We, Digital Matter Embedded South Africa, St Georges building, cnr Meadowbrook and Sloane Rd, Bryanston, South Africa, 2021

declare on 22/02/2024

under our sole responsibility that the product:

- **Barra-GPS-4G**

is in compliance with the essential requirements and other relevant provisions of Radio Equipment Directive (RED) 2014/53/EU and Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS 2) Directive 2011/65/EU and its amendment Directive 2015/863/EU (RoHS 3).

Technical Specifications	Product Code
	Barra-GPS-4G
Cellular Modem:	Nordic nRF9160-SICA-B1
Cellular Modem Bands and Power	4G Bands: CAT-M1 & CAT-NB1 bands - 1 FDD 2100 MHz - 2 FDD 1900 MHz - 3 FDD 1800 MHz - 4 FDD 1700 MHz - 5 FDD 850 MHz - 8 FDD 900 MHz - 12 FDD 700 MHz - 13 FDD 700 MHz - 17 FDD 700 MHz - 19 FDD 850 MHz - 20 FDD 800 MHz - 25 FDD 1900 MHz - 26 FDD 800 MHz - 28 FDD 700 MHz - 66 FDD 1700 MHz CAT-M1 specific - 18 FDD 850 MHz
Cellular Modem Operating Mode:	CAT-M1 & CAT-NB1
Maximum Cellular Output power	Up to 23dBm
Modulation	CAT-M1 & NB-IOT: OFDMA CAT-M1: 16 QAM
Bandwidth	CAT-M1: 1.4MHz NB-IOT: 200kHz
GNSS Receiver:	UBX-M10050-KB
GNSS Bands:	GPS, GLONASS, Galileo, BeiDou, QZSS
Power Supply:	Input Voltage: 2.2-3.6 V DC
Firmware	V1.0
Clarification of module function:	GNSS provided by UBX-M10050-KB Cellular communication provided by nRF9160-SICA-B1

Essential Requirements – Radio Equipment Regulations 2017	
Health and Safety	EN/ IEC 62368-1:2020+A11:2020 EN 62311:2020
EMC	EN 301 489-1 V2.2.3 EN 301 489-19 V2.2.1 EN 301 489-52: V1.2.1 EN 55032:2015/A1:2020 EN 55035:2017/A11:2020
Radio Spectrum Efficiency	EN 301 908-1 V15.2.0 EN 301 908-13 V13.2.1 EN 303 413 V1.2.1
RoHS	RoHS 2 Directive 2011/65/EU with amendment (RoHS 3) EU Directive 2015/863/EU

All technical documentation relevant to the above equipment will be held at:

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The Oval, St Georges Block,
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Adrian Pickles
Technical Director

11/03/2024
Date Signed