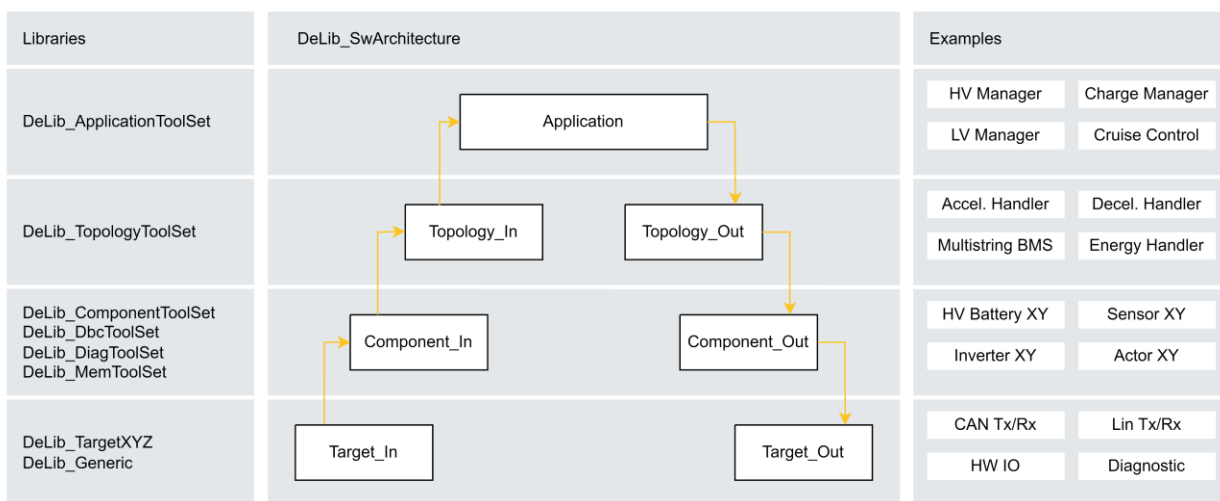# DeLib – Overview

The DeLib accelerates ECU Firmware development, based on the MATLAB Simulink Toolchain. The Library consists of a predefined software architecture with standardized interfaces, built to quickly build your ECU software. It enables fast integration of new components and offers many predefined and tested component interfaces and machine functions.
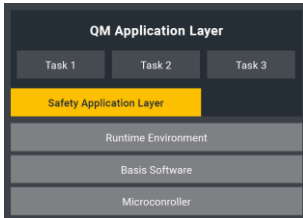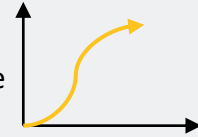
Architecture Overview

Libraries Description

	Name	Description
Basic	DeLib_TargetTTC2300	MATLAB Project for TTC2300 Series incl. SW Architecture
	DeLib_TargetTTC580	MATLAB Project for TTC580 Series incl. SW Architecture
	DeLib_TargetC2000	MATLAB Project for TI C2000 Series incl. SW Architecture
	DeLib_TargetStwEsx	MATLAB Project for STW ESX Series incl. SW Architecture
	DeLib_TargetBoschRc40ML	MATLAB Project for Bosch RC40 ML Series incl. SW Architecture
Functions	DeLib_Generic	Generic Library Functions used by other ToolSets
	DeLib_DbcToolSet	Import DBC Files into your Code
	DeLib_DiagToolSet	Import Diagnostic Information into your Code
	DeLib_MemToolSet	Easy Access to ECU Memory
Safety/Security	DeLib_TargetTTC2300_safe	Target specific functional safety functions & architecture
	DeLib_TargetStwEsx_safe	Target specific functional safety functions & architecture
	DeLib_DbcToolSet_safe	DBC ToolSet for meeting functional safety requirements
	DeLib_TargetTTC2300_secure	Target specific cyber security functions

DeLib – Advantages

Increased Development Speed
Kickstart your engineering with a field approved development environment. Implement your code in days instead of months. Increase your software development speed and gain quality at the same time through model-based design, validated models, scripts and architectures.

Predefined Architecture
The predefined and proven Architecture acts as guideline to build safe, reliable and modular software. It is the foundation for most of our time-saving functions.

Safety & Security Included
Functional Safety and Cyber Security are easily integrated with «Element out of context» solutions, prepared to be tailored according to your needs.
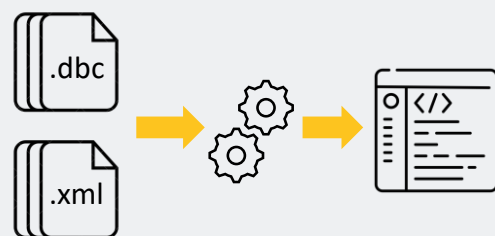
J1939 & UDS Included
Making diagnostics easy with UDS and J1939 support. Conveniently set your warnings and let the DeLib do the rest.

High Modularity
Based on our predefined Interfaces, swapping out components from different suppliers becomes quick and easy.

Automated Code Generation
Import your DBC's directly into your code and access all the signals attributes directly. The interfaces are generated automatically as .sldd. Timeout, CRC and Message Counter are checked and generated according to the specifications.

Multiple ECU Support
The DeLib gives you the freedom to quickly switch between multiple ECU's. Any ECU with an open C API can be adapted to use Durot's DeLib.