Contribution ID: 38

New MTCA.4 AMC and µRTM for high channel count ADC applications

Thursday, 11 December 2014 15:00 (15 minutes)

This talk presents the TAMC532, an MTCA.4 compliant AMC and its companion μ RTM TAMC532-TM for high channel count analog to digital conversion applications, developed within HVF.

The TAMC532 provides 32 ADCs with 12 or 14 Bit resolution. Depending on the resolution, sample rates up to 75 Msps are possible.

A powerful clock distribution allows using the TAMC532 in nearly any clocking scheme required by the application.

A Kintex-7 FPGA provides the ability to transfer ADC data via x4 PCI-Express Gen 2 or two SFP+ interfaces. In addition, on-board DDR3 memory allows to store ADC data for subsequent readout.

The ADCs analog inputs connect to a µRTM via Zone 3 with a pin assignment according to Class A2.1.

Signal conditioning and analog input connectors are located on the μ RTM, allowing easy adaption to different user requirements.

The TAMC532-TM is a μ RTM according to Class 2.1, and holds an adjustable gaussian shaping amplifier for each of the 32 input channels.

Primary author: Mr KOLL, Niels (TEWS Technologies)

Presenter: Mr KOLL, Niels (TEWS Technologies)

Session Classification: New Products

Track Classification: New products and updates