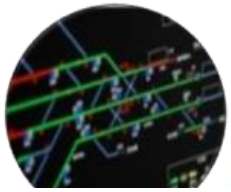





Boards & Solutions for accelerators

powerBridge
Computer

powerBridge Computer … In and around Automation, Transportation, Telecom, Science, Medical and Defence ....



Transportation

Communications Network

Command & Control

Medical Processing Equipment

Process Control

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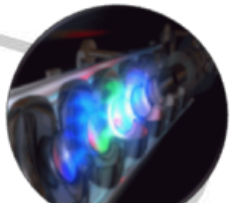

Scientific

Rugged Computers

Intelligence, Surveillance & Reconnaissance

Unmanned Vehicles

Training & Simulation

powerBridge has the right solution … From building blocks to systems

powerBridge Computer - At A Glance

- Over 20 years in the market
- Privately owned
- Over 25 years VME experience
- Own Lab and integration facilities
- powerBridge has delivered over 25.000 VME boards and 5.000 systems
- powerBridge manufacturers – Emerson Network Power, Concurrent, Adlink, Tews, Interface Concept, N.A.T, Surf, Telkoor and Schroff
- ISO 9001:2008 and 14001:2009 approved
- 100% paperless company (certified)

The manufacturers working with powerBridge are the backbone of VITA & PICMG Technology. We are experts of technologies.

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Computer

AM900 3rd Gen Core i7 AMC CPU design

- Dual-Core i7-3555LE or Quad-Core i7-3612QE
- PCI Express Gen 1, Gen 2 or Gen 3 support
- Up to 16GB DDR3-1600 DRAM with ECC, soldered
- 2 GbE ports in front and 2 to ports 0+1
- Up to 2 SSDs onboard with RAID 0+1
- MTCA.4 compliant Zone 3 I/O as build option (PCIe x8 or legacy I/O)
- DisplayPort, COM and 2 USB 3.0 in front
- Serial-over-LAN

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AM900-µRTM for AM900 incl. XMC Interface

- MTCA.4 compliant µRTM
- XMC slot, PCIe x8
- XMC Rear-IO PN4 and PN6
- DVI-D and USB 3.0 in frontpanel
- GPIO header, RS232 header, 4 x USB 2.0 header
- HD Audio connector, USB 3.0 connector
- 2 x SATA3 connector
- Dual SFP+ 10GbE ports optional

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TPM1000W-AC Low ripple & noise AC power Module

- 1.000W output power (600W also available, please ask)
- Double 2x full-size (12HP) PM
- Incl. Management functions
- Max. load / channel: 80W / 7.6A
- Hot swappable N+1 output redundancy
- Ripple & noise < 50mV
- IPMI update function

- Current readout for every channel under preparation

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RackPak/M4-2 2U 19“ 6-Slot MTCA.4 compliant crate

- Small & easy to use crate in 2U only
- PCI Express Gen 3 support
- Double Full-Size MCH Slot
- Double Full-Size PM Slot
- 2 Double Mid-Size AMC slots
- 4 Double Mid-Size MTCA.4 compliant AMC slots with Rear-I/O
- Cooling from front-to-left, alternative right-to-left

- Applications:
  machine (Klystron) protection, NRF and SRF configurations

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MTCA-12S-RF2 MTCA.4 LLRF crate

- 19“, 9U
- PCI Express Gen 3 support
- AMC backplane 10GbE tested
- 12 Double Full-Size AMC slots
- 2 Double Full-Size MCH Slots, redundant operation
- 4 Double Full-Size PM Slots, 2x 1.000W or 4x 600W PM
- Cooling from bottom front to top rear
- RF backplane mounting behind MTCA backplane
- Rear slot for LO-generation (µLOG) and add. voltage (15V) PM

