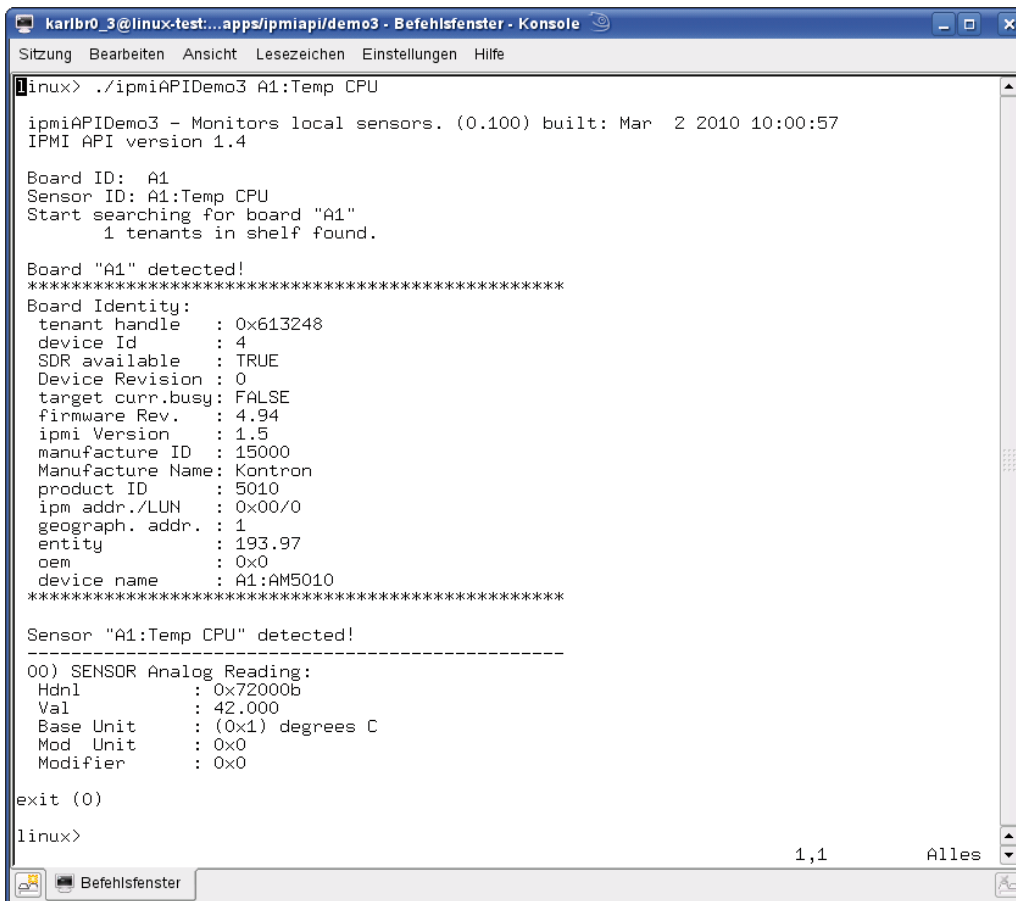


# » IPMI-API «



```
karlbr0_3@linux-test:...apps/ipmiapi/demo3 - Befehlsfenster - Konsole
Sitzung Bearbeiten Ansicht Lesezeichen Einstellungen Hilfe

linux> ./ipmiAPIDemo3 A1:Temp CPU

ipmiAPIDemo3 - Monitors local sensors. (0.100) built: Mar  2 2010 10:00:57
IPMI API version 1.4

Board ID: A1
Sensor ID: A1:Temp CPU
Start searching for board "A1"
      1 tenants in shelf found.

Board "A1" detected!
*****
Board Identity:
tenant handle   : 0x613248
device Id      : 4
SDR available  : TRUE
Device Revision: 0
target curr.busy: FALSE
firmware Rev.  : 4.94
ipmi Version    : 1.5
manufacture ID : 15000
Manufacture Name: Kontron
product ID     : 5010
ipm addr./LUN   : 0x00/0
geograph. addr. : 1
entity         : 193.97
oem            : 0x0
device name    : A1:AM5010
*****

Sensor "A1:Temp CPU" detected!
-----
00) SENSOR Analog Reading:
Hdnl          : 0x72000b
Val           : 42.000
Base Unit     : (0x1) degrees C
Mod Unit      : 0x0
Modifier      : 0x0

exit (0)

linux>
```

## Kontron IPMI-API for Linux 2.6 / 32Bit

- » IPMI-API
- » Detection of components
- » Easy access to IPMI sensors
- » Library to configure the Ethernet switches on MCHs
- » Scriptable tool to configure MCH Ethernet environment

# IPMI-API

## for Linux 2.6 for 32Bit kernel

IPMI-API is a C-based library that provides access to IPMI enabled devices. The API hides IPMI-specifics in wide ranges. The main intention of IPMI-API is to retrieve easily sensor readings, thresholds etc. from a CPU-Board with IPMI Subsystem without extensive IPMI knowledge. Additionally, the API monitors SDRs and FRU data deposited in an IPMI Subsystem. Furthermore, IPMI-API offers an interface for sending and receiving IPMI messages in a raw format.

As new feature it is possible to configure the Ethernet switches on the Kontron MCHs as the AM4901 and the AM5901, with this library. Broadcast suppression, VLAN and Multicast support is implemented. Please refer in ethSwCfg directory to the ethSwCfgReadMe.txt and to the example.conf file. The ethSwCfg binary can be used as tool to configure the switch. This tool is able to handle with a text-based configuration file.

### Supported Features

#### IPMI

- Detection of components (boards, power units, fans, etc.) inside a shelf (CompactPCI or, with restrictions, Micro TCA)
- One handle for each Management Controller inside the shelf for addressing.
- Sensor detection either per Management Controller or system-wide (BMC).
- System-wide unique handle for each sensor.
- Retrieval of sensor readings and settings like Normal Minimum/Maximum Reading, Thresholds etc.
- Thresholds adjustment
- Sensor statistics (by sensor types)
- Retrieval of FRU data sections (Header, Chassis, Board, Product, MultiRecord).
- Retrieval of SDRs (threshold-based/analog Full SDR, discrete Full SDR, Compact SDR, MC Device Locator Records, FRU Device Locator Records) from BMCs SDR Repository or from MC (Device SDRs)
- Sending and receiving of IPMI-Messages in raw (binary) format.

#### Configuration of AM5901 and AM4901 Ethernet switches

- Configuration of the MCH-Ethernet-switches. Setup of Broadcast Storm Suppression, port-based VLAN, tagged VLAN and Multicast are supported.
- Configure the MCH-Ethernet-switch with an configuration file.
- Handle managed and unmanaged Ethernet switches of the AM4901 and AM5901.

#### Open Source

- Modular package structure, conforming to open source conventions
- Every package comes with HTML-documentation

NOTE: The Linux-IPMI-API is running on any Linux 2.6 X86 CPU. The MCH configuration part can only be used on an X86-AMC-CPU

Please contact your local sales office for ordering information.

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