



List of C-V2X Devices

5GAA Automotive Association
Technical Report

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Availability of C-V2X Devices

This document intends to provide an overview of the C-V2X Devices which we understand are already publicly available on the market or will soon be. This overview is based on publicly available information¹.

This list may not include factory fit telematics/V2X boxes directly under contract with automakers.

Below, the following terms are used:

C-V2X-Chipset: An integrated circuit hardware including the wireless modem that manages the C-V2X information transmission and reception over a dedicated radio spectrum.

C-V2X-Module: A printed circuit board (PCB) assembling a C-V2X chipset with additional components, interfaces and functionalities, e.g. including application, positioning and security processors, antenna connectors etc, which are needed for the integration into a complete C-V2X unit (aka ITS station), like a roadside unit (RSU) or an on-board unit (OBU).

C-V2X RSU: Complete C-V2X ITS station unit incorporating a C-V2X module, designed with all necessary components to be mounted on the roadside.

C-V2X OBU: Complete C-V2X ITS station unit incorporating a C-V2X module, designed with all necessary components to be mounted on a vehicle.

¹ The sources are referenced. 5GAA does not accept any liability for information provided by third parties. 5GAA has not verified whether the information provided by third parties is accurate. 5GAA does not in any way validate the information provided by third parties by including particular devices in this list. This document is only intended to provide an overview, the list of devices is not necessarily complete.

LTE-V2X: LTE-V2X relates to all 3GPP releases supporting LTE-V2X mobile network communications and LTE-V2X direct communications. LTE-V2X mobile network communications relates to 3GPP specifications, starting with Rel-8 for LTE. LTE-V2X direct communications relates to 3GPP specifications, starting with Rel-14.

5G-V2X: 5G-V2X relates to 5G radio access technology (NR-New Radio), starting with Rel. 15 and possibly complemented by LTE-V2X.

C-V2X Aftermarket Safety Device (ASD): C-V2X ITS station unit incorporating a C-V2X module, designed with components for easy installation in existing vehicles (including micromobility vehicles).

GCF Certified: C-V2X Devices marked with an asterisk are certified by GCF. Source: <https://www.globalcertificationforum.org/gcf-certified-products/all-c-v2x-certifications.html>

C-V2X Chipsets:

Product Name	Manufacturer	Product type	Reference Market	More info	LTE-V2X mobile network communications (Uu)	LTE-V2X direct communications (PC5)	5G-V2X mobile network communications (Uu)	5G-V2X direct communications (PC5)
SECTON	Autotalks	Chipset	Global	Link	-	X	-	-
CRATON2	Autotalks	Chipset	Global	Link	-	X	-	-
TEKTON3	Autotalks	Chipset	Global	Link	-	X	-	X
SECTON3	Autotalks	Chipset	Global	Link	-	X	-	X
Balong765	Hisilicon-Huawei	Chipset	Global	Link	X	X	-	-
Balong5000	Hisilicon-Huawei	Chipset	Global	Link	X	X	-	-
CX1860	Morningcore	Chipset	Global	Link	X	X	-	-
CX1910	Morning core	Chipset	Global	Link	X	X	-	-
Snapdragon Automotive 5G	Qualcomm	Chipset	Global	Link	X	X	X	-
Snapdragon Automotive 4G	Qualcomm	Chipset	Global	Link	X	X	-	-
9150 C-V2X ASIC	Qualcomm	Chipset	Global	Link	-	X	-	-
Snapdragon 2150 Platform	Qualcomm	Chipset	Global	Link	X	X	X	-

C-V2X Module:

Product Name	Manufacturer	Product Type	Reference Market	More info	LTE-V2X mobile network communications (Uu)	LTE-V2X direct communications (PC5)	5G-V2X mobile network communications (Uu)	5G-V2X direct communications (PC5)
UMCC1B	Alps Alpine	Module	CHN	Link	-	X	-	-
UMNZ1*	Alps Alpine	Module	Global	Link	X	X	X	-
DMD3A	CICTCI	Module	Global	Link	-	X	-	-
DMM2x	CICTCI	Module	Global	Link	X	X	X	-
AX168 C-V2X Module	Fibocom	Module	Global	Link	-	X	-	-
LAM- V500	LG Innotek	Module	Global	Link	X	X	-	-
AG15	Quectel	Module	Global	Link	-	X	-	-
AG52xR	Quectel	Module	Global	Link	X	X	-	-
AG18	Quectel	Module	Global	Link	-	X	-	-
AG190W-GL	Quectel	Module	Global	Link	-	X	-	-
AG55xQ	Quectel	Module	Global	Link	X	X	X	-
AG590E	Quectel	Module	Global	Link	X	X	X	-
RX113A	Rolling Wireless	Module	Global	Link	-	X	-	-
RN93xx	Rolling Wireless	Module	Global	Link	X	X	X	-
RN94xx	Rolling Wireless	Module	Global	Link	X	X	X	-
SIM8100	SimCOM	Module	Global	Link	-	X	-	-
SOM-351U	Unex Technology Corp.	Module	Global	Link	-	X	-	-
ZM9200	ZTE	Module	Global	Link	X	X	X	-
ZM8350	ZTE	Module	CHN/EU	Link	-	X	-	-