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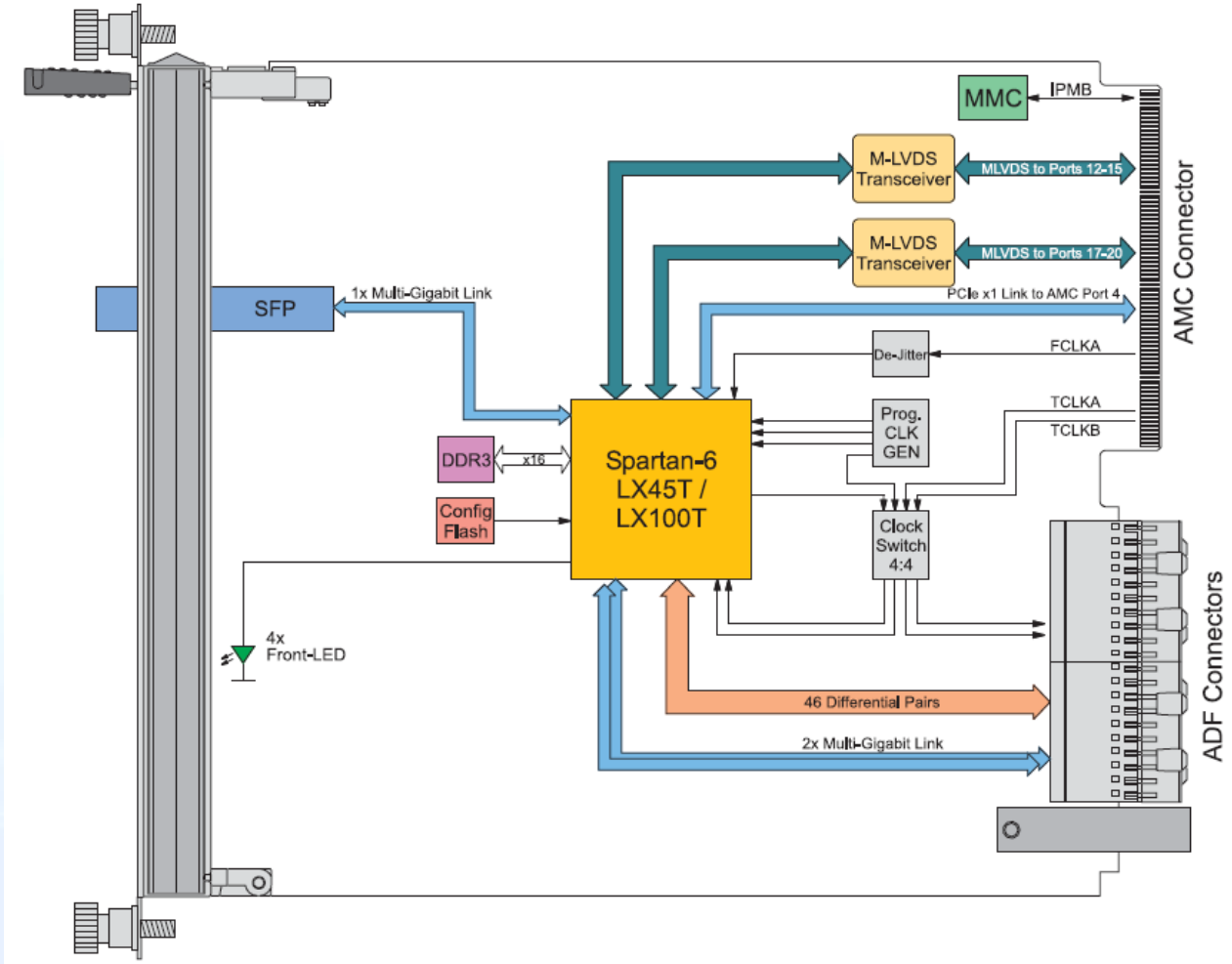
TAMC651 Spartan-6 FPGA AMC, MTCA.4 compliant rear-I/O



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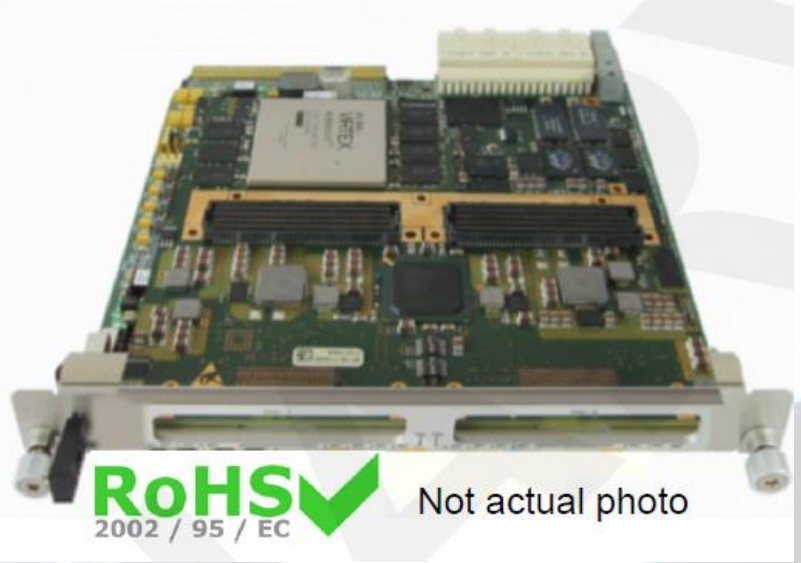
IC-FEP-TCAa High speed FPGA based AMC, MTCA.4 compliant

- Xilinx Virtex-7 VX690T-2 FPGA
- 693k Logic Cells
- Other Virtex-7 available upon request
- Two DDR3 4GB memory banks
- Three Quad SPI flash memory 256MB
- 2 FMC (VITA 57.1) slots High Pin Count
- 80 LVDS (diff.) connections each



- More information on request

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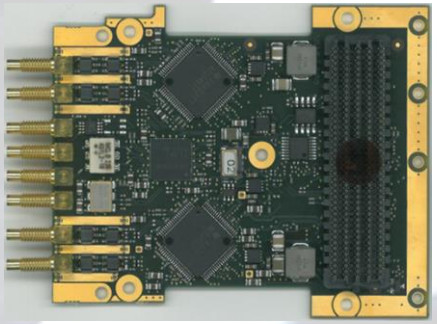
FMC modules VITA 57.1

