Pt 100/1000 USB Temperature Readout Board

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Command	Description
C	configure connected Pt sensors, to be followed by a hex number defining the sensor types
M	switch internal averaging on
N	switch internal averaging off
O	switch to request readout mode (new mode, available since firmware 1.1)
P	switch to continuous readout mode (old mode)
I	print out board ID
R	read temperature values (in request readout mode only)
S	switch digital pin on (for switching peltier polarity)
T	switch digital pin off (for switching peltier polarity)
X	call internal calibration routine (available since firmware 1.2)
Z	print out board status and configuration

Table 1: *Command reference for Pt 100/1000 USB temperature readout boards with firmware version 1.2 (from July 2013)*

COMMAND REFERENCE

Compute the hexadecimal number for Pt 100/1000 sensor configuration:
One bit for each input (in total four bits) converted into a hex number between 0 and F.
(Pt 100 value: 0, Pt 1000 value: 1)

IMPORTANT INFORMATION

- Relevant for board identification is only the board ID located on the USB connector housing
- Listed board IDs, product descriptions and FTDI chip serial numbers are verified for all boards except one
- Operation with Microsoft Windows: Virtual COM Port (created by FTDI driver from http://www.ftdichip.com/Drivers/VCP.htm) needs to be configured to use 19200 Baud in Device Manager

ID	Manufacturer	USB Product Description	Serial Number	Layout	Firmware	Setup (Room)
1	Uni Karlsruhe	USB Temp. Pt 100/1000 # 1	FTRCP1X5	1.0	1.2	Spare (010)
2	Uni Karlsruhe	USB Temp. Pt 100/1000 # 2	FTRCP3VE	1.0	1.2	Probe 1 (left)
3	Uni Karlsruhe	USB Temp. Pt 100/1000 # 3	FTRCP2HB	1.0	1.2	TCT (311)
4	FTDI	USB to Serial Cable	FTQWE0UV	1.0	1.2	ALiBaVa 1 (right)
5	Uni Karlsruhe	USB Temp. Pt 100/1000 # 13	FTU2N8M9	1.0	1.2	Probe 2 (right)
6	Uni Karlsruhe	USB Temp. Pt 100/1000 # 6	FTRCP1LF	1.0	1.2	Spare (010)
7	Uni Karlsruhe	USB Temp. Pt 100/1000 # 7	FTRCP1JQ	1.0	1.2	X-ray (312)
8	Uni Karlsruhe	USB Temp. Pt 100/1000 # 8	FTRCP1FU	1.0	1.2	Weiler (415)
9	Uni Karlsruhe	USB Temp. Pt 100/1000 # 9	FTTLBA8M	1.0	1.2	TCT Student (325)
10	Uni Karlsruhe	USB Temp. Pt 100/1000 # 10	FTTLBB30	1.0	1.2	CMS-Pixel left (010)
11	Uni Karlsruhe	USB Temp. Pt 100/1000 # 11	FTTLBBC0	1.0	1.2	Bögelspacher (320)
12	Uni Karlsruhe	USB Temp. Pt 100/1000 # 12	FTTLBBI0	1.0	1.2	Spare (010)
13	Uni Karlsruhe	USB Temp. Pt 100/1000 # 4	FTRCP23I	1.0	1.2	CMS-Pixel right (010)
14						
15						
16*	Uni Karlsruhe	USB Temp. Pt 100/1000 # 16	FTTLV0OO	1.0	1.1	Cosmic Telescope (H245)
17	Uni Karlsruhe	USB Temp. Pt 100/1000 # 98	A900ae2I	1.0	1.2	Lorentz Angle (325)
18						
19						
20	Uni Karlsruhe	USB Temp. Pt 100/1000 100	FTTG2WBY	2.0	1.2	ALiBaVa 2 (left)
21						
22						

Table 2: *Status of programmed Pt 100/1000 USB temperature readout boards at IEKP (* not yet verified)*

Last changed: August 7, 2015