**TOC**

**Development and production:**

## Datasheet

The ATCA_PTSW-AMC4_RTM844 is an xTCA[1] based module that follows the specifications presented in PICMG® 3.8, RC1.0f from 2 July 2011 that complements PICMG® 3.0, Revision 3.0 with respect to ARTM[2] specification.

The module provides interface capabilities extension for the ATCA Base carrier. The module acts as a passive External multiple-Host to ATCA Base carrier interface, providing the required electrical and logical connections, with status information.

The module implements the following functions:

- PCI Express 8 lane over cable **upstream port**, compliant with v1.x, operating as a downstream system using ATCA Base carrier with a PCIe bay. The PCIe lanes are mapped on ATCA Base Carrier according Table 2.
- PCI Express 4 lane over cable **upstream port**, compliant with v1.x., operating as a downstream system using ATCA Base carrier with a PCIe bay. The PCIe lanes are mapped on ATCA Base Carrier according Table 3.
- PCI Express 4 lane over cable **downstream port**, compliant with v1.x., operating as a upstream system using ATCA Base carrier with a PCIe bay. The PCIe lanes are mapped on ATCA Base Carrier according Table 4.
- Two Gigabit Ethernet ports that are mapped on ARTM connector according Table 5.
- Three General purpose Optical interfaces using SFP (Small form-factor pluggable) connector. These ports are mapped on ARTM connector according Table 6.
- External timing and trigger features connector.
- The ARTM provides features for control and status of on-board devices that are mapped on the ARTM, according tables referenced above.

[1] AdvancedTCA Rear Transition Module for Physics. PICMG® 3.8, RC1.0f from 2 July 2011.

[2] AdvancedTCA® Base Specification, PICMG® 3.0, Revision 3.0, PCI Industrial Computer Manufacturers Group. March 24, 2008.

## User Manual

View the User Manual of this board.