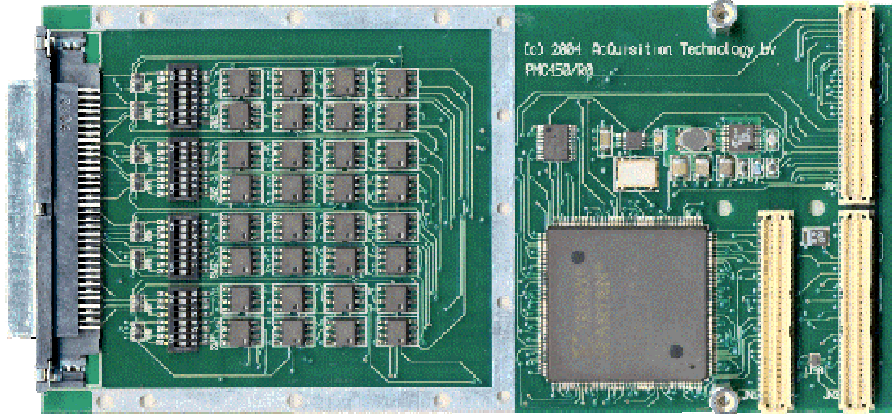


8046 – PMC FPGA Serial controller Card with front and rear I/O



The 8046 is a PMC FPGA-based RS422 serial card with front and rear I/O. The standard configuration consists of a PCI-core and eight 16C650-uart compatible cores. With the 32 onboard RS422 transceivers, 8 serial RS422 channels (Rx, Tx, RTS and CTS) are created.

The 8046 features a 68-pin high dense connector at the front for the connection of all the RS422 channels. A PIM (PMC I/O Interface) for rear I/O is optional. Because of the fully FPGA-based design, custom protocol interfaces for RS422 are available on request. Usage in ruggedized systems with conduction cooling is also possible.

- Single PMC slot (IEEE 1386.1-2001) with front I/O and rear I/O
- Optional PIM8046 (VITA 36) for rear I/O connections
- Xilinx FPGA softcore PCI interface
- 16C650 compatible host interface
- PCI interface:
 - PCI 2.1 compliant
 - 33MHz, 32-bit interface
 - 3.3V and 5.0V signaling supported 5V supply
- 8 serial RS422 channels with Rx, Tx, RTS and CTS at 68-pin front or 64-pin rear connector
- Dipswitch selectable line termination

PCIBusCompliance

- PCI 2.1 compliant
- PMC: IEEE 1386.1-2001 compliant
- 33MHz, 32-bit interface
- 3.3V or 5.0V PCI signalling
- 5V supply voltage
- PIM: VITA 36 compliant

HostInterface

- Xilinx Spartan FPGA-based
- Softcore PCI/PMC-interface
- 16C650 compatible programming interface
- Custom host interfaces or line protocols available on request

LineInterface

- 32x RS422 transceivers in a default configuration of 8 transceivers with Rx, Tx, RTS and CTS
- Dipswitch selectable line termination
- High dense 68-pin front connector
- PIM available for rear I/O

OrderingInformation

- 8046: PMC with RS422 controller
- PIM8046: PMC I/O Module for rear I/O

BlockDiagram

