

# **Testing Solutions**

#### **Automotive Test Benches**

# Don't Let Your ECU be a Warranty Liability

Automotive Test Benches provide a clean and compact platform to validate electronic control units (ECUs) and subsystems, such as instrument clusters, body control modules, infotainment modules and more. Supporting manual or automated test execution, the test benches recreate the vehicle test environment with with all the necessary hardware and software.

#### **Manual Testing**

The test bench can be stimulated manually. This allows test engineers to find issues early, making them less costly to resolve. For suppliers, it provides a testing platform when there is no access to test vehicles.

#### **Automated Testing**

Stimulated by automated test scripts, the test benches provide a platform for durability and regression testing, thus compressing a lifetime of use into hours. Automotive OEMs use multiple test benches to identify repeatability of keys issues and make launch decisions based on the mean time between failures (MTBF) as a proxy to future warranty returns.

#### Overview

- Automated and manual operations
- ✓ Ability to pinpoint the failure symptoms of an ECU
- ✓ Ability to easily replicate failure conditions
- Requirements-based testing, integration testing, stability testing, power mode testing, diagnostics testing and more, diagnostics, hardware-in-the loop
- ✓ Optional robotic touch and machine vision interfaces
- Custom-designed to fit your application and budget

Danlaw has built hundreds of Automotive Test Benches for various OEMs and Tier suppliers providing an expandable and scalable solution that takes the worry out in-house build and maintenance.

#### **Contact Us**

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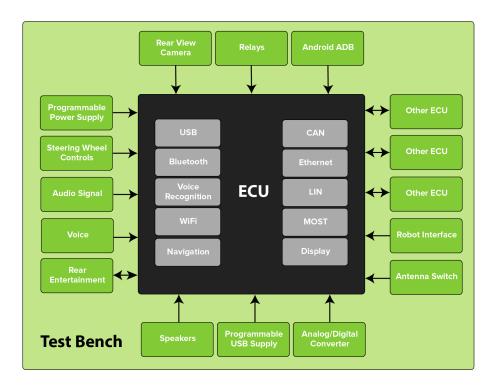








#### Connections



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## **Commonly Used Cases**

- Restbus simulation over Ethernet, CAN, LIN and MOST
- Speech-to-Text / Text-to-Speech conversion
- Machine vision: Image acquisition, recognition, and analysis
- · Black screen and module reset detection
- Robotic touch for physical contact

- Audio monitoring for chime frequency and audio level testing
- · Rear view camera freeze detection
- Programmable power and measurements for crank and over/under voltage conditions
- Programmable Ignition/Accessory/Crank Relays

#### **Related Products**

**Automotive Suitcase Tester** is a portable solution for validating automotive electronic control units (ECUs), such as instrument clusters, seat modules, or body control modules.

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