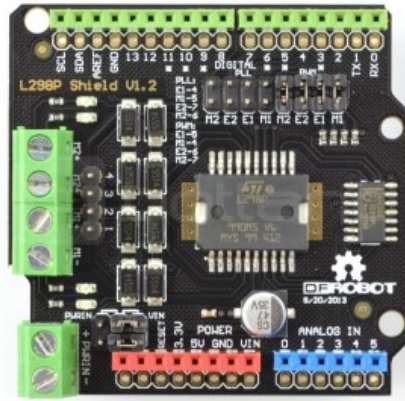
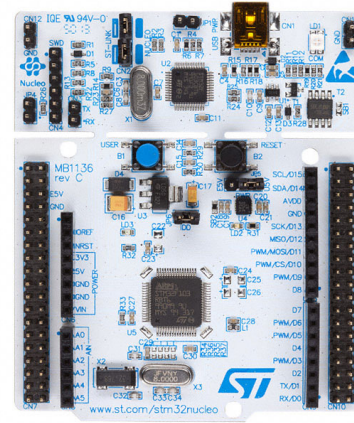


# LineFollower Robot – short note



(a)



(b)

Figure 1: (a) DFRobot Motor Shield L298, (b) Nucleo STM32F103RBT6

1. Main board: Nucleo STM32F103RBT6 Fig.1b
2. Motor Board: DFRobot Motor Shield L298 Fig.1a
3. Connectors Board: Grove Base Shield v2

Signals connected to microcontroller are listed in table 1.

Table 1: Configuration of signals connected to microcontroller

Name	Direction	Signal type	Pin number	Internal function
Reflective sensor KTIR0711s	Input	Analog	PA0	ADC1_IN0
Reflective sensor KTIR0711s	Input	Analog	PA1	ADC1_IN1
Reflective sensor KTIR0711s	Input	Analog	PA4	ADC1_IN4
Reflective sensor KTIR0711s	Input	Analog	PB0	ADC1_IN8
Reflective sensor KTIR0711s	Input	Analog	PC0	ADC1_IN10
Nucleo on board switch	Input	Digital	PC13	
Nucleo on board LED	Output	Digital	PA5	
Motor A - direction	Output	Digital	PB5	
Motor B - direction	Output	Digital	PA8	
Motor A - Enable (velocity)	Output	Digital PWM	PB4	TIM3_CH1
Motor B - Enable (velocity)	Output	Digital PWM	PB10	TIM2_CH4 (remap)