

Software manual

Version. 1

1) Available commands

Types of commands:

- Global – Can be called everywhere. (a)
- Group – Can be called just when the correct command group is selected. (b)

After startup of the MCU no command group is selected. To select command group type exact name of the group. After hitting “enter” the command group will be selected.

```
>> [command group]
```

After command group selection you can type desired command with argument (if specified). To exit the command group use the “back” command (a).

```
>> [command group] >> [command] [argument]
```

a) Global commands

- clear – Clears output terminal.
- back – Exits current command group.
- help – Prints out all available commands. [Not implemented]

b) Command groups

PWM <pwm>

- on <duty> – Turn on the PWM. If second argument is given(optional: number), then it specifies duty cycle.
- off – PWM is deactivated.
- duty <new duty> – Prints out currently set duty. If second argument is given(optional: number), then it specifies new duty.

Regulation <reg>

- on <rpm> – Turns the regulation on. If second argument is given(optional: number), then it specifies desired RPM.
- off – Turns the regulation off.
- rpm <new rpm> – Prints out currently set RPM. If second argument is given(optional: number), then it specifies desired RPM.

Brake <brake>

- on – Brake is activated.
- off – Brake is deactivated.

Direction <dir>

- cw – Motor is set to turn clockwise.
- ccw – Motor is set to turn counter clockwise.
- chDir – Changes motor turn direction.

2) Configuration

Configuration is done by modifying config.h file.

3) Software limitations and known issues

- Missing help command
- PWM frequency cannot be changed (20 kHz)
- Regulation period cannot be changed (2 ms)