C-V2X OBU:

Product Name	Manufacturer	Product Type	Reference Market	More info	LTE-V2X mobile network communications (Uu)	LTE-V2X direct communications (PC5)	5G-V2X mobile network communications (Uu)	5G-V2X direct communications (PC5)
5G OBU, CTX-0800*	Askey	OBU	EU/US/CHN	Link	X	X	X	-
AI-500-065-02	Applied Information	OBU	US	Link	X	X	-	-
V2X OBU	Chemtronics	OBU	US/KOR/CHN	Link	-	X	-	-
ITS-OB4	Commsignia	OBU	EU/US	Link	X	X	X	-
MK6C EVK	Cohda Wireless	OBU	Global	Link	-	X	-	-
MK6 OBU	Cohda Wireless	OBU	Global	Link	X	X	X	-
R1900 Series 5G Ruggedized Router	CradlePoint	OBU	Global	Link	X	-	X	-
R2100 Series 5G Ruggedized Router	CradlePoint	OBU	Global	Link	X	-	X	-
HMCU-OBU	CTAG	OBU	EU	Link	X	X	X	-
VU4004	CICTCI	OBU	CHN	Link	X	X	-	-
VU4105	CICTCI	OBU	CHN	Link	X	X	X	-
VU40E4	CICTCI	OBU	CHN	Link	X	X	-	-
C-V2X Autolink	Danlaw	OBU	US	Link	X	X	-	-
C-V2X OBU	Ficosa	OBU	Global	Link	X	X	-	-
HARMAN Savari MobiWAVE	Harman	OBU	Global	Link	-	X	-	-
WaveBee Plus Av1022A	Keysight	OBU	Global	Link	-	X	X	-
CBOX-OBU	Neusoft	OBU	CHN	Link	-	X	-	-
VeTalk	Neusoft	OBU	Global	Link	X	X	-	-
RXV200	RANiX	OBU	Global	Link	-	X	-	-
OBU-351U	Unex Technology Corp	OBU	Global	Link	-	X	-	-
Y9000	ZTE	OBU	CHN	Link	X	X	X	-

C-V2X RSU:

Product Name	Manufacturer	Product Type	Reference Market	More info	LTE-V2X mobile network communications (Uu)	LTE-V2X direct communications (PC5)	5G-V2X mobile network communications (Uu)	5G-V2X direct communications (PC5)
5G RSU, CRU-0100	Askey	RSU	EU/US/CHN	Link	X	X	X	-
AI-500-095	Applied Information	RSU	US	Link	-	X	-	-
MK6C-RSU	Cohda Wireless	RSU	EU/US/CHN	Link	-	X	-	-
ITS-RS4	Commsignia	RSU	EU/US	Link	X	X	X	-
MK6 RSU	Cohda Wireless	RSU	Global	Link	X	X	X	-
HMCU-RSU	CTAG	RSU	EU	Link	X	X	X	-
RU3110E	CICTCI	RSU	CHN	Link	X	X	-	-
RU5000E	CICTCI	RSU	CHN	Link	X	X	X	-
C-V2X RouteLink	Danlaw	RSU	US	Link	-	X	-	-
ETF-PRO-RC	Ettifos Co.	RSU	EU/US	Link	X	X	X	-
Savari StreetWAVE	Harman	RSU	Global	Link	X	X	X	-
RSU5201	Huawei	RSU	Global	Link	X	X	-	-
RIS-9260 C-V2X ITS Station	Kapsch	RSU	Global	Link	X	X	-	-
WaveBee Road AV1023A	Keysight	RSU	Global	Link	-	X	X	-
V2I-OUT_OMNI	Lacroix City	RSU	EU/US	Link	X	X	X	-
RSU DK3	SWARCO	RSU	EU	Link	-	X	-	-
RSU-351x	Unex Technology Corp	RSU	Global	Link	-	X	-	-
Sittraffic Dual Mode ESCoS RSU	Yunex-Siemens	RSU	Global	Link	X	X	-	-
Y2000	ZTE	RSU	CHN	Link	X	X	-	-
Y2001	ZTE	RSU	CHN	Link	X	X	X	-

C-V2X ADS

Product Name	Manufacturer	Product type	Reference Market	More info	LTE-V2X mobile network communications (Uu)	LTE-V2X direct communications (PC5)	5G-V2X mobile network communications (Uu)	5G-V2X direct communications (PC5)
V2X-AIR	Ettifos	ASD	EU/US	Link	X	X	X	-

5GAA is a multi-industry association to develop, test and promote communications solutions, initiate their standardisation and accelerate their commercial availability and global market penetration to address societal need. For more information such as a complete mission statement and a list of members please see <https://5gaa.org>

