SPI to MIL-STD-1553 Daughterboard

BRD1553SPI / BRD1553SPI-P

MIL-STD-1553B/1760 with SPI Connectivity

Compact, Robust, Reliable
MIL-STD-1553 Products

SITAL TECHNOLOGY

Specifications

Compatibility
- MIL-STD-1553B/1760 Notice 2
- Transformer coupling pins
- Direct coupling pins
- SPI up to 50Mhz

Host Requirements
- SPI interface
- PMOD host port for "P" version

Power
- Single 3.3Vdc
- 2W peak during transmission

Connection
- 4 pins SPI slave to host
- 4 pins for 1553 bus A and B
- RT Address wires (Optional)
- Interrupt to host
- Two 17 pins, 2 mm headers
- Field upgradeable connector

Ordering Information
- BRD1553SPI
  Board without coating
- BRD1553SPI-C
  Board with coating
- BRD1553SPI-P
  Board with PMOD and Triax
  adapter board
  BRD1553SPI-P-SVIVADO
  Integration package for Xilinx
  Vivado

More 1553 products from Sital:
- *MIL-STD-1553 IP Cores for FPGAs.*
- *MIL-STD-1553 Discrete Components Transceiver for IP Core*
- *USB 1553 Tester*
- *Smart Wiring for 1553 bus fast fault detection and location*

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BRD1553SPI-P Key Features and Benefits

- Dual-Redundant Mil-Std-1553B Bus transceiver and transformer.
- Simple hardware connections 4 wires to Host, 4 wires to bus.
- PMOD connectivity for popular evaluation boards for rapid prototyping
- Digital engine and API compatibility with DDC® Micro-ACE®, Total-ACE®, Mini-ACE®, Enhanced Mini-ACE® and Mini-ACE® Mark3 chipset families.
- 8K x 16 internal memory.
- Support for MacAir transceiver protocols as bus monitor.
- Operates from a single 3.3Vdc power supply, 2W at peak usage.
- Less than 0.25W power dissipation.
- PCB Board size 32 x 35 mm (SPI)
- Additional JTAG header for optional field update
- Both transformer AND direct coupling pins for user selection
- Triaxial Connectors for MIL-STD-1553B bus

BRD1553SPI   *BRD1553SPI-P*

The BRD1553SPI unit is a complete Mil-Std-1553 node intended to simplify the integration of MIL-STD-1553 BC, RT, or MT onto a system. The BRD1553SPI unit integrates compatibility with DDC®) Micro-ACE®, Total-ACE®, Mini-ACE®, Enhanced Mini-ACE® and Mini-ACE® Mark3 chipset families with transceiver and transformer. The digital engine uses an 8Kx16 memory incorporated on the same fabric for higher reliability. The BRD1553SPI is built from commonly available components, and does not depend on any of the MIL-STD-1553 IC suppliers.

More information available at **www.sitaltech.com**
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