Anritsu Advancing beyond

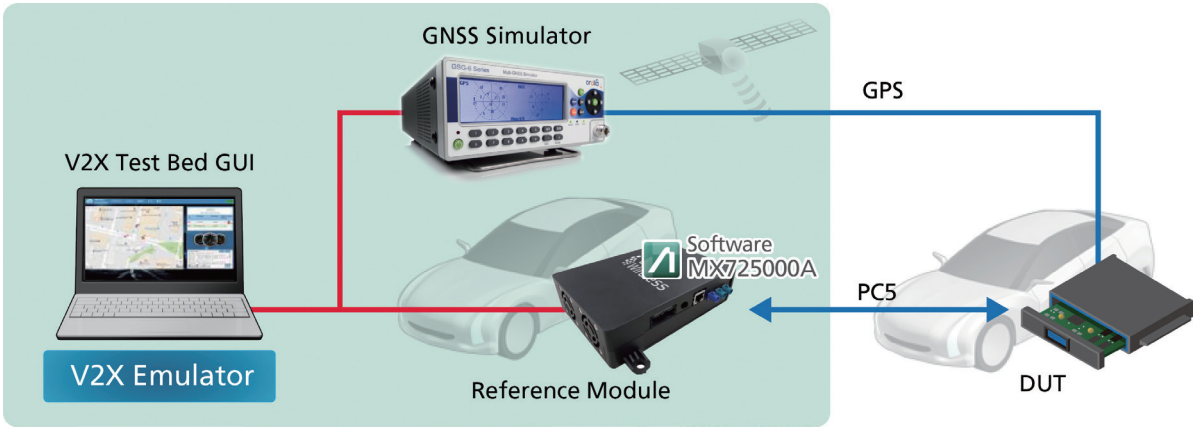
Cost-Effective Graphical Evaluation of C-V2X PC5 Communications Function

LTE V2X PC5 Communications Software MX725000A

V2V and V2I communications over the ITS-band PC5 interface are being developed to support the future expected widespread rollout of cellular V2X (C-V2X) applications. Conventional test environment was extremely expensive and required test scenario programming, causing problems for development engineers in securing adequate evaluation resources and bench time.

This solution uses Anritsu's LTE V2X PC5 Communications Software to link the C-V2X communications reference module and GNSS simulator with the Tata Elxsi V2X Emulator to support programming-free graphical evaluation of PC5 communications and cut C-V2X development time and costs.

System Configuration



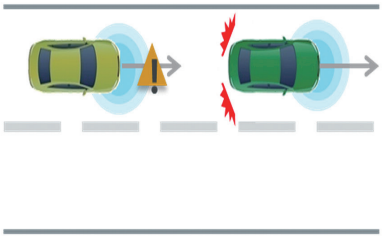
Scenario Configuration | Play and Visualise | Log Trace

Functions/Traffic Scenarios

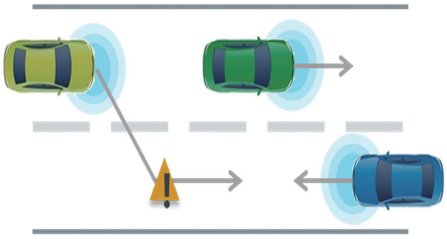
FCW (Forward Collision Warning)	**SVW** (Stationary Vehicle Warning)
ICW (Intersection Collision Warning)	**EVW** (Emergency Vehicle Warning)
HLN (Hazardous Location Warning)	**CACC** (Cooperative Adaptive Cruise Control)
BSW (Blind Spot Warning)	**LTA** (Left Turn Assist)
DNPW (Do Not Pass Warning)	**AVW** (Abnormal Vehicle Warning)
EBW (Emergency Brake Warning)	**CLW** (Control Loss Warning)
SLW (Speed Limit Warning)	**GLOSA** (Green Light Optimized Speed Advisory)

Typical Usage Cases

Forward Collision Warning



Do Not Pass Warning



Ordering Information

Please specify the model/order number, name and quantity when ordering.
The names listed in the chart below are Order Names. The actual name of the item may differ from the Order Name.

Model	Name	Qty.	Remarks
Software			
MX725000A*1	LTE V2X PC5 Communication Software	1	
TATA-V2XE-ADV*2	V2X Emulator	1	Tata Elxsi software
TATA-V2XE-ADV-AMC*2	V2X Emulator 1 year support service	1	Annual technical support (unnecessary in first year)
Google Maps API service*3	Directions API Geocoding API JavaScript API	1	Google Maps data contract. Credit card required for payment. Internet connection required.
Reference Module			
MK6C EVK*3	Reference Module	1	Cohda Wireless Reference module
GNSS Simulator			
GSG-62*4	GNSS Simulator	1	Orolia GNSS simulator
OPT-RSG*4	RSG Option	1	
OPT01/07*4	Passive GNSS Antenna	1	Required for GNSS OTA connection
Accessories			
Z2017B*1	Standard PC	1	Dell PC
J1440A*1	LAN Cable	3	LAN cable
Z1858A*1	Divider (2 way)	1	RF Divider
J1795B*1	Coaxial Cable (SMA(M)-SMA(M), 1.0 m)	1	SMA Coaxial cable
Mini-Circuits BLK-18-S+*3	SMA DC Block	2	(Recommended model) Cuts DC in the signal from GNSS Simulator. Connected to the Divider output.
StarTech/USB31000S*3	USB 3.0 to LAN Adapter	1	Recommended model
NETGEAR/GS105*3	5 Gigabit Ports Switching Hub	1	Recommended model

*1: Sold by Anritsu
*2: Sold by both Tata Elxsi and Anritsu
*3: Customer needs to purchase directly from the vendor
*4: Sold by local distributors of Orolia