

USB-2001-TC Python Windows example

Here is a simple example to get you started using the USB-2001-TC with Python on Windows.

it features the mcculw v1.0.0 library found on github.com.

The example is attached to the end of this KB article.

```
from __future__ import absolute_import, division, print_function
from builtins import * # @UnusedWildImport

from mcculw import ul
from mcculw.enums import InfoType, BoardInfo, AiChanType, TcType, TempScale,
TInOptions

def run_example():
    device_to_show = "USB-2001-TC"
    board_num = 0

    # Verify board is Board 0 in InstaCal. If not, show message...
    print("Looking for Board 0 in InstaCal to be {0} series...".format(device_to_show))

    try:
        # Get the devices name...
        board_name = ul.get_board_name(board_num)

    except Exception as e:
        if ul.ErrorCode(1):
            # No board at that number throws error
            print("\nNo board found at Board 0.")
            print(e)
            return

        else:
            if device_to_show in board_name:
                # Board 0 is the desired device...
                print("{0} found as Board number {1}.\n".format(board_name, board_num))
                ul.flash_led(board_num)

            else:
                # Board 0 is NOT desired device...
                print("\nNo {0} series found as Board 0. Please run
InstaCal.".format(device_to_show))
                return

    try:
        # select a channel
```

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```
channel = 0
# Set thermocouple type to type J
ul.set_config(
    InfoType.BOARDINFO, board_num, channel, BoardInfo.CHANTCTYPE,
    TcType.J)
# Set the temperature scale to Fahrenheit
ul.set_config(
    InfoType.BOARDINFO, board_num, channel, BoardInfo.TEMPSCALE,
    TempScale.FAHRENHEIT)
# Set data rate to 60Hz
ul.set_config(
    InfoType.BOARDINFO, board_num, channel, BoardInfo.ADDATARATE, 60)

# Read data from the channel:
options = TInOptions.NOFILTER
value_temperature = ul.t_in(board_num, channel, TempScale.FAHRENHEIT, options)
print("Channel{:d}: {:.3f} Degrees.".format(channel, value_temperature))

except Exception as e:
    print('\n', e)

if __name__ == '__main__':
    run_example()
```

Measurement Computing Data Acquisition Knowledgebase
<https://kb.mccdaq.com/KnowledgebaseArticle50836.aspx>