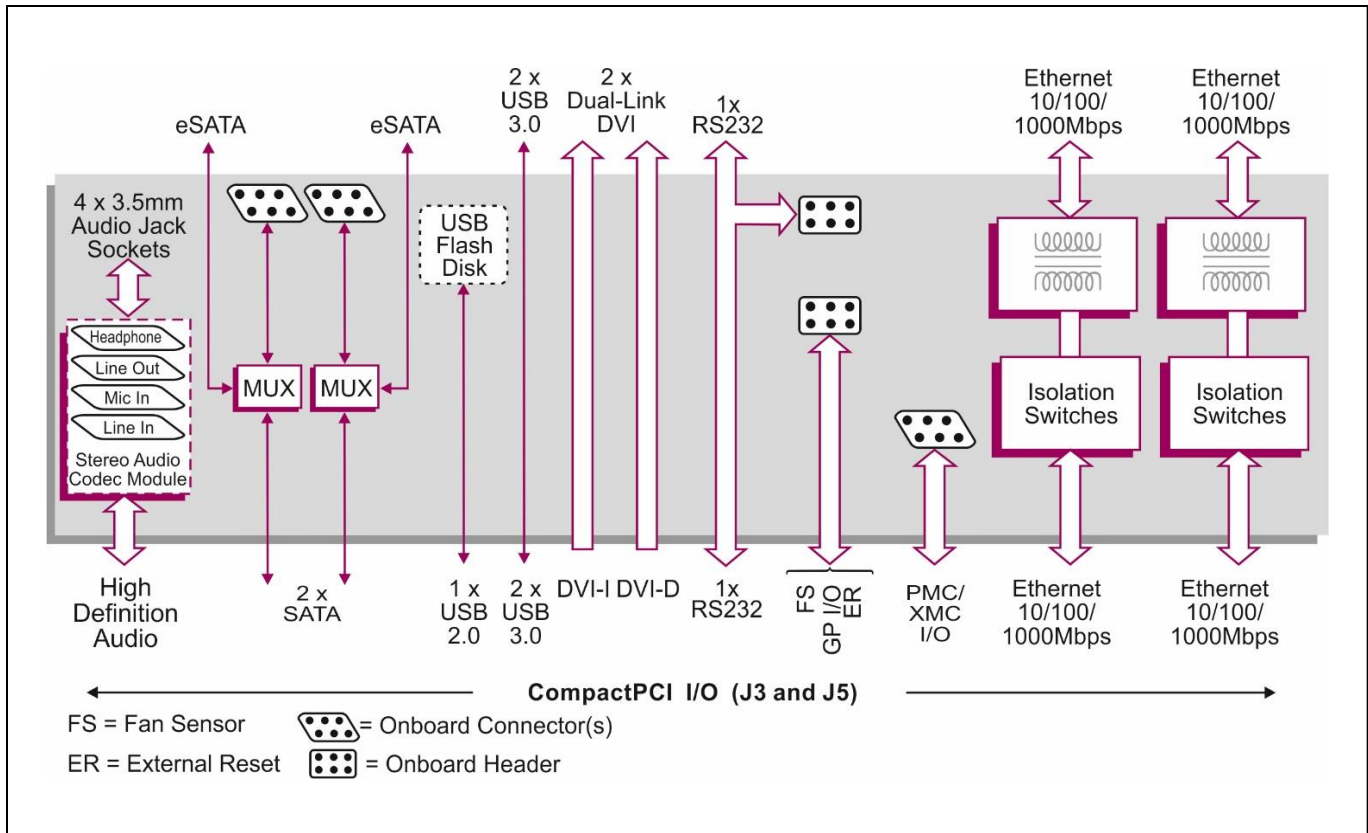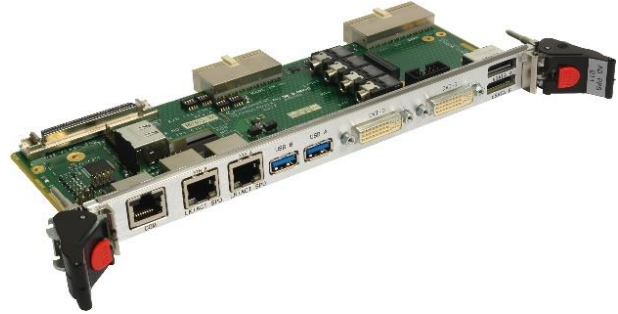# Rear Transition Module

