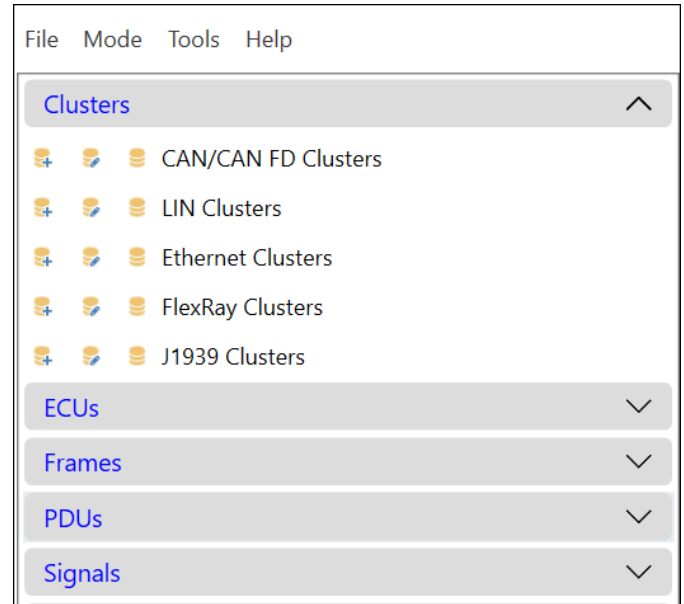# EEA COM

Software to Design AUTOSAR Based ECUs Communication Matrix

The EEA COM software tool allows for communication networks design based on AUTOSAR. The software enables users to view, edit and create AUTOSAR ARXML based network databases for ECUs and support CAN/CAN FD, LIN, FlexRay and Automotive Ethernet. EEA COM imports and exports ARXML format files for seamless interaction with other tools. It is designed to help legacy network database users migrate to AUTOSAR based systems with ease.

In view mode, EEA COM loads an existing ARXML file for easy viewing of AUTOSAR Clusters information, ECUs, PDUs and signal information with full details in hierarchical form. These multiple simultaneous views give engineers an edge when it comes to understanding whole-network architecture.

Features:

- ARXML output files can be part of further AUTOSAR work flow or to load in other AUTOSAR tools

- Edit to add new PDUs, frames, signals, data type and assign

- Create an entirely new AUTOSAR communication matrix by defining clusters, ECUs data types, and more

- Support for Service Oriented Architecture - SOME/IP

- Support for Ethernet and FlexRay communication architectures

- View or edit the Ethernet switch configuration from the ARXML file

- Edit and change LIN schedule table design

- Legacy and other database (.dbc, .vsdb, .csv*, .ldf*,.fibex*) import available

- ECU or System Extract can be loaded

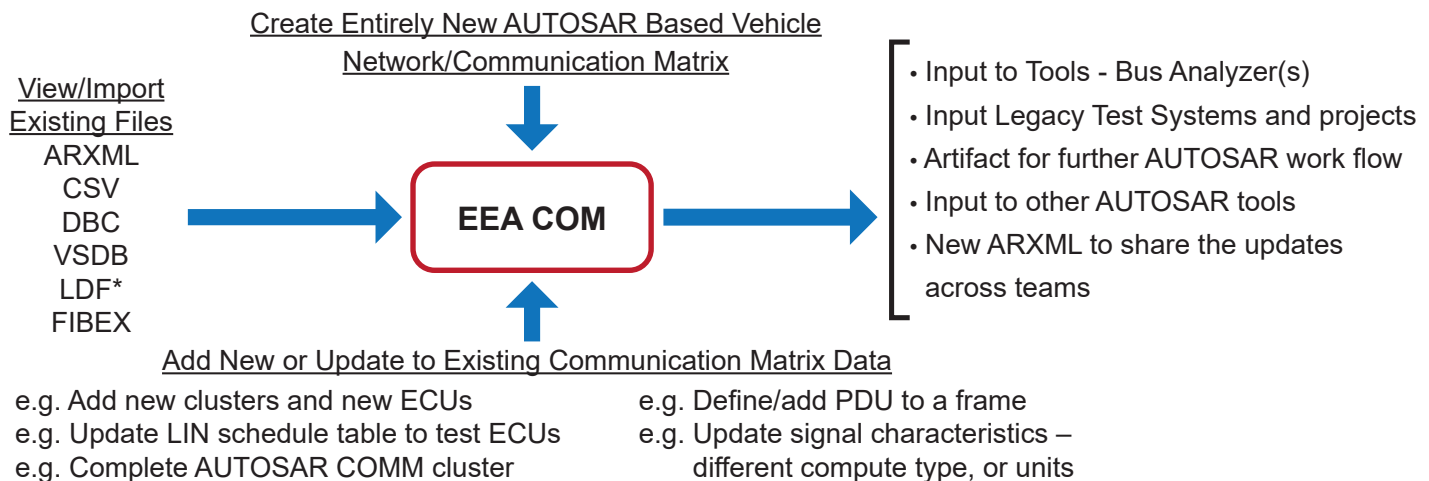- Edit compute methods and data types to test with real ECUs

