4.4.3.2 Motor Driver

With the PWM driver the PWM signals can be generated. The next step is a driver to initialize and control the motors and their controllers. Therefore the _les "`b motordriver.c"' and "`b motordriver.h"' were implemented. It uses the PWM driver interface to set up the controllers.
To initialize all controllers as well as the motors the "`MotorDriver init()"' method exist. It _rst sets the duty cycle to the highest value that still allows a frequency detection. After the return button on the keyboard of your computer was pressed the signal switches to the minimum value. The di_erence between both the highest and the lowest value de_nes the range a motor is able to use. Finally it needs another return to end the initialization. This procedure has to be done during every start up of the system, because the controllers are not able to store these values.
Apart from that the driver provides methods to set the speed of a single motor or all together. The motors can be selected with an Enum that is de_ned in the header _le.