

# Control Signals

PIN	NET	MCU Notes	Description
D0	LED_SW	Interrupt	LED Enable Pushbutton Input
D1	MEXT		Motor Extend
D2			Bootloader conflict
D3	MEN	PWM	Motor Enable
D4	MELIM	Interrupt	Motor Extend Limit Input
D5	MRLIM	Interrupt	Motor Retract Limit Input
D6	LED_GRN		Green Status LED
D7	LED_RED		Red Status LED
A0	ĪO_INT	Interrupt	10 Extender Interrupt
A1	OPEN_CLOSE_SW	Interrupt	Open—Stop—Close Pushbutton Input
A2	OWIRE		1-Wire
A3	LED_EN		Enable LEDs
Α4			Unused
A5			Unused
A6	MIS	ADC	Motor Current Sense

#### Notes

- 1. This board is compatible with the Arduino MKR1000 board which directly supports the ATWINC1500.
- 2. When the bootloader is running D2 is turned into an output at a logic '1'.
- 3. All LEDs are normally off.

Mike	L	awı	en	ce

Sheet: Motor Driver

Sheet: Inputs

Sheet: Outputs and LEDs

File: WiFi-Gate-Control-Board-Motor.sch

File: WiFi-Gate-Control-Board-Inputs.sch

File: WiFi-Gate-Control-Board-Outputs.sch

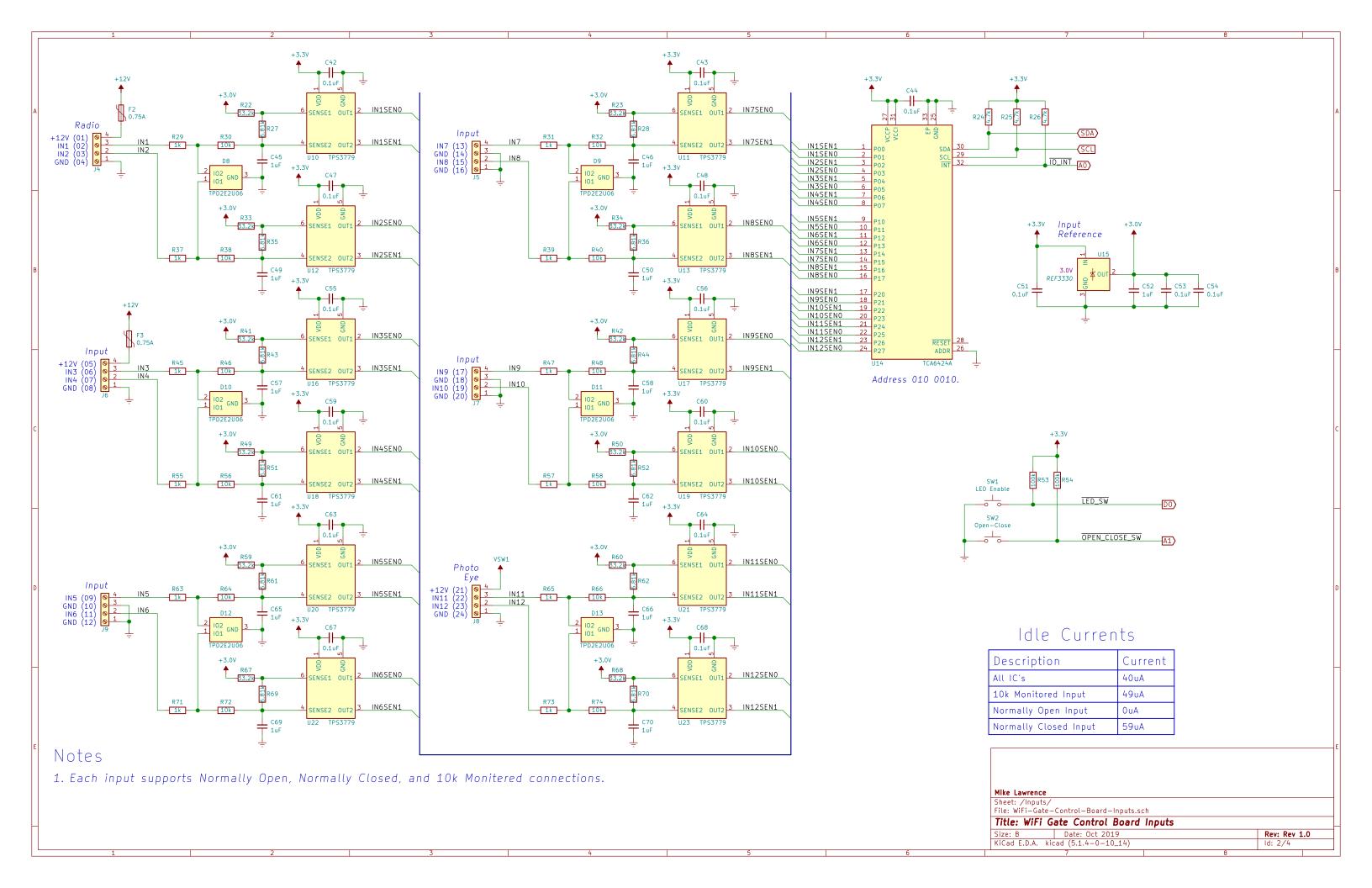
Sheet: / File: WiFi-Gate-Control-Board.sch

