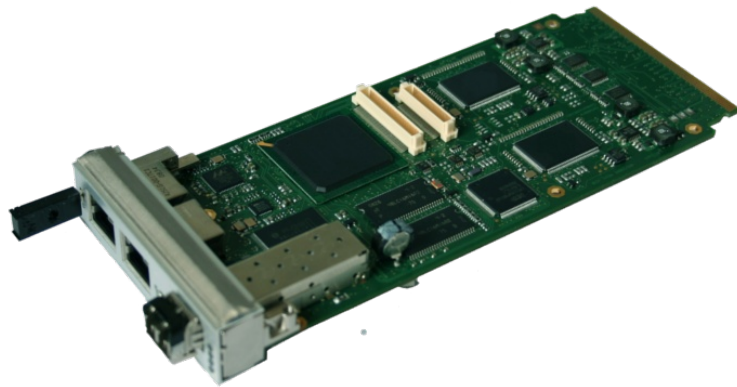


MCH21B

The MCH base board represents the basic carrier card (Tongue 1) of the MicroTCA carrier hub (MCH) in mid/full size form factor. The basic carrier card can be extended offering additional functionalities on optional plug-on cards.

The MCH21B provides the switch fabric A and the IPMB-L bus for up to 12 AMC modules, the IPMB0 bus for communication with up to two fan modules (CU) and up to 4 power modules (PU).



Features

- scalable cost optimized MCH.
- fully L2 managed gigabit switch.
- IPMI MCMC microcontroller.
- carrier and local shelf manager on microcontroller.
- system management via command line and RMCP.
- MCH can be expanded by switching/clocking requirements with plug-on modules.
- E-keying, SDR-Repository, SEL, PEF and FRU support.
- configurable cooling and power policy.
- all mandatory and many optional IPMI/uTCA/AMC commands supported.
- voltage and temperature monitoring.
- UART over USB debug and command line interface.
- battery buffered real time clock.
- hardware watchdog.
- MCMC-Starterkit available for customer specific MCH implementations.



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MCH21B

Specifications

- MCMC
 - 100MHz Microcontroller LPC1768 Cortex M3 CPU.
 - Fast Ethernet 100base-T management interface
 - USB device: management /configuration.
 - Voltage and temperature monitoring
 - serial EEPROM for configuration
 - FLASH for firmware update.
- Gigabit Ethernet switch for fabric A
 - Vitesse SparX-II-16™ Gigabit Layer-2 Switch
 - VCore-II embedded ARM926EJ-S™ CPU
 - Jumbo frame support up to 10 kByte
 - Advanced packet filtering engine: security features for wireline and wireless applications
 - Traffic shapers for rate limitation of traffic allow rate limitation with a granularity of 64 kbps
 - 8-kilobyte MAC addresses and 4-kilobyte VLANs (IEEE 802.1Q), as well as 8-kilobyte IPv4/IPv6 multicast group support
 - DSCP remarking for both IPv4 and IPv6 frames
 - 12x 1000Base-X to AMC.
1x uplink port 1000Base-T via B.145

