-102 Table 1 for the applicable frequency and separation distance. For controlled use devices where the 8 W/kg for 1 gram of tissue applies, the exemption limits for routine evaluation in Table 1 are multiplied by a factor of 5. For limb-worn devices where the 10 gram value applies, the exemption limits for routine evaluation in Table 1 are multiplied by a factor of 2.5. If the operating frequency of the device is between two frequencies located in Table 1, linear interpolation shall be applied for the applicable separation distance.

The SAR exclusion threshold has been evaluated using the method described above from information supplied by the manufacturer. Based on the evaluation above, the EUT is categorically excluded from SAR testing.

Approved by ..... **Date** 21 September 2022

Authorised Signatory

Manufacturer's Declaration of Product information:

Technical Description: *(Please provide a brief description of the intended use of the equipment)*	The Bluetooth Driver ID (BT DID) comprises: a) Green Button (upper): Transmit the Driver Identification message in order to identify the driver in the vehicle. b) Red Button (lower): Road Side Assist/Panic The product is designed with an RF range that limits it to in-cab use of the Driver ID and Roadside Assist/Panic buttons only. The BT DID forms part of the MiX6000, MiX 3000, and MiX 4000 range of products, and soon to be integrated with other products, such as MiX Vision. It communicates with the mobile host (e.g. MiX3000 or MiX4000) via a bi-directional Bluetooth LE RF link. There is also a variant with more memory that supports Hours of Service (HOS) functionality. Both product variants use the same PCB.
Manufacturer:	MiX Telematics International (Pty) Ltd.
Model:	Bluetooth Driver ID Bluetooth HOS Driver ID
Part Number:	P0022MT P0032MT

If more than one frequency band is supported, please confirm which combinations of bands are capable of Simultaneous Transmit.	BLE2400

Frequency Band :

Antenna Model:	PCB : Meandering IFA antenna	
Antenna length:	0.766 x 1.4 x 0.15	cm
Bottom frequency:	2400	MHz
Middle frequency:	2440	MHz
Top frequency:	2480	MHz

Maximum power (input to the antenna including a tolerance):	4	dBm
Antenna gain (or maximum gain allowed):	2.5	dBi

Or

Field Strength Measurement:		dBµA/M
Measurement Distance:		cm

Separation distance from antenna to the user/bystander	1	cm
Transmitter Duty Cycle:	<10	%