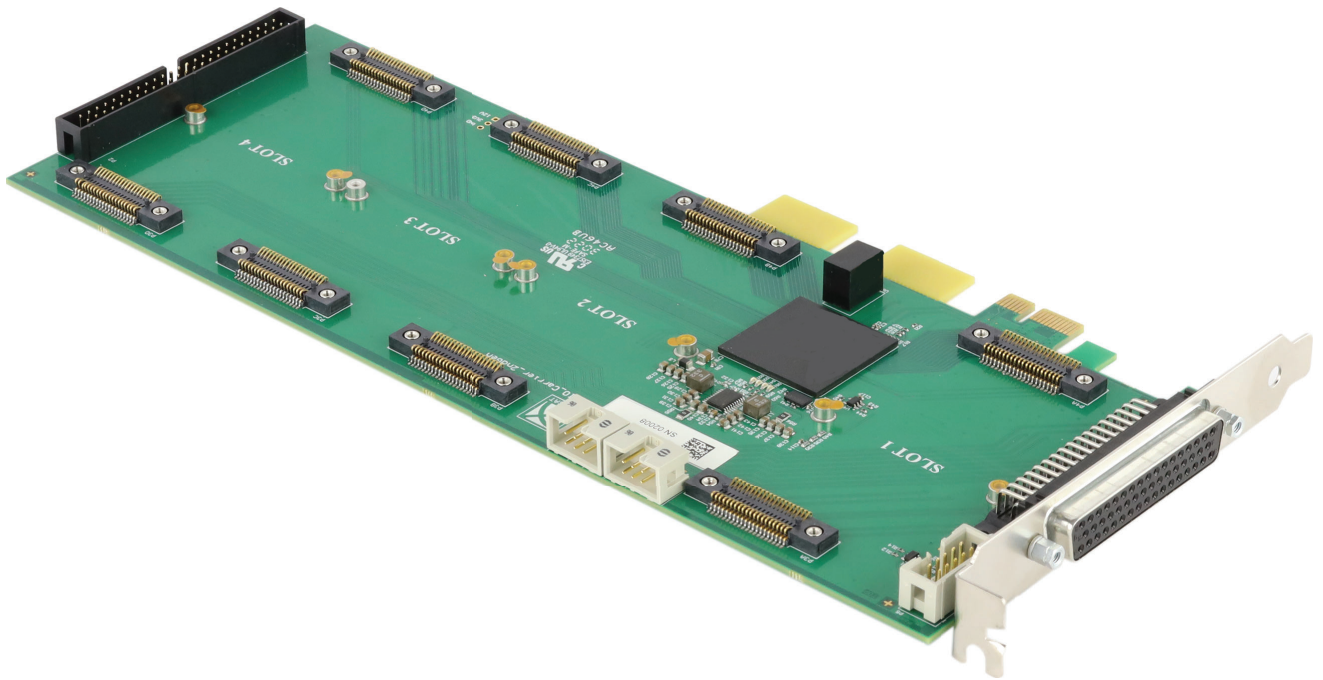




mastering  
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## PCIe-2G Carrier

PCIe Carrier for TSMIO-2G Modules



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



System Engineering



Hardware Software



Test and Integration



Production



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complexity

## PCIe-2G Carrier

### PCIe Carrier for TSMIO-2G Modules

#### Description

The PCIe-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 user API.

The PCIe-2G Carrier is an intelligent FPGA based PCIe carrier for any combination of up to four TSMIO-2G modules.

The carrier's FPGA hosts the PCIe 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.

Communication with the host uses DMA. One single DMA transfer is used to send output data to all modules of a carrier. One reply transfer returns the receive data from all modules.

#### Technical Data

##### Features

- Four slots for TSMIO-2G modules
- Sampling and streaming mode
- High speed DMA between host and carrier
- High speed SPI between carrier and modules

##### Electrical Characteristics

- PCIe X1

##### Physical Dimensions

- 266 mm x 111.2 mm

##### Environmental Conditions

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

##### Part Number

- 702513