

## Product Brief:

# 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.



*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.*

[cohdawireless.com](http://cohdawireless.com)

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### TEST STANDARD CONFORMANCE

V2X	IEEE 802.11- 2012
	IEEE 1609 - 2020
	ETSI ES 202 663
	SAE J2735 – 2020
	SAE J3161/1, J3161/1A, J3161 - 2022
	T/CSAE-2021
CERTIFICATION*	EU RED, FCC, OmniAir

### CORE FEATURES

CPU	NXP i.MX 8 (8544 DMIPS) operating at 800MHz
OS	Ubuntu LTS
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
POWER	MicroSD card slot
	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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