



CASE STUDY-AUTOSAR Drivers Testing

Project Objective and Scope

- Manual Testing of AUTOSAR drivers for 32 bit Microcontroller dedicated for automotive applications
- GPTA Drivers: The GPTA Driver is used in order to realize the complete ICU/PWM/GPT Drivers functionality. GPTA provides a set of timer, compare, and capture functionalities that can be flexibly combined to form signal measurement and signal generation cells. They are optimized for tasks typical of engine, gearbox, and electrical motor control applications
- Flash Loader driver testing
- ICU (Input Capture Unit) driver testing: The ICU driver module using the input capture unit (ICU) for demodulation of a PWM signal, counting pulses, measuring of frequency and duty cycle, generating simple interrupts and also wakeup interrupts.
- Development of Test Cases, configuration of microcontroller
- Manual testing and subsequent automation of the test cases using in-house tools from client
- AUTOSAR standards

XPT Team Contribution

- The project was executed onsite at client location and XPT Engineers were instrumental in development & execution of test cases

Tools and Hardware used

Tools: Tressos, UDE, Memtool, Labview, UVP