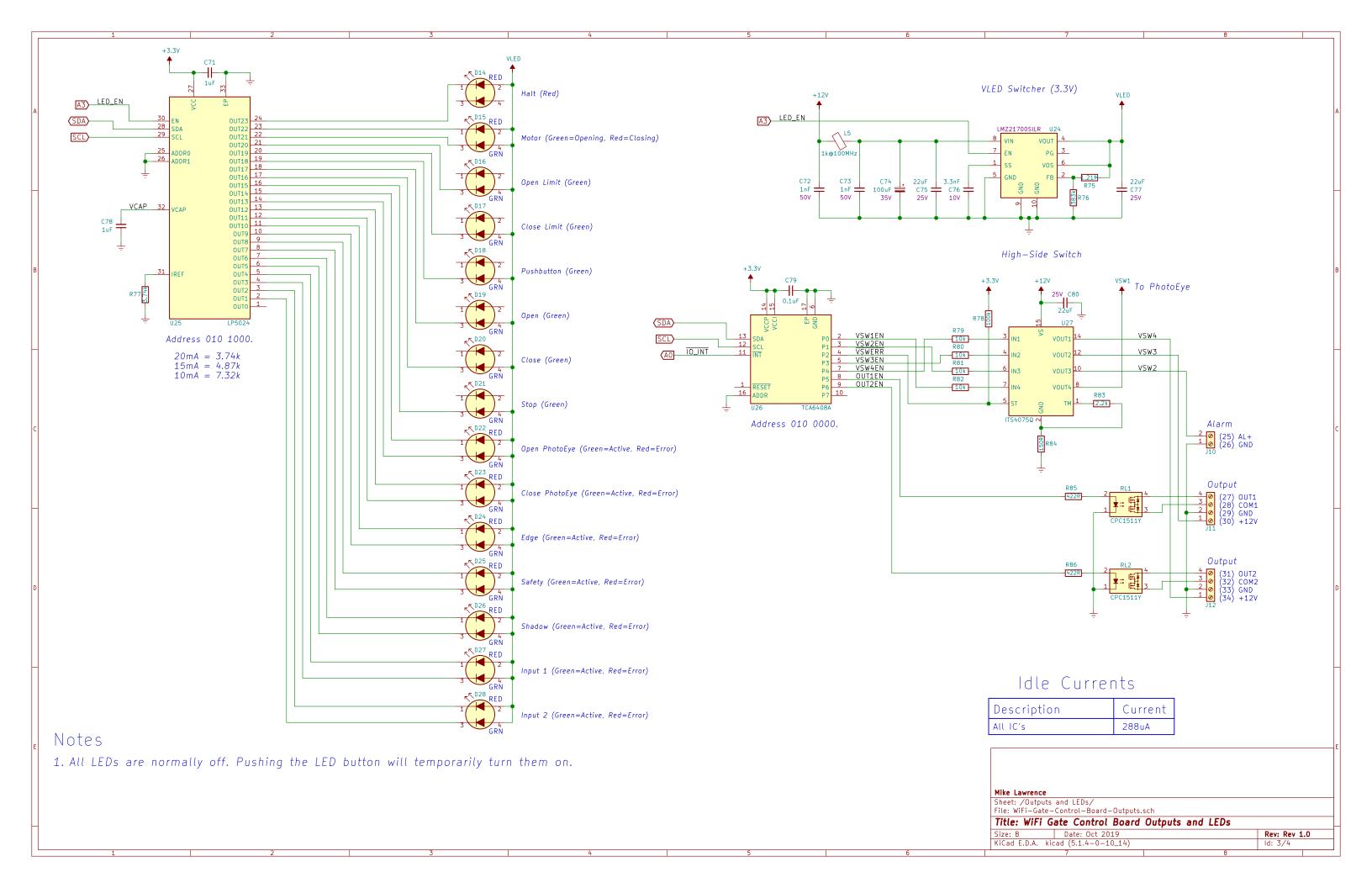
Title: WiFi Gate Control Board

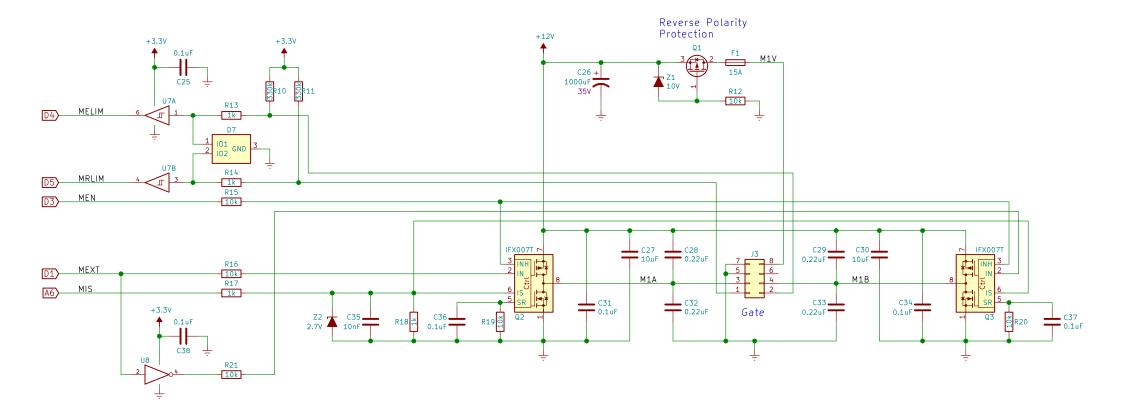
 Size: B
 Date: Oct 2019
 Rev: 1.0

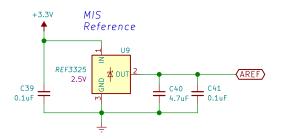
 KiCad E.D.A. kicad (5.1.4-0-10\_14)
 Id: 1/4

\*\*









## Motor Truth Table

MEN	MEXT	Motor Action
L	Χ	Motor Off
Н	L	Motor Retracting
Н	Н	Motor Extending

# Idle Currents

Description	Current	
All IC's	47uA	

#### Mike Lawrence

Sheet: /Motor Driver/ File: WiFi-Gate-Control-Board-Motor.sch

Title: WiFi Gate Control Board Motor Driver

Size: B Date: Oct 2019 KiCad E.D.A. kicad (5.1.4-0-10\_14) Rev: Rev 1.0

### Notes

1. When M1A is positive and M1B is negative actuator extends.