

IsoSPI

Isolated Serial Peripheral Interface Module



- Power Architecture® Microcontroller featuring 3 dual-issue, 32-bit CPU core complexes, 8 MB on-chip flash memory, 512 kB on-chip general-purpose SRAM including 64 kB stand-by RAM, and 5 Deserial Serial Peripheral Interfaces (DSPI)
- 2 LTC6820 IC (Analog Device)
- 2 L9963 IC (STMicroelectronics)
- Compatible with TechSAT PCIe-2G (PCI) and FAST-2G (Ethernet) carriers
- Fully integrated in TechSAT's Simulation and Test Environment ADS2™



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Description

The IsoSPI module 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 the 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 module provides four ISO-SPI interfaces used specifically for test and integration of battery management system components.

The module's IsoSPI bus can be configured as master or slave. The modules are used to communicate with the LTC6820 and L9963 ICs. These ICs are general purpose SPI to isolated SPI transceivers to establish communication between devices that are not in the same voltage domains.

Operation

Since this is a special purpose module, please contact TechSAT for further details.

Technical Data

Features

- 4 x ISO-SPI interfaces:
 - 2 x ISO-SPI interfaces for LTC6820 IC
 - 2 x ISO-SPI interfaces for L9963 IC
- Voltage and GPIO (temperature) readings for all ICs
- Accessible via FAST-2G or PCI-e2G protocol from ADS2 or standalone user API

Electrical Characteristics

- Power supply: provided by carrier

Physical Dimensions

- 95 mm x 52 mm

Environmental Conditions

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

Part Number

- 702499