



# Integration Case Study

Medical Industry - Image Processing

## Multi-Domain cPCI System Solution

### Requirements

Provide a highly reliable chassis level solution in support of this precision image processing application.

### Solution

Supplied fully integrated and tested systems to the customer. Designed custom backplane, sourced all required embedded boards, performed qualification, verification, validation and production test development services with supporting documentation. Managed the supply chain including materials and boards from multiple vendors while maintaining tight control over the manufacturing process. Provided fully documented configuration management including consideration for EOL components, costs, and new technology insertion.



SBCs



I/O



Software



Storage



Network

Chassis / Systems



### Benefits

ACT/Technico services allow the customer to concentrate on core capabilities and to maintain precision standards required of the medical equipment industry. This unit can be ordered under a single part number for faster MTTR. As the system integrator, spares depot and single point of support contact, we actively assist the customer in maintaining high levels of reliability. Significant risk and cost mitigation due to design and manufacturing improvements with our rigid adherence to schedules.



**This complex chassis level solution supports multiprocessor and high bandwidth requirements along with custom cooling capability:**

- Three 6U cPCI SBCs running VxWorks MP
- CAN PMC for I/O control
- Quad DSP implementation for image processing
- Custom cPCI backplane and bridge chip for maximum payload support
- Custom chassis design supporting:
  - ❑ High CFM cooling
  - ❑ Redundant power supplies
  - ❑ Variable speed fans
  - ❑ Custom cabling and backplane

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