- IC-ADC-FMCa unit : Quad 16-bit, 135Msps
- IC-ADC-FMCb unit : Quad 14 bit, 400 Msps (or Quad 12 bit, 500 Msps)
- IC-ADC-FMCc unit : Quad 12 bit, 1.4Gsps (Q2/14)
- IC-ADA-FMCa unit : Dual DAC / Dual ADC 12-bits 1Gsps (TBC)
- IC-DAC-FMCa : quad 16-bit 800Msps
- IC-DAC-FMCa : quad 16-bit 800Msps
- IC-DAC-FMCb : quad 16-bit 1Gsps



- IC-QSFP-FMCa : Dual SFP+ ports

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- MTCA.4 Starter Kits

- 6-, 7- and 12-slot crates (LLRF version as option)
- 600W up to 2.000W AC or DC PM (1+1 redundancy as option)
- NAT-MCH or NAT-MCH-PHYS with support for 12-slots with GbE, PCIe Gen 3, x4 to every slot, Spread Spectrum Clock
- 3rd Gen i7 AMC CPU, 8GB or 16GB memory (PPC as option)
- Adapter cable & Filler AMCs in every unused slot
- Fully integrated & tested, Windows 7 or Linux OS support

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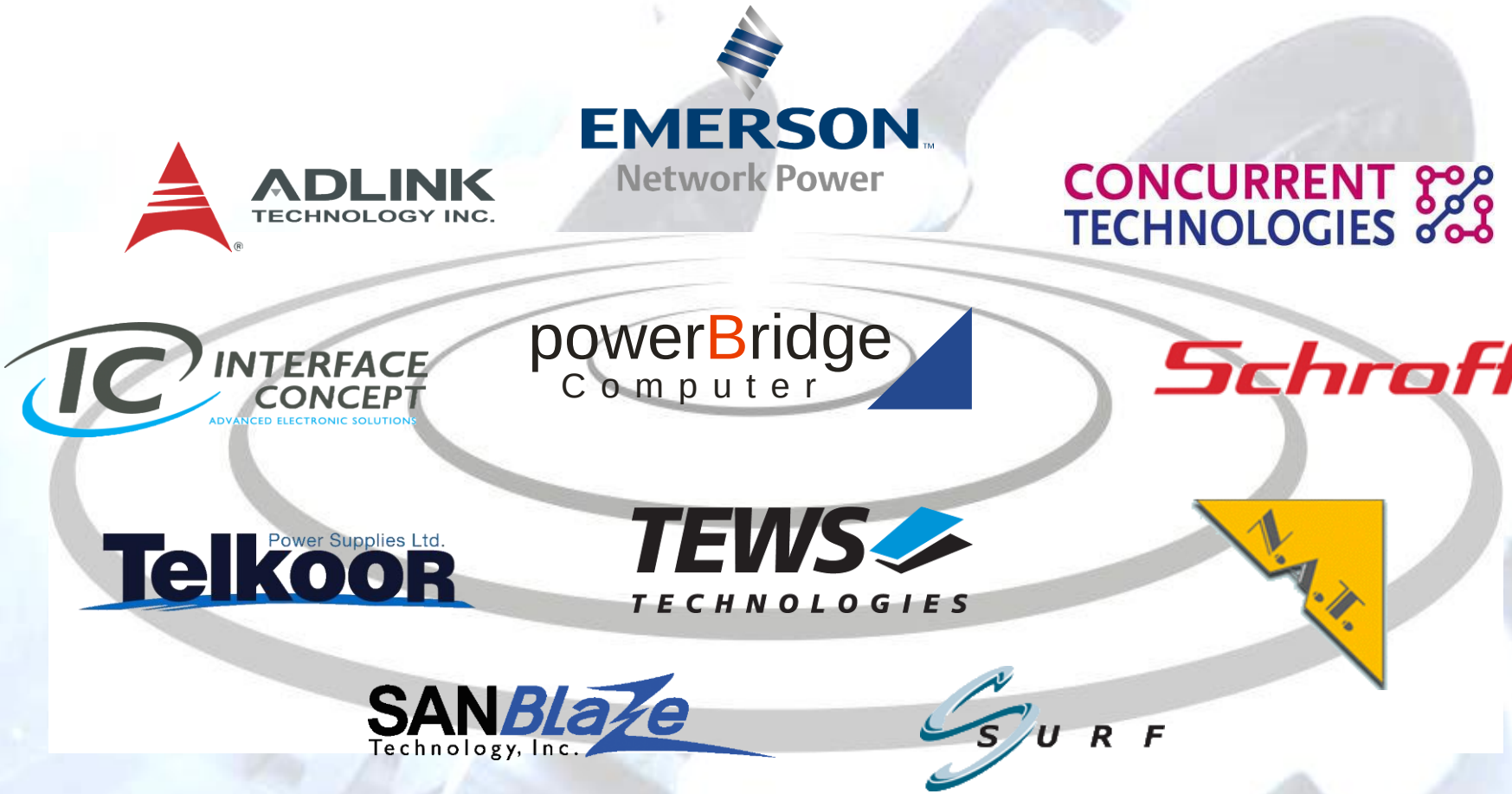
…the network for your success !



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Let´s discuss your requirements…

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