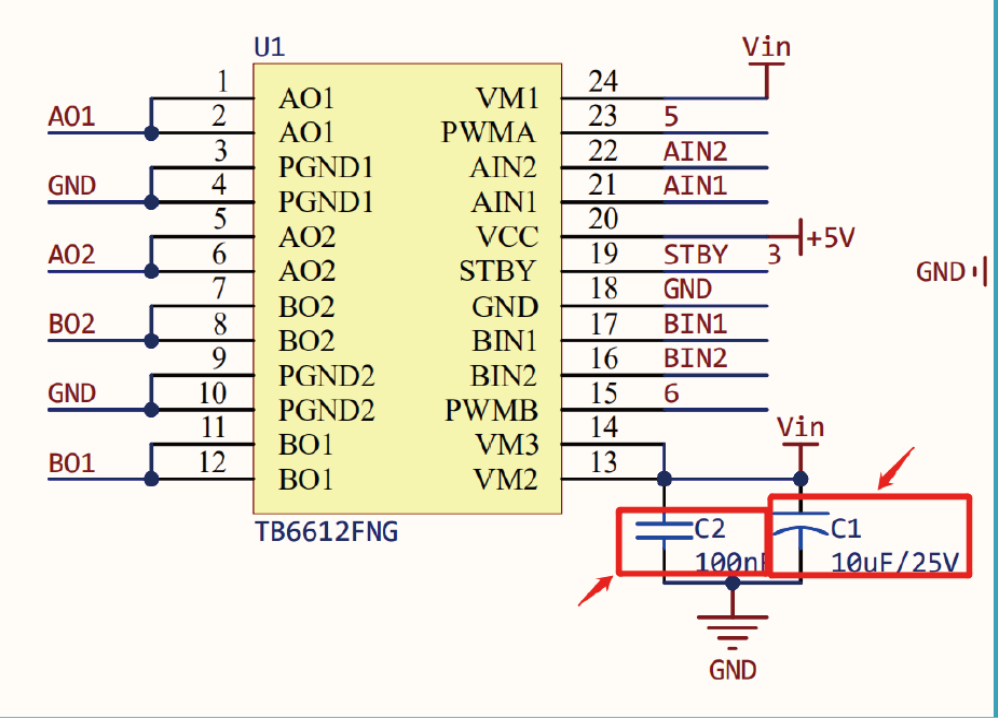
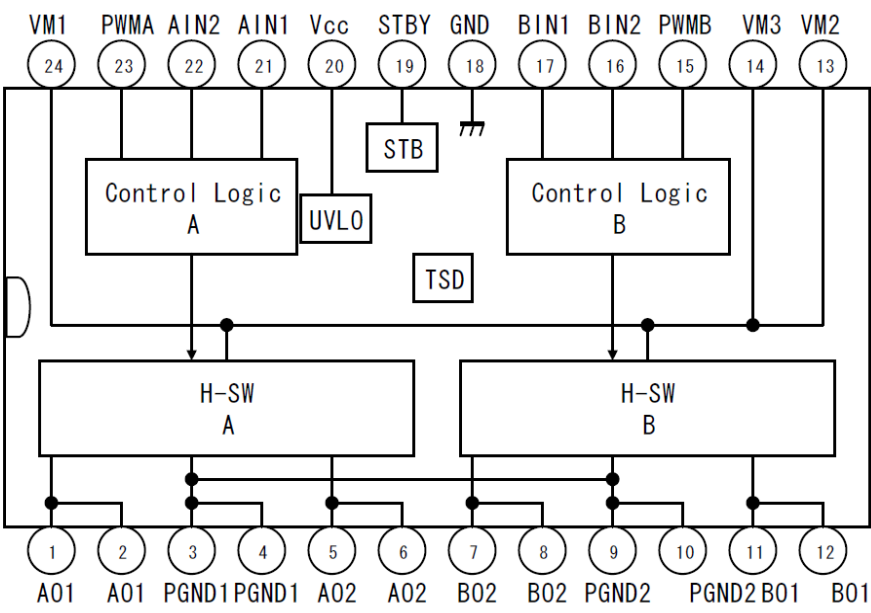


Control a DC motor driver with PWM and IR

TB6612FNG

Driver IC for Dual DC motor TB6612FNG is a driver IC for DC motor with output transistor in LD MOS structure with low ON-resistor. Two input signals, IN1 and IN2, can choose one of four modes such as CW, CCW, short brake, and stop mode.



Input				Output		
IN1	IN2	PWM	STBY	OUT1	OUT2	Mode
H	H	H/L	H	L	L	Short brake
L	H	H	H	L	H	CCW
		L	H	L	L	Short brake
H	L	H	H	H	L	CW
		L	H	L	L	Short brake
L	L	H	H	OFF (High impedance)		Stop
H/L	H/L	H/L	L	OFF (High impedance)		Standby

Emulate motor driver with IR and leds

```
void my_ISR(void) __attribute__((interrupt_handler));

int cnt;
int pwmA;
int pwmB;
int dirA;
int dirB;

void my_ISR(void)
{
    manage_pwm(cnt, pwmA, pwmB, RGBaddr); //0x40000008 - channel 1
    set_dir(dirA, dirB, ledGPAaddr);      //0x40000000 - channel 0
    clear_interrupt();
}

main(){
    enable_interrupts(); // from_timer_channel_1
    enable_timer_channel_0();// upcount
    enable_timer_channel_1();// downcount

    while(1){
        command=decode_NEC(timer);
        manage_command(pwmA, pwmB, dirA, dirB); //increase, decrease, switch dir based on the command;
    }
}
```