

Vollrath Dirksen - Up to 48 GigE-Vision Cameras benefitting from the MicroTCA architecture

Wednesday 5 December 2018 14:30 (15 minutes)

It's time to bring the advantages of MicroTCA architecture to the image processing market.

The solutions for image processing seem to cover all market requirements. They are PC based or embedded or centralised or de-centralised etc.

In this presentation the due to its endless scalability known GigE-Vision cameras are selected to show how unsolved image processing problems can be addressed by the modular architecture and the scalability of MicroTCA.0 and MicroTCA.4 systems.

Questions are answered,

- how to aggregate the raw data amount of 48 GigE-Vision cameras inside one MicroTCA system,
- how to scale and synchronise multiple MicroTCA systems full of camera links
- how to combine GigE-Vision cameras with camera-link-cameras
- how to accelerate standard image processing tools on block level by using FPGAs

This presentation is second by vision presentation of Desy MicroTCA Techlab and Powerbridge.

Also have a look about "Image Processing in Banknote Printing Applications, Technology and Trends" from the MTCA Workshop 2016 presented by Carsten DIEDERICH (KBA-NotaSys AG & Co. KG)

at

<https://indico.desy.de/indico/event/15974/session/2/contribution/50/material/slides/0.pptx>

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Session Classification: Session 3