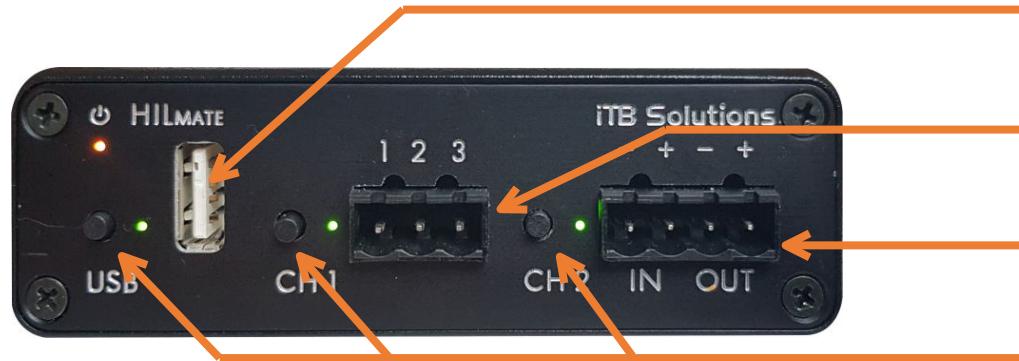




HILMATE

CI/CD equipment and developer toolkit

HILmate Front- and Backpanel Interfaces

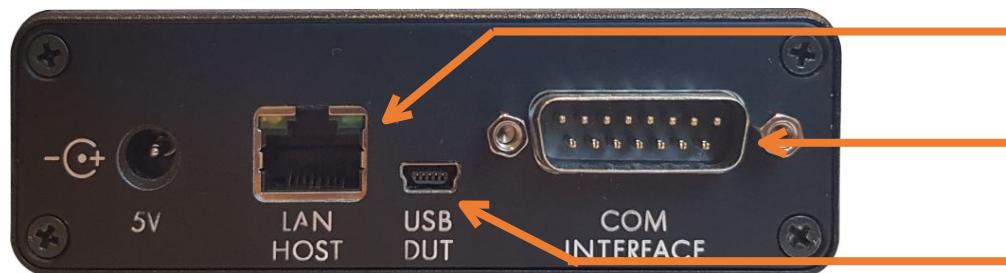


forwarded USB device, e.g. USB-Memory Stick

2-way DC switch, e.g. accessoire, debugger

switchable DC Voltage and Ampere meter

manual control buttons for ease of use



Ethernet port to access WebGUI or REST api

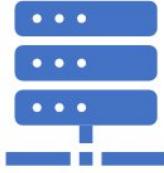
configurable Communiation Interface
CAN, UART, RS485, GPIO

USB port to device-under-test

HILmate access:

LAN / VPN

CI/CD Server
Automated testing



REST API



Development
or SystemTest

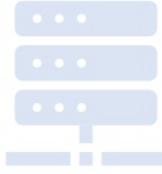


WebGUI



HILmate access:

