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|  | <b>Digital Matter Embedded South Africa</b> |              | Doc No:            | DM/CMP/DoC/BE4/001 |
|   | <b>EU Declaration of Conformity</b>         |              | Date Created:      | 25/10/2023         |
|   |   |              | Date Modified:     | 11/03/2024         |
|   |   |              | Rev No:            | 02                 |
| Creator:  | Lizette Viljoen                             | Approved By: | Technical Director |                    |

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


declare on 25/10/2023

under our sole responsibility that the product:

- **Barra-Edge-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-Edge-4G  |
| Cellular Modem:                   | Nordic nRF9160-SICA-B1   |
| Cellular Modem Bands and Power    | <b>4G Bands:</b><br><b>CAT-M1 &amp; CAT-NB1 bands</b> <ul style="list-style-type: none"> <li>- 1 FDD 2100</li> <li>- 2 FDD 1900</li> <li>- 3 FDD 1800</li> <li>- 4 FDD 1700</li> <li>- 5 FDD 850</li> <li>- 8 FDD 900</li> <li>- 12 FDD 700</li> <li>- 13 FDD 700</li> <li>- 17 FDD 700</li> <li>- 19 FDD 850</li> <li>- 20 FDD 800</li> <li>- 25 FDD 1900</li> <li>- 26 FDD 800</li> <li>- 28 FDD 700</li> <li>- 66 FDD 1700</li> </ul> <b>CAT-M1 specific</b> <ul style="list-style-type: none"> <li>- 18 FDD 850</li> </ul> |
| Cellular Modem Operating Mode:    | CAT-M1 & CAT-NB1   |
| Maximum Cellular Output power     | Up to 23dBm  |
| Modulation                        | CAT-M1 & NB-IOT: OFDMA<br>CAT-M1: 16 QAM   |
| Bandwidth                         | CAT-M1: 1.4MHz<br>NB-IOT: 200kHz   |
| GNSS Receiver:                    | Semtech LR1110   |
| GNSS Bands:                       | GPS & BeiDou   |
| WiFi Receiver:                    | Semtech LR1110   |
| Power Supply:                     | Input Voltage: 2.2-3.6 V DC  |
| Firmware                          | V1.0   |
| Clarification of module function: | Passive GNSS provided by LR1110 and server-side lookup<br>Passive WiFi provided by LR1110 and server-side lookup<br>Cellular communication provided by nRF9160-SICA-B1   |

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### Essential Requirements – Radio Equipment Directive 2014/53/EU

|   |  |
|---|--|
| Health and Safety (Article 3.1a)                        | EN/ IEC 62368-1:2020+A11:2020<br>EN 62311:2020   |
| EMC (Article 3.1b)                                      | EN 301 489-1: V2.2.3<br>EN 301 489-17: V2.3.6<br>EN 301 489-19: V2.2.1<br>EN 301 489-52: V1.2.1<br>EN 55032:2015/A1:2020<br>EN 55035:2017/A11:2020 |
| Radio Spectrum Efficiency (Article 3.2)                 | EN 300 328: V2.2.2<br>EN 303 413: V1.2.1<br>EN 301 908-1: V15.2.1<br>EN 301 908-13: V13.2.1  |
| Essential Requirements (RoHS)<br>Prevention Article 4.1 | RoHS 2 Directive 2011/65/EU with amendment (RoHS 3) EU Directive 2015/863/EU   |
| Article 10(10) and 10(2)                                | No restrictions on use in any EU member states.  |

The conformity assessment procedure referred in Article 17 and detailed in Annex III of the Directive 2014/53/EU has been followed and all technical documentation relevant to the above equipment will be held at:

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Adrian Pickles  
Technical Director

11/03/2024

Date Signed