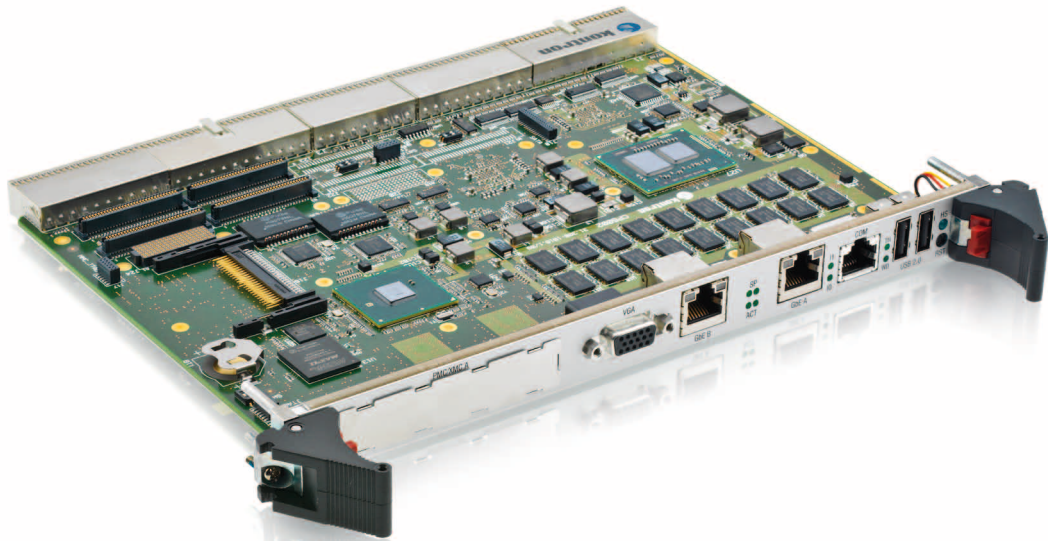# » IPMI-Firmware for CPCI CPUs «

Kontron IPMI-Firmware for the B3401 family

- » Designed for CPCI environment
- » Monitoring of voltages, temperatures, board state, geographic addresses
- » Hot swap and FRU data handling
- » Interfaces: KCS and IPMB
- » Supports CP6002

Kontron IPMI-Firmware
for the B3401 family

The Kontron B3401 IPMI Firmware monitors the temperature sensors, the board voltages and the power supply status. It manages the hot swap operations and programs the geographic address. The firmware runs as BMC to manage the whole system or as SMC to manage the Board and to communicate with a BMC. As BMC it manages the sensor data record repository. A system event log is stored in the NVRAM of the IPMI-Controller.

The firmware communicates via KCS with the system Software and via the IPMBs with other boards in a CompactTCA system. It provides access to various sensors on the board itself and in the system. E.g. voltage sensors, processor, chipset and board temperatures, various processors and system states (power good, board resets, POST codes, ...).

The firmware can be updated in the field. The controller uses two firmware banks to store the firmware redundant. This allows a manual or automatic roll-back to the backup firmware bank.

Supported Features

Board Management	Firmware designed for CPCI environments: » CompactTCA PICMG 2.50 D0.3 » IPMI v1.5 / v2.0 » IPMI Platform Management FRU Information Storage Definition v1.0
Interfaces	» Keyboard Controller Style (KCS) interface to communicate with the system software, uEFI or the OS. The KCS interface supports polling or interrupt mode » Local IPMB-0 or IPMB-1 (redundant or single) to communicate with other CompactTCA boards via the backplane
IPMI Functionality	Sensor Device functionality: » As BMC the firmware manages the complete Sensor Device Record repository of the System. » Sensor thresholds fully configurable » The sensor name includes the Slot in which the board is plugged, if it is configured as SMC. If configured as BMC the string "BMC:" prefixes the sensor name. Complete IPMI watchdog functionality Complete FRU Inventory functionality
CPCI Functionality	» Hot-Swap support » Graceful shutdown support » XMC presence support
Front panel LEDs	» LED indication for System Health and KCS activity » Out-of-Service LED » Hot-Swap LED
Firmware Upgrade	» Firmware can be updated in the field via KCS or IPMB » Two Firmware banks to store the firmware image redundant in the FLASH » Roll-back to the backup FLASH manually or automatically possible. » Downloading new Firmware doesn't break MMC or CPU activities. » Bootable Firmware CDROM image available for download » IPMI-Firmware in HPM.1 format available (Revision 15 and higher)
uEFI interaction	» uEFI fail over control, to switch to the other uEFI Firmware bank in case of error » OEM commands to select the uEFI Firmware bank » Boot device selection » Configurable with the uEFI
Documentation	IPMI Firmware User Manual in PDF format with a list of the available sensors and supported commands

NOTE: The feature list above represents a summary of functionalities supported by the platform IPMI-Firmware. Depending on the used Platform Board a subset of those features is available. For more information about implemented hardware features refer to the Platform Board Hardware Manual.

Ordering Information

Please contact your local sales office for ordering information.

CORPORATE OFFICES

Europe, Middle East & Africa
Oskar-von-Miller-Str. 1
85386 Eching/Munich
Germany
Tel.: +49 (0)8165/ 77 777
Fax: +49 (0)8165/ 77 219

info@kontron.com

North America
14118 Stowe Drive
Poway, CA 92064-7147
USA
Tel.: +1 888 294 4558
Fax: +1 858 677 0898

info@us.kontron.com

Asia Pacific
17 Building,Block #1,ABP.
188 Southern West 4th Ring Road
Beijing 100070, P.R.China
Tel.: + 86 10 63751188
Fax: + 86 10 83682438

info@kontron.cn

intel Embedded Alliance Premier

www.kontron.com