

Fabric Interconnects**RACEbridge-PMC**

Tekmicro's RACEbridge-PMC provides a high performance interface that adds access to RACEway switch fabric technology to any VME board with a standard PMC site. It supports both single-port RACEway 1.0 and RACE++.

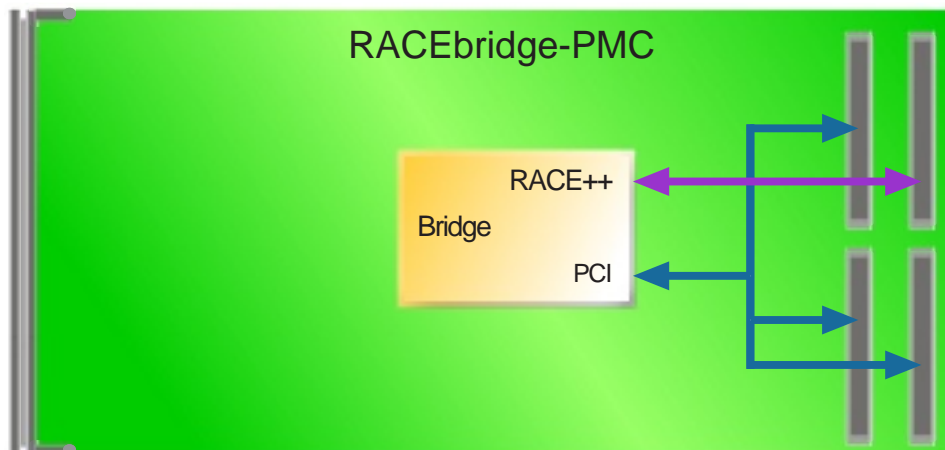
ANSI/VITA 5-1994 RACEway Interlink provides an open industry standard architecture for implementing scalable bandwidth. RACEway is well suited for applications such as signal processing or streaming I/O that require scalable real-time bandwidth with deterministic latency.

The RACEbridge-PMC uses a high-performance PCI-RACEway bridge to connect the local carrier's PCI bus to the RACEway fabric. The RACEbridge may be used to transfer data between RACEway nodes running Mercury MC/OS, Tekmicro's PowerRACE I/O controllers, or other RACEbridge-PMC-equipped cards.

Data transfers are supported with throughputs up to 150 MB/s using RACEway and 250 MB/s using RACE++. Burst data rates are 160 MB/s using RACEway and 267 MB/s using RACE++.

The RACEbridge-PMC is supported with a VxWorks driver which has been fully integrated and tested with a wide range of host carrier cards from Thales, Motorola, Force Computer and others.

RACEbridge-PMC



Specifications:

RACEway Interface	Compatible with 40 MHz ANSI/VITA 5-1994 RACEway (single port) Compatible with 66 MHz RACE++ (single port)
PCI Interface	Compatible with PCI Local Bus 2.1 32/64 bit 33/50 MHz
Burst Data Rate	160 MB/s (RACEway) 267 MB/s (RACE++) Assume 64-bit PCI
Sustained Data Rate	150 MB/s (RACEway) 250 MB/s (RACE++)
Interrupt Support	Maps inbound RACEway mailbox events to PCI message interrupts Maps PCI interrupts to RACEway mailbox events
DMA Support	Linked-list DMA controller
Mechanical	Single-wide PMC module
Power Requirements	+5 Volts, 250 mA
Operating Temperature	0° to +55°C (Commercial) -40° to +70°C (Rugged Level 2)
Storage Temperature	-40° to +85°C (Commercial) -55° to +85°C (Rugged Level 2)
Ruggedization	Available commercial grade and Rugged Level 2. See Tekmicro Ruggedization Data Sheet for definition of environmental performance specifications.
Warranty	One year limited hardware warranty Ninety day limited software warranty

Features

Supports 3.3V and 5V PCI signaling levels

Electrically compatible with all PMC carriers

tekX software environment

Portable and scalable application development for Tekmicro's entire line of fabric-enable solutions

VxWorks driver support

Drop-in integration with supported host carriers

Supports read prefetching

Improved performance and reduced read latency

Common driver suite with Tekmicro's PowerRACE carriers

Provides scalable I/O migration path to PowerRACE family

Tek Microsystems
2 Elizabeth Drive
Chelmsford, MA 01824

V: (978) 244 9200
F: (978) 244 1078

sales@tekmicro.com
support@tekmicro.com