EEA COM

Automotive Ethernet Clusters

- Support for creating Ethernet clusters for vehicle communication networks

- Support for SOME/IP – view Consumed and Provided Services. Edit Methods, Event, Event Groups, Others

- Easy View of Network Endpoints and Application End points. Easily change IP and Port configs for testing

- Easy view of Socket Connections – SoAd, DoIP entities

- See details on Gateway ECU's
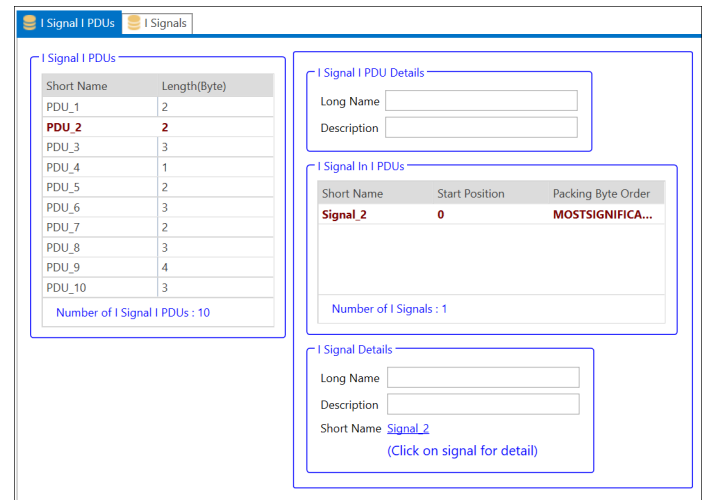
Applications and Use Cases for EEA COM

- Quick and efficient validation and testing of changes

- Edit an existing database ARXML or DBC and output an AUTOSAR compliant new ARXML file.
  Allows quick testing and validation of a new change before being added to rest of AUTOSAR work flow and update in communication database.

- Enables easy collaboration among teams - simply exchange updated ARXML file

- Export and import from legacy databases such as DBC for CAN Clusters without changes in the existing systems

- Help vehicle testing engineers and teams to view contents of ARXML files

Create Entirely New AUTOSAR Based Vehicle Network/Communication Matrix

View/Import Existing Files
ARXML
CSV
DBC
VSDB
LDF*
FIBEX

EEA COM

- Input to Tools - Bus Analyzer(s)
- Input Legacy Test Systems and projects
- Artifact for further AUTOSAR work flow
- Input to other AUTOSAR tools
- New ARXML to share the updates across teams

Add New or Update to Existing Communication Matrix Data

e.g. Add new clusters and new ECUs
e.g. Update LIN schedule table to test ECUs
e.g. Complete AUTOSAR COMM cluster

e.g. Define/add PDU to a frame
e.g. Update signal characteristics – different compute type, or units

Ordering Information *Supported in Q2 2019

Part Number	Description
EEA-COM-BASIC	EE Network Design Tool - View ARXML files for Network Databases. Allows export to DBC file format.
EEA-COM-EXPERT	EE Network Design Tool - Edit, View and Create ARXML files for Network Databases. Allows to import, export of DBC, VSDB.