# CiA test center

Validate your product to increase user satisfaction



Device conformance assessment Interoperability assessment CiA plugfest

## Device conformance assessment

mplementing CANopen CC and CANopen FD to the well-established international standard EN 50325, its refined version CiA 301 V4.2, resp. CiA 1301 V1.1 does not guarantee conformant devices thus reducing compatibility.

The device conformance assessment is the process to verify that device implementations follow the

same interpretations. These interpretations are specified in the respective conformance test plans. Verified device implementations guarantee system integrators and end users that devices implement intended functions as expected.

The CiA conformance assessment guarantees comparable results.

#### **CANopen assessment**

CiA uses its CANopen conformance test tool. The tool is implemented according to the CANopen conformance test plan (CiA 310-1) and is available free of charge for CiA members.

The CANopen device conformance assessment by CiA is not mandatory, but it provides an independent CANopen product compliancy approval.

## **CANopen FD assessment**

CiA uses a defined procedure for the assessment that is approved by the IG CANopen FD. This procedure is according to CANopen FD conformance test plan (CiA 1310-1).

For CANopen FD devices the CiA conformance assessment is mandatory.

#### Benefits for device designers

- Independently approved compliant devices
- Devices support functionalities as expected
- · Independent quality monitoring

#### Benefits for system integrators

- Independently approved compliant devices
- Devices support functionalities as advertised
- · Quality control as a buying decision

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# Interoperability assessment

Interoperability is important to guarantee that device implementations have matching dynamic behavior with other networked products.

CiA provides the manufacturer-independent assessment facility. The interoperability assessment system is made by a number of conformance-tested products from different manufacturers. A host controller configures the device implementation to be assessed,

so that it can communicate with actuators, sensors, and diagnostic tools. The device implementation is stress-tested to evaluate its robustness.

Fraba, HMS Industrial Networks, Janz Tec, Fritz Kübler, Maxon Motor, Microcontrol, Port Industrial Automation, Schneider Electric Automation, and Vector Informatik have provided complimentarily products for the interoperability assessment.

## Benefits for device designers

- Devices are interoperable with other manufacturers' devices
- Devices are as robust as they can
- Devices fulfill general timing requirements



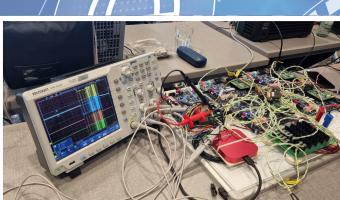
#### Benefits for system integrators

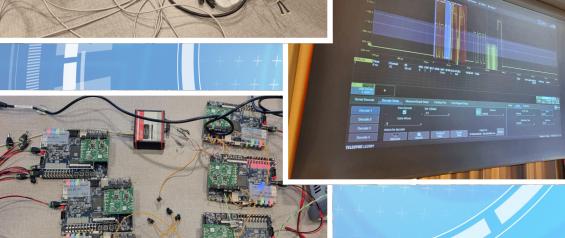
- Devices are interoperable across different suppliers
- Devices work as advertised
- Devices do not degrade network stability

# CiA plugfests

These events are dedicated for CiA members to test the interoperability of their implementations.

CiA plugfests are a unique opportunity to connect products with those of other manufacturers to test and resolve network compatibility and interoperability challenges. Companies attend from around the world to pursue improvement of their customer's product experiences. Previous plugfests have attracted a wide range of prototype and production level products from a diverse range of manufacturers. Plugfests are a chance to take advantage of the knowledge and experience of the participating CiA members. CiA plugfests cover broad and specific application fields, e.g., drives and motion controllers (CiA 402), products designed for lift applications (CiA 417), as well as CAN CC, CAN FD, and CAN XL components (transceivers and controllers).







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