Key Features

The AD PP5/011 Rear Transition Module is designed to be used with the Concurrent Technologies PP 81x/09x and PP 91x/01x CompactPCI® Processor board family primarily when combined with a Tech Source™ XMC graphics card. The Transition Module mounts in the rear transition area of the CompactPCI backplane and provides straightforward access to the majority of the I/O functions provided on the processor board, plus independent DVD-I and DVI-I connectors for the XMC module outputs. Many I/O interfaces are accessed through the Transition Module's own front panel and the remainder from headers mounted on the Module.

FS = Fan Sensor   = Onboard Connector(s)
ER = External Reset   = Onboard Header

CompactPCI I/O (J3 and J5)

Rear Transition Module

- compatible with the Tech Source™ XMC graphics card when fitted onto either:
  - → PP 81x/09x CompactPCI® Processor board
  - → PP 91x/01x CompactPCI Processor board

Graphics Interface

- 2 x DVI front panel connectors:
  - → 1 x DVI-I
  - → 1 x DVI-D
- Tech Source XMC graphics card on host processor board connects to rear I/O via Pn4 XMC site 1

Ethernet Interfaces

- two Gigabit Ethernet channels
- supports 10BASE-T, 100BASE-Tx and 1000BASE-T for UTP CAT5 via RJ45 connectors on front panel
- Ethernet signals are routed via transition module's front panel or via PICMG® 2.16 Packet Switching Backplane

Serial ATA Interfaces

- 2 x SATA interfaces:
  - → via on-board eSATA connectors or front
  - → transfer rates up to 300 Mbytes/s

Serial Interface

- 1 x RS232 serial port:
  - → via front panel RJ45 and on-board 10-way header
  - → supports TXD, RXD, RTS, CTS, DTR, DSR and DCD (plus RI on 10-way header)

USB Interfaces

- 3 x USB channels:
  - → 2 x USB 3.0
  - → 1 supporting optional on-board Flash Drive

PMC/XMC I/O Interface

- vertical on-board 68-way high density D-type connector
- connector provides 64-bits of I/O from PMC/XMC site 2 Pn4

Stereo Audio Interface

- optional module with audio CoDec supporting:
  - → stereo line in
  - → stereo microphone in
  - → stereo line out
  - → stereo headphones out
- accessed via four 3.5mm jack sockets in board

Other Interfaces

- 10-way on-board header providing:
  - → system fan monitor
  - → external reset
  - → general purpose user I/O lines (GP I/O)
- 5-way on-board header providing:
  - → legacy speaker

Electrical Specification

- all voltages to be within +5%/-3%
- typical current figures:
  - → +5V @ 0.05A (with audio module, headphones and USB devices not included)
  - → +3.3V @ 0.7A (SATA interfaces active)
- current taken via host board

Environmental Specification

- operating temperatures:
  - → 0°C to +55°C (N-Series)
  - → -25°C to +70°C (E-Series)
  - → -40°C to +70°C (K-Series with Tech Source™ Condor XMC Graphics card fitted)
  - → -40°C to +85°C (K-Series)
- non-operating: -40°C to +85°C
- 5% to 95% Relative Humidity, non-condensing

Mechanical Specification

- 6U form-factor: 9.2" x 3.2" (233.35mm x 80mm)
- single-slot: 0.8" (20.3mm)
- connectors: IEC-1076-4-101 for J3 and J5
- shock:
  20g, 11ms, ½ sine (operating);
- vibration:
  5Hz-2000 Hz at 2g, 0.38mm peak displacement (operating)

Please contact your local Concurrent Technologies sales office for further details on board build options and accessories.