

MK6 OBU

Cohda Wireless 6th 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 LTE-V2X (PC5), using 3GPP R14
- Cellular 5G NR 3GPP R15, 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.



Cohda Wireless is a global leader 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.

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TEST STANDARD CONFORMANCE

V2X	IEEE 802.11- 2012
	IEEE 1609 - 2020
	ETSI ES 202 663
	SAE J2735 – 2022
	SAE J3161/1, J3161/1A, J3161 - 2022 T/CSAE-2021
CERTIFICATION	CE, E1 R10 & R118, UKCA, FCC, ISED, KC, OmniAir*

CORE FEATURES

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
MAX Tx POWER	DSRC: +22dBm (ETSI Mask C) C-V2X: +21.5dBm (Class 3)
BANDWIDTH	10 & 20 MHz
POSITIONING	Advanced GNSS with RTK capability
SECURITY	SXF1800 FIPS 140-2 level 3 compliant, CC EAL4+ Mizar TTM2000 (China variant)
ENVIRONMENTAL OPERATING RANGE	-40°C to + 74°C
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

ANTENNAS	1x 3in1 C-V2X / DSRC / GNSS, 2 x LTE, 2 x Wi-Fi/BT
INTERFACES	Ethernet (IEEE802.3) Automotive Ethernet (100BASE-T1)
	USB 2.0 high-speed, on-the-go (host/peripheral)
	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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