CI/CD Server
Automated testing



REST API



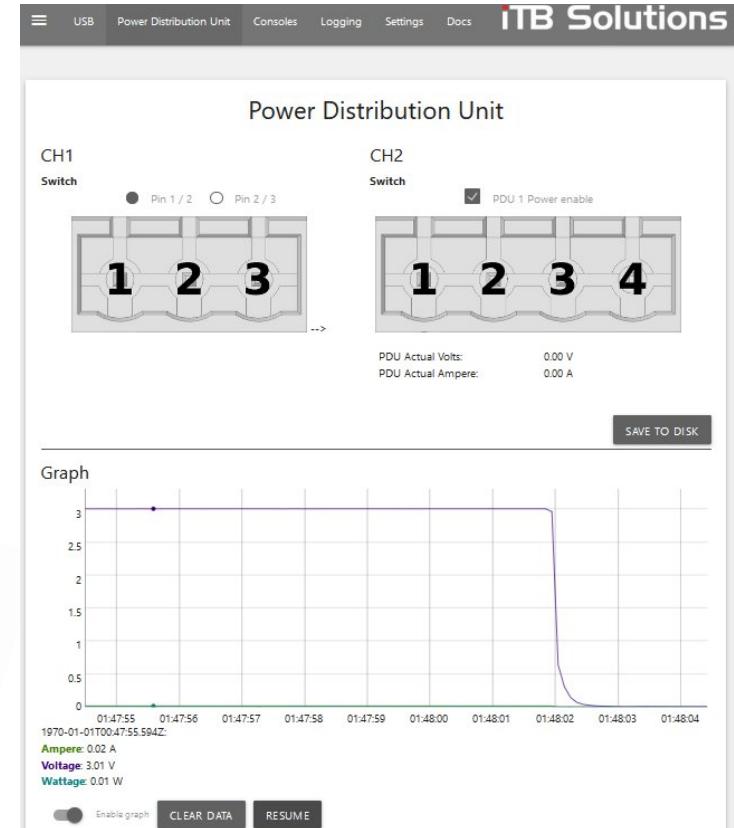
Development
or SystemTest



WebGUI

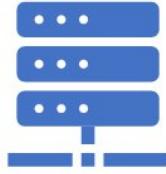


WebGUI
live observation



HILmate Communication Interfaces:

CI/CD Server
Automated testing



REST API



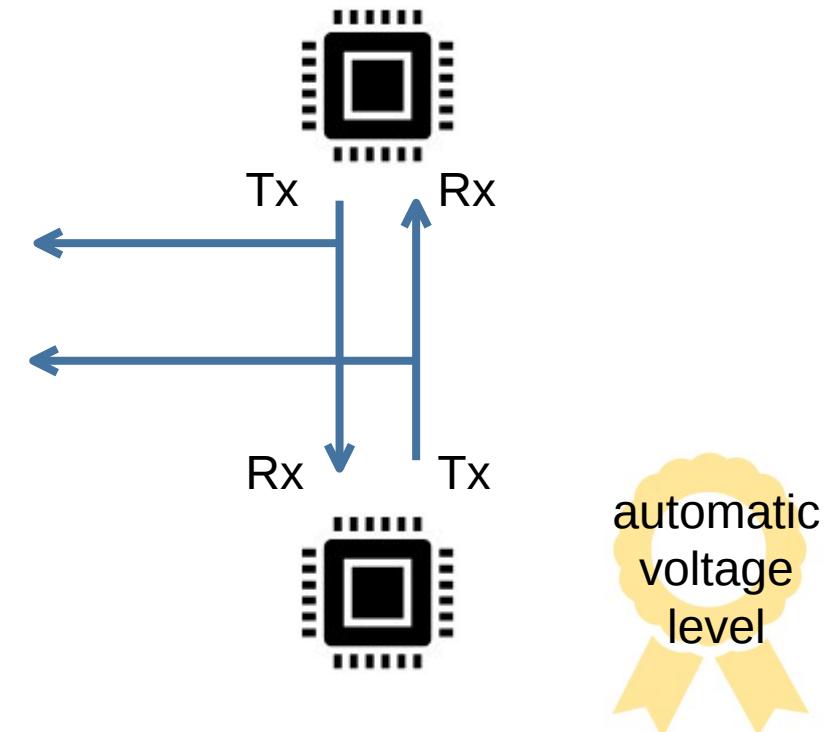
Development
or SystemTest



WebGUI



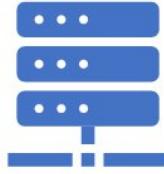
UART and RS485
Communication Sniffing



HILmate Communication Interfaces:

UARTs and RS485
Remote Console

CI/CD Server
Automated testing



REST API

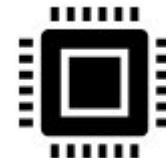


Development
or SystemTest



Rx

Tx



Tx

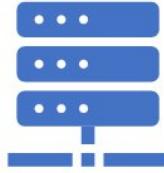
Rx



HILmate Communication Interfaces:

