

# **MK6 OBU**

Cohda Wireless 6<sup>th</sup> generation On-Board Unit is the most advanced V2X OBU with dual V2X technology using the latest connectivity with:

- DSRC with 2x NXP RoadLink® SAF5400 chipset
- C-V2X with Qualcomm SA515 chipset supporting 3GPP R15, 5G
- Cellular 5G NR with fallback support for 4G (LTE Cat 19)/3G/2G
- Wi-Fi 802.11 a/b/g/n/ac
- Bluetooth v5.1

Cohda Wireless OBU offers a robust, secure foundation for intelligent transport systems of the future no matter the technology choice of C-V2X or DSRC.



Conda Wireless is a global Jeader in the development of Connected Vehicles and Connected Autonomous Vehicle software with proven applications for Smart City, Mining and other environments.

Cohda Wireless' V2X technology is proven with inclusion in the first two production vehicles giving Cohda Wireless practical experience in bringing automotive ITS solutions to industry.



# MK6 OBU

#### **TEST STANDARD CONFORMANCE**

IEEE 802.11-2012 IEEE 1609 - 2020 ETSI ES 202 663 SAE J2735 - 2022

SAE J3161/1, J3161/1A, J3161 - 2022

T/CSAE-2021

CE, UKCA, FCC, ISED, KC, OmniAir\* CERTIFICATION



V2X

CPU NXP i.MX 8 (8544 DMIPS) operating at 800MHz

OS Debian based Linux OS

RAM 1GB SDRAM **FLASH** 16GB eMMc

**STORAGE** microSD Card slot supporting SDHC / SDXC

**ETHERNET** 10/100/1000 Mbps

**POWER SUPPLY** 7-36 VDC

**BACKUP POWER** <1mA at 12V input RECEIVER SENSITIVITY -99dBm @ 3Mbps

DSRC: +22dBm (ETSI Mask C) MAX Tx POWER C-V2X: +21.5dBm (Class 3)

**BANDWIDTH** 10 & 20 MHz

**POSITIONING** Advanced GNSS with RTK capability

SXF1800 FIPS 140-2 level 3 compliant, CC EAL4+ **SECURITY** 

Mizar TTM2000 (China variant)

**ENVIRONMENTAL OPERATING** 

-40°C to + 74°C RANGE

**DIMENSIONS** 172mm x 168mm x 51mm

### **WIRELESS CONNECTIVITY**

**DSRC** NXP RoadLink® SAF5400 C-V2X Qualcomm SA515

**CELLULAR** Cellular 5G NR with 4G (LTE Cat 19)/3G/2G fall back

WIFI 802.11 a/b/g/n/ac

**BLUETOOTH** V5.1

## **CONNECTORS**

1x 3in1 C-V2X / DSRC / GNSS, 2 x LTE, 2 x Wi-Fi/BT **ANTENNAS** 

Ethernet (IEEE802.3)

Automotive Ethernet (100BASE-T1)

USB 2.0 high-speed, on-the-go (host/peripheral) **INTERFACES** 

High speed CAN maximum throughput (5Mbit/sec (CAN-FD) with a CAN

transceiver of 2 MicroSD card slot

**POWER** 1 x Molex Mini50





















#### KIT CONTENTS

**ANTENNAS** 

1x 3in1 C-V2X / DSRC / GNSS 2x LTE 2x Wi-Fi/BT

\* Target certification

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