

Product Brief:

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 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

Product Brief:

MK6 OBU



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



Cohda Wireless Pty Ltd
27 Greenhill Road
Wayville SA 5034
Australia
P +61 8 7099 5500
inquiry@cohdawireless.com

Cohda Wireless Europe GmbH
P +49 89 208 026548
inquiry.eu@cohdawireless.com

Cohda Wireless America LLC
P +1 317 818 5595
inquiry.na@cohdawireless.com

Cohda Wireless China
P +61 8 7099 5500
inquiry.ch@cohdawireless.com

Beijing BOCON Automation Tech Co Ltd (China)
P +81 10 5166 3110
inquiry@bocon.com.cn

Hancom MDS Inc. (Republic of Korea)
P +82 31 627 3000
inquiry.kr@cohdawireless.com

Nexty Electronics (Japan)
P +81 3 5462 9724
inquiry.jp@cohdawireless.com

cohdawireless.com