CAN bus

CI/CD Server
Automated testing



REST API



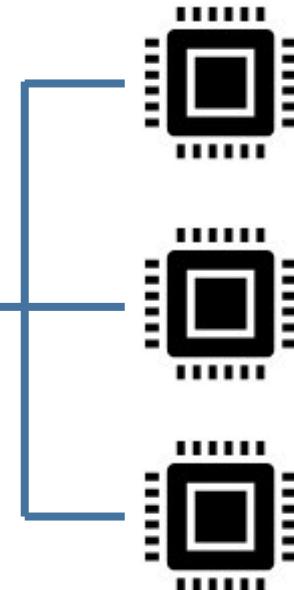
Development
or SystemTest



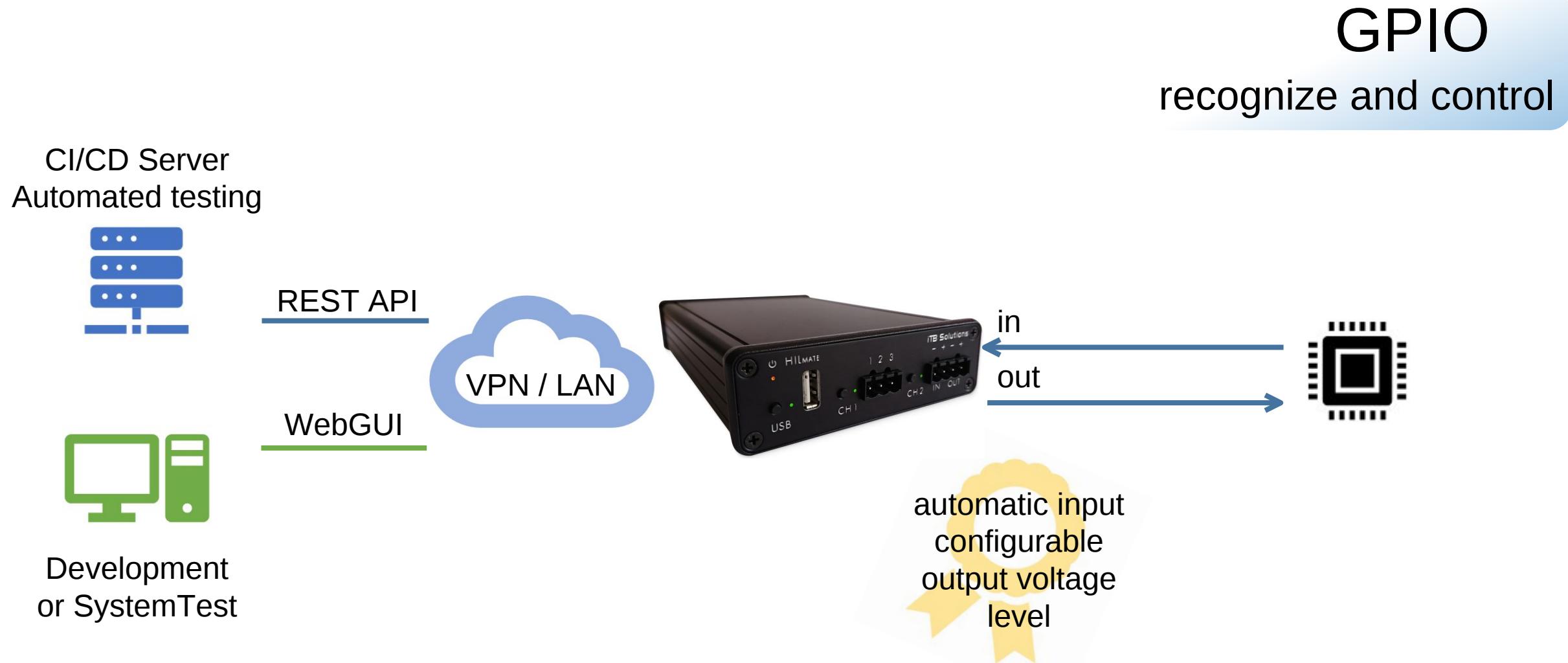
WebGUI



Rx/Tx



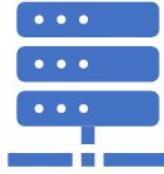
HILmate Communication Interfaces:



