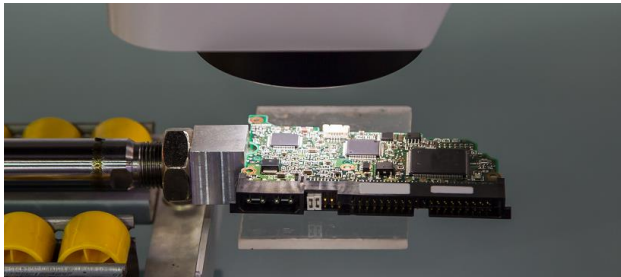


Test & Measurement



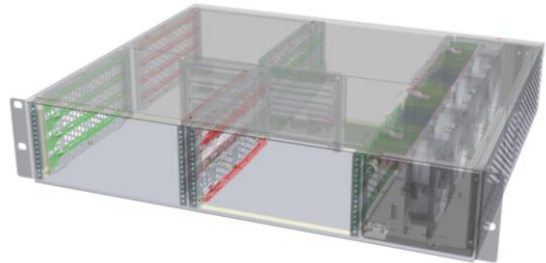
Requirement

The system is a highly scalable platform for sophisticated machine image and video processing applications for automation, medical, transportation and public safety. The chassis must be modular, flexible, scalable and future-proof to allow new or changing hardware to be integrated.

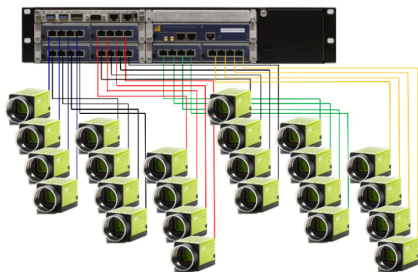


Challenge

The goal was to have six slots in a compact 19" system. This posed a challenge for the mechanical design of the system and the positioning of the backplane slots to ensure the high processing density. The density of the powerful boards required a proper cooling solution that the chassis is adaptable to the application environments in the various vertical markets.




Solution



The vision system is designed according to the MicroTCA.4 standard, as compared to industrial PCs it provides higher bandwidth and allows the connection of more cameras, even in 1 GbE- or 10 GbEvision, Camera link or Coax Press versions. The number of used cameras depend on the different protocols. With two separate root complexes, the system allows two different tasks to be accomplished in one application. In order to have as much space as possible for the plug-in cards, the system design enables the left and right side panels and their RTM's to be mounted from bottom to bottom. Thus a height of 2 U was possible. The cooling solution is variable and the fan tray is exchangeable. Cooling is possible from side to side or from front to side and can be adapted according to installation and available space in an electronics cabinet.

Project Details

Location	Germany
Industry	Test & Measurement
Application	Maschine Vision
Technology	MicroTCA
Client	Power Bridge 
Date/Time frame	2017 (Prototyping), 2018 (Serie)
Contract scope	50 pieces / annual