

# IO691

## CAN I/O Module with 2 Isolated Channels for CAN FD and High-Speed CAN, and Simulink® Driver Blocks



### Included in the Delivery

- I/O module installed in the real-time target machine
- Cable for loopback testing
- Simulink driver blocks
- Test models
- Comprehensive documentation

### Capabilities

The IO691 I/O module provides an intelligent CAN interface with two channels that support flexible data-rate CAN (CAN FD) and high-speed CAN (CAN HS). Simulink driver blocks are also provided.

The IO691 is compatible with CAN 2.0A/B networks and supports SAE J1939 and ASAM XCP for bypassing. In addition, all signals can be accessed through 9-pin D-sub front CAN connectors.

This I/O module is ideal for closed-loop controls, hardware-in-the-loop simulations and restbus simulation using MATLAB® and Simulink.

The IO691 I/O module is fully compatible with the Simulink Real-Time™ workflow. The extensive Simulink Real-Time driver blockset offers comprehensive functionality.

### Common Applications

- Rapid control prototyping
- Hardware-in-the-loop (HIL) simulation
- Restbus simulation

### Supported Target Machines

- Unit
- Baseline

### Key Features

Two independent, galvanically isolated CAN channels for CAN FD and CAN HS (ISO 11898-2)

Supports SAE J1939 and ASAM XCP for bypassing

CAN FD with up to 8 Mbps and a 64 data-byte payload

CAN with up to 1 Mbps and a 8 data-byte payload

Compatible with CAN 2.0A messages (11-bit identifier) and CAN 2.0B messages (29-bit identifier)

## Technical Specifications

Physical	
Form factor	mPCIe
Power requirements	300 mA max @ +3.3 V DC (0.726 W typical)
Bus	PCI Express x1
Connectors	2x 9-pin D-sub plug according to CiA 303-1
Environmental	
Operating temperature	0°C to +75°C -40 °C to +85 °C extended temperature range is optionally available
Relative humidity	10 to 90 %, non-condensing
CAN	
Number of interfaces	2 interfaces configurable for CAN HS and CAN FD
CAN bus interface	High-speed CAN (according to ISO 11898-2), galvanically isolated
Bit rates	CAN HS: from 10 Kbit/s up to 1 Mbit/s CAN FD: from 10 Kbit/s up to 8 Mbit/s
Message Frame format	Base frame format: CAN 2.0A (11-bit identifier), Extended Frame format: CAN 2.0B (29-bit identifier)

## Order and Contact Information

Item ID	Product Name	Components
2A691X	IO691	1x IO691 CAN I/O module
		1x CAN Loopback Test Cable with terminator resistor (120 $\Omega$ )
		Driver block library for Simulink Real-Time
		Comprehensive documentation and Simulink example models
		Installation into the real-time target machine
2C691X	IO691-T	1x IO691-T CAN I/O module with Extended Temperature Range
		1x CAN Loopback Test Cable with terminator resistor (120 $\Omega$ )
		Driver block library for Simulink Real-Time
		Comprehensive documentation and Simulink example models
		Installation into the real-time target machine

\* Please replace the X with the code number of the specific target machine for the I/O module installation:

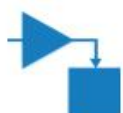
7 = Unit real-time target machine

8 = Baseline real-time target machine

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## Benefits of Speedgoat Solutions



Made for Simulink



Vast Range of I/O & Protocols



Built for Speed



Scales with Your Projects



Configured to Your Needs



With Quality Services