HILmate USB access and control:

USB storage access
remote read-/write access

CI/CD Server
Automated testing



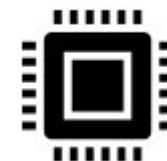
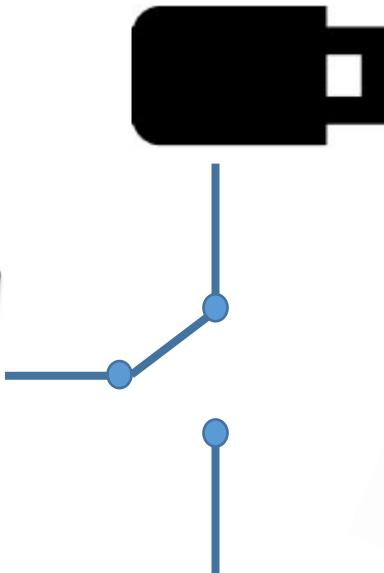
REST API



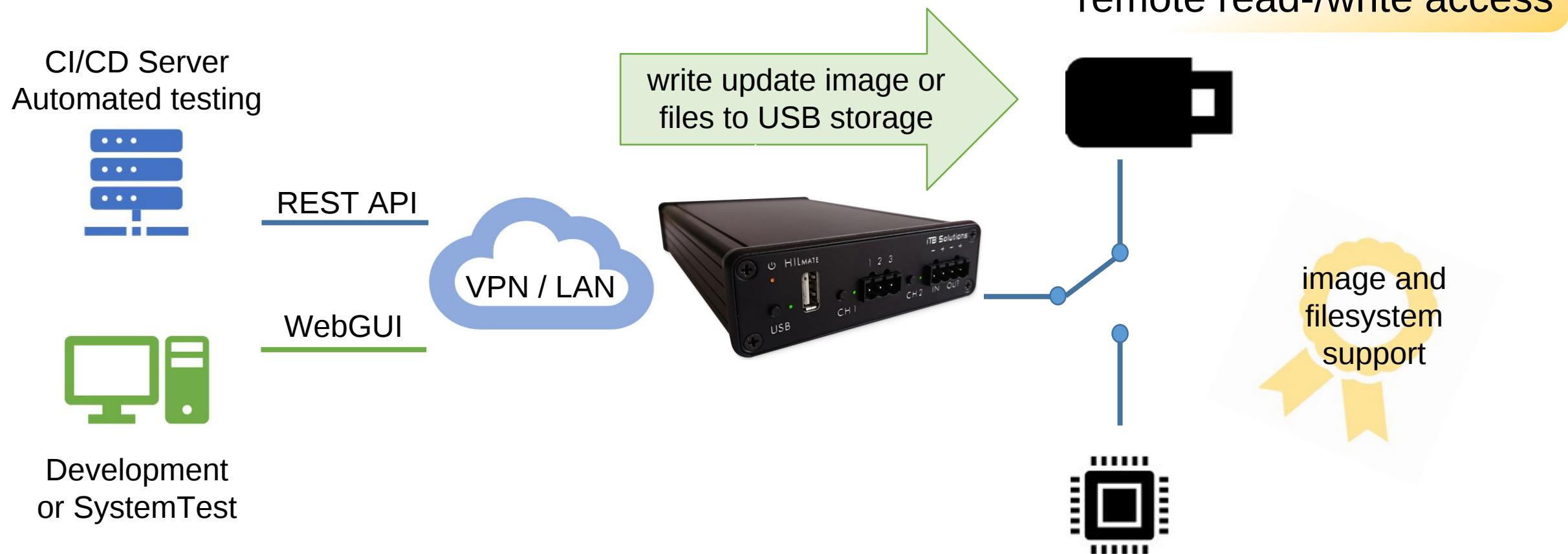
Development
or SystemTest



WebGUI



HILmate USB access and control:



