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Gnublin Tools

Whether one temperature, stepper motor, display, ADC, PWM,

```
root@gnublin:~# gnublin-gpio -h
This program is designed, to easily interact with the GPIOs of GNUBLIN.

-h Show this help
-b show output in raw format.
-j Convert output to json format
-p <value> Select gpio Pin (default=14) <value> between 1 and 20
-i configure pin as input and print the value
-o <value> configure pin as output and set a value 1=high,0=low
-f unexport the gpio Pin

Examples:

    set GPIO14 Pin as input, read value and print it in json format:
    gnublin-gpio -i -p 14 -j

    set GPIO11 Pin as output with a high value:
    gnublin-gpio -o 1 -p 11

    set GPIO11 Pin as output with a low value:
    gnublin-gpio -o 0 -p 11
root@gnublin:~#
```

SPI messages or similar need exists in Gnublin now a collection of programs with which you can do all of this in the same way. In parallel with the tools in the long run for key programming to an API offered.

The principle for a tool looks like this:

Call with almost no parameter: If once the hardware is connected issue of the value of such

Switch on the led on the board:

```
gnublin-gpio -p 3 -o 1
```

Get valued of the adc converters.

```
gnublin-gpio -p 3 -o 1
```

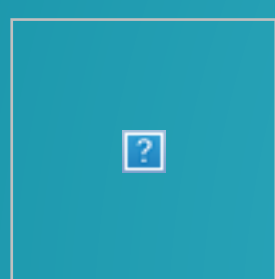
Tool	Beschreibung
gnublin-adcint	Get value on internal ADC
gnublin-adcmod	Get value on external ADC
gnublin-cam	Webcam control (Snapshot or Stream)
gnublin-dogm	Display (2×16 Chars)
gnublin-lm75	Temperature
gnublin-pwm	PWM
gnublin-rtc	RTC
gnublin-step	Motor
gnublin-wlan	WLAN

Force minimal output

If you start one Gnublin tool by default partially various messages or notes are issued by a simple introduction to the programs and modules to ensure. But if you want install such a program in its own, it is better if you get minimal cost or then immediately switches to the JSON format, which is described in the next section. JSON format is too much but you can just use the-b like so bare force (in) a clear issue.

JSON for data exchange

As a special highlight, each Gnublin program to an output via JSON. For this just add the-j option to each command. Even each output is delivered via JSON. This has the great advantage if you want to process the output in another program, you can easily transfer the data to internal data structures of programming languages. Most modern languages offers purpose of features.



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