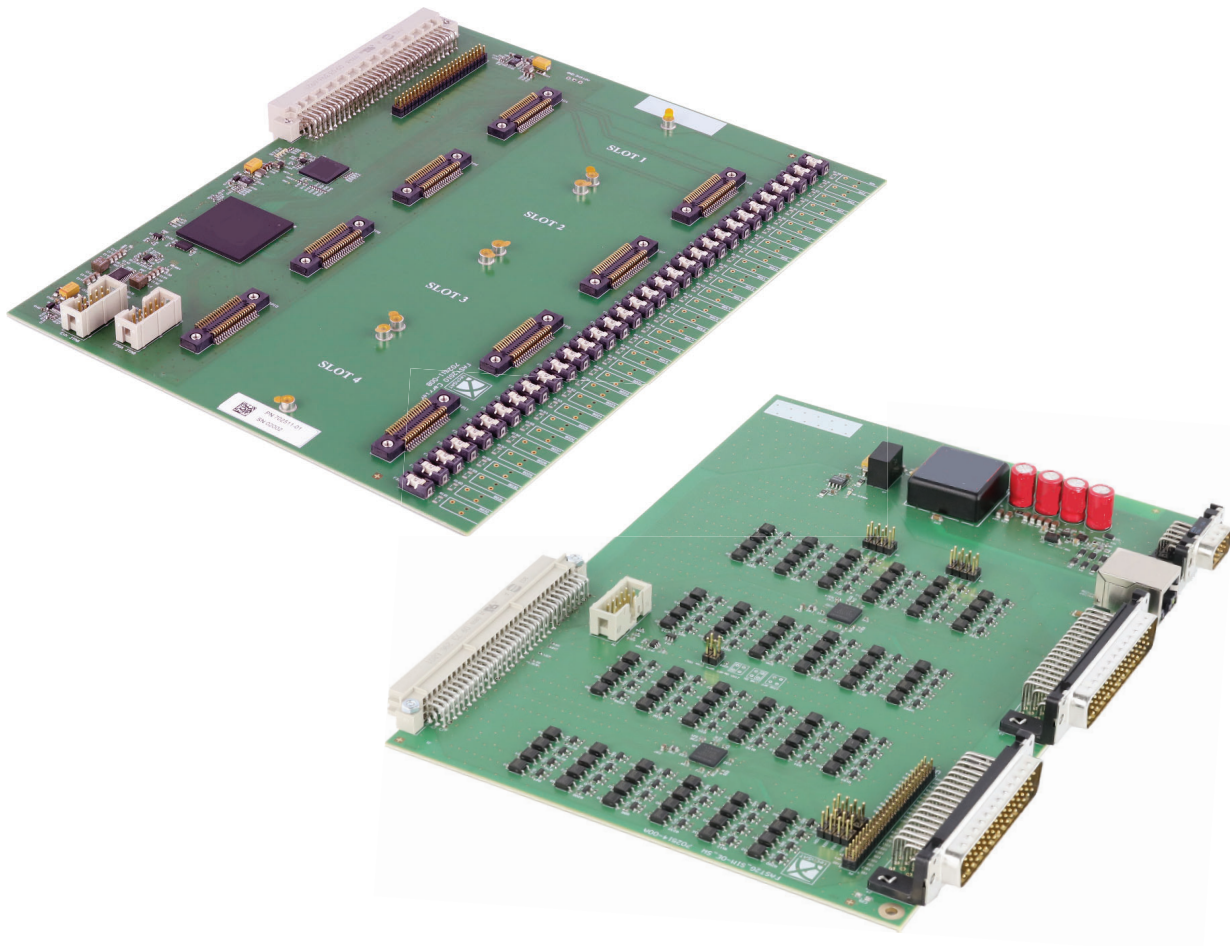


FAST-2G Carrier

Ethernet Carrier for TSMIO-2G Modules



- Intelligent Ethernet carrier for up to four TSMIO-2G modules
- 1 Gbit Ethernet based data exchange between host and modules
- Sampling and streaming mode
- Fully integrated in TechSAT's Simulation and Test Environment ADS2™



FAST-2G Carrier

Ethernet Carrier for TSMIO-2G Modules

Description

The FAST-2G Carrier is a member of TechSAT's Modular IO (TSMIO-2G) product family, second generation. TSMIO-2G modules can be mounted either on a PCIe carrier (PCIe-2G Carrier) or on an Ethernet carrier (FAST-2G Carrier). All members of the TSMIO-2G family are fully integrated into the TechSAT ADS2 Simulation and Test Environment as well as provided as standalone products with a fully featured driver and API.

The FAST-2G Carrier is an intelligent FPGA based Ethernet carrier for any combination of up to four TSMIO-2G modules. The carrier's FPGA hosts the Ethernet interface as well as four instances of the TSMIO interface.

The TSMIO interface IP supports sampling mode as well as streaming mode. In sampling mode, the carrier transfers the latest value sampled by I/O modules to the host. In streaming mode, it transfers all data acquired since the previous frame. This allows the I/O module to operate at a higher frame rate than the system, making it possible to sample or command several values per system frame.

A single Ethernet message is used to send output data to all modules of a carrier. One reply message returns the receive data from all modules.

SIM-OE Switching Extension

The purpose of the SIM-OE extension is to switch the input of a UUT between a simulated signal and a real sensor.

To achieve this, the SIM-OE extension provides solid state relays in each signal path, allowing each signal on the UUT connector to be switched between 3 positions:

- Open: No connection
- SIM: UUT signal is connected to the corresponding I/O channel of a TSMIO module.
- OE: UUT signal is connected to the corresponding pin of the OE connector.

Technical Data

Features

- Four slots for TSMIO-2G modules
- Sampling and streaming mode
- 1 Gbit Ethernet between host and carrier
- High speed communication between carrier and modules
- Supports power over Ethernet (PoE) or individual power via D-sub connector
- Optional breakout
- Support for SIM-OE switching extension

Electrical Characteristics

- 1 Gbit Ethernet with PoE

Physical Dimensions

- 233.4 mm x 180 mm

Environmental Conditions

- Operating temperature: 0 °C to +70 °C
- Storage temperature: -40 °C to +85 °C
- Humidity: 0 - 90% non-condensing

Part Number

- 702511-01 – no breakout
- 702511-02 – with breakout
- 702514 – SIM-OE switching extension