HILmate USB access and control:

USB storage access
remotely grant access

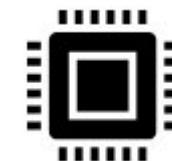
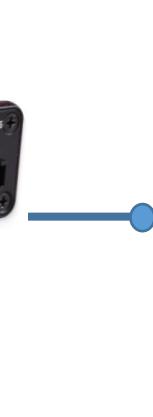
CI/CD Server
Automated testing



REST API



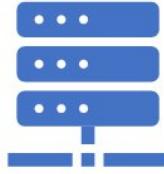
Development
or SystemTest



attach USB via
WebGUI/REST

HILmate USB access and control:

CI/CD Server
Automated testing



REST API



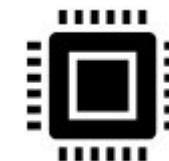
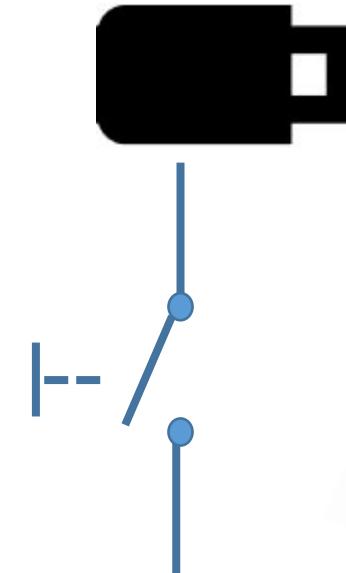
Development
or SystemTest



WebGUI



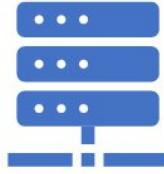
USB device switch
de- and attach



independently
switchable USB
power and data
line

HILmate power switch and measure:

CI/CD Server
Automated testing



REST API



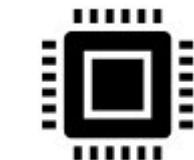
Development
or SystemTest



WebGUI



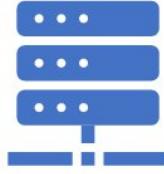
DC meter
voltage and power meter



supports
up to 10 A
DC

HILmate power switch and measure:

CI/CD Server
Automated testing



REST API



Development
or SystemTest

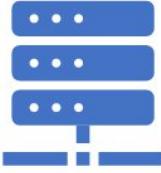


DC switch
additional toggle switch



HILmate access:

