

# Compact PCI LEON RTAX Development Board GR-CPCI-RTAX

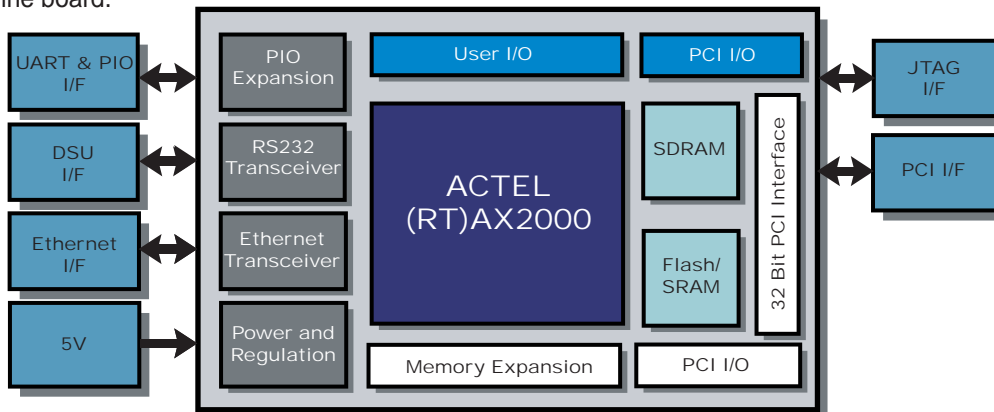


## Description

This board has been developed to host the LEON processors on the Actel RTAX2000S/SL Field Programmable Gate Array. LEON is an IP core that implements a 32-bit SPARC V8 Embedded Processor. The standard implementation is targeted for commercial designs while the Fault Tolerant (FT) version is targeted for use in Aerospace and Critical applications with fault tolerance features including internal upset resistant structures, register parity protection and EDAC for external memories. On-board volatile and non-volatile memory, together with serial and Ethernet interfaces makes this board ideal for evaluation of the performance and behaviour of both the hardware and software for the LEON processors. The board is capable of operating either as a standalone board, or as a compact PCI plug-in card in either the System slot or Peripheral slots. An adapter is available to allow the installation of the board in a standard PCI slot of a Personal Computer. User expansion can be implemented either via the PCI interface or as a mezzanine board.

## Specifications

- Socket to host either AX2000-FG896 (commercial) or RTAX2000S/SL-CGA624 (rad-tolerant) devices.
- Processor core frequency: up to 33 MHz, depending on configuration and device type.
- Memory and User I/O expansion using 120 pin and 60 pin connectors (AMP 177-984-5 and -2), for mezzanine card applications
- Standard memory configuration
  - FLASH 64 Mbit (8M x 8 bit)
  - SDRAM SODIMM socket (up to 64M x 64 bit)
  - SRAM 40 Mbit (1M x 40 bit)
- RJ45 10/100 Mbit Ethernet connector
- SUB-D9 pin connector for DSU/UART I/F
- On-board power regulation allows operation from
- PCI slot or stand-alone with +5V supply
- Options
  - PIO expansion with 2 x RS232, 2 x RS422 or 2 x LVDS.
  - MIL-STD-1553B, SpaceWire or CAN 2.0B bus expansion via mezzanine connectors



For more information on the LEON core, the VHDL model, synthesis, configuration, hardware and software development tools, debug monitor, simulators, IP core development and technical support for the LEON processor, please refer to the Aeroflex Gaisler home page. ([www.aeroflex.com/gaisler](http://www.aeroflex.com/gaisler)).

For more information concerning the board please refer to the Pender Electronic Design home page. ([www.pender.ch](http://www.pender.ch)).

### CONTACT INFORMATION

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