

Evolutek<< & Goldorak