CI/CD Server
Automated testing



REST API



WebGUI



Development
or SystemTest



onboard
REST
specification &
examples

REST Api
OpenApi v3 standard

```
#!/usr/bin/env python3

import requests
import json
import time
import os

os.environ['NO_PROXY'] = '192.168.10.240'

HILmate_API ='http://192.168.10.240/api/v1'
headers = {"Content-Type": "application/json"}

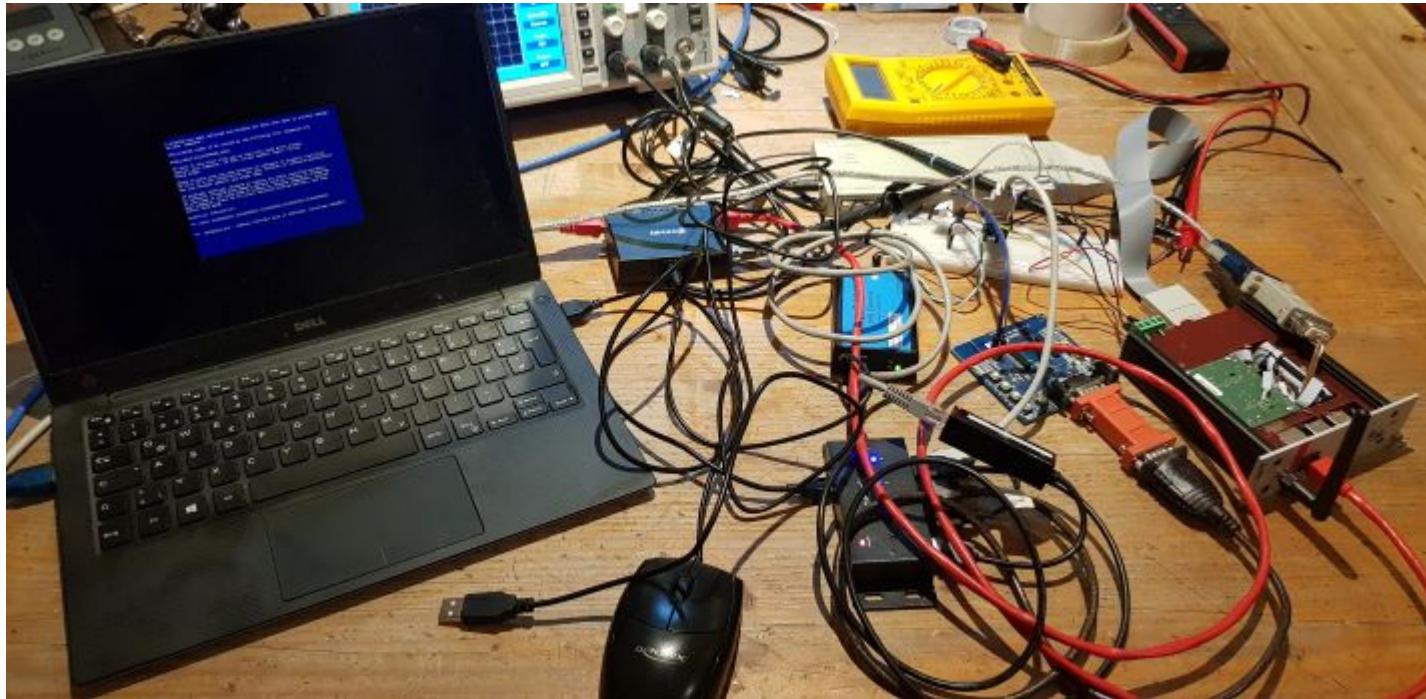
#Clear Log file
response = requests.post(HILmate_API + 'logging/power/clear')
response = requests.post(HILmate_API + 'logging/com/1/clear')
response = requests.post(HILmate_API + 'logging/com/2/clear')

#Get Log state
response = requests.get(HILmate_API + 'logging/config')
print("Get logging state: ")
print(response.json())

#save timestamp
file_prefix= time.strftime('%Y_%m_%d_%H_%M_%S')

#Set Log Power On
logging_config = response.json()
logging_config ['power']['enabled'] = True
logging_config ['com_1']['enabled'] = True
logging_config ['com_2']['enabled'] = True
response = requests.put(HILmate_API + 'logging/config', data=json.dumps(logging_config))
print("Set logging state response: ")
print(response.json())

#Switch Ch2 on
```

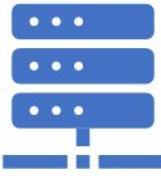


benefit?

homogenous WebGUI / REST for all features
one device, small size factor
a free USB port for the mouse

HILmate access:

CI/CD Server
Automated testing



REST API

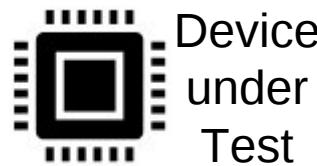


Development
or SystemTest

HILMATE



Power
measurement and control



Communication
Logging & Transmit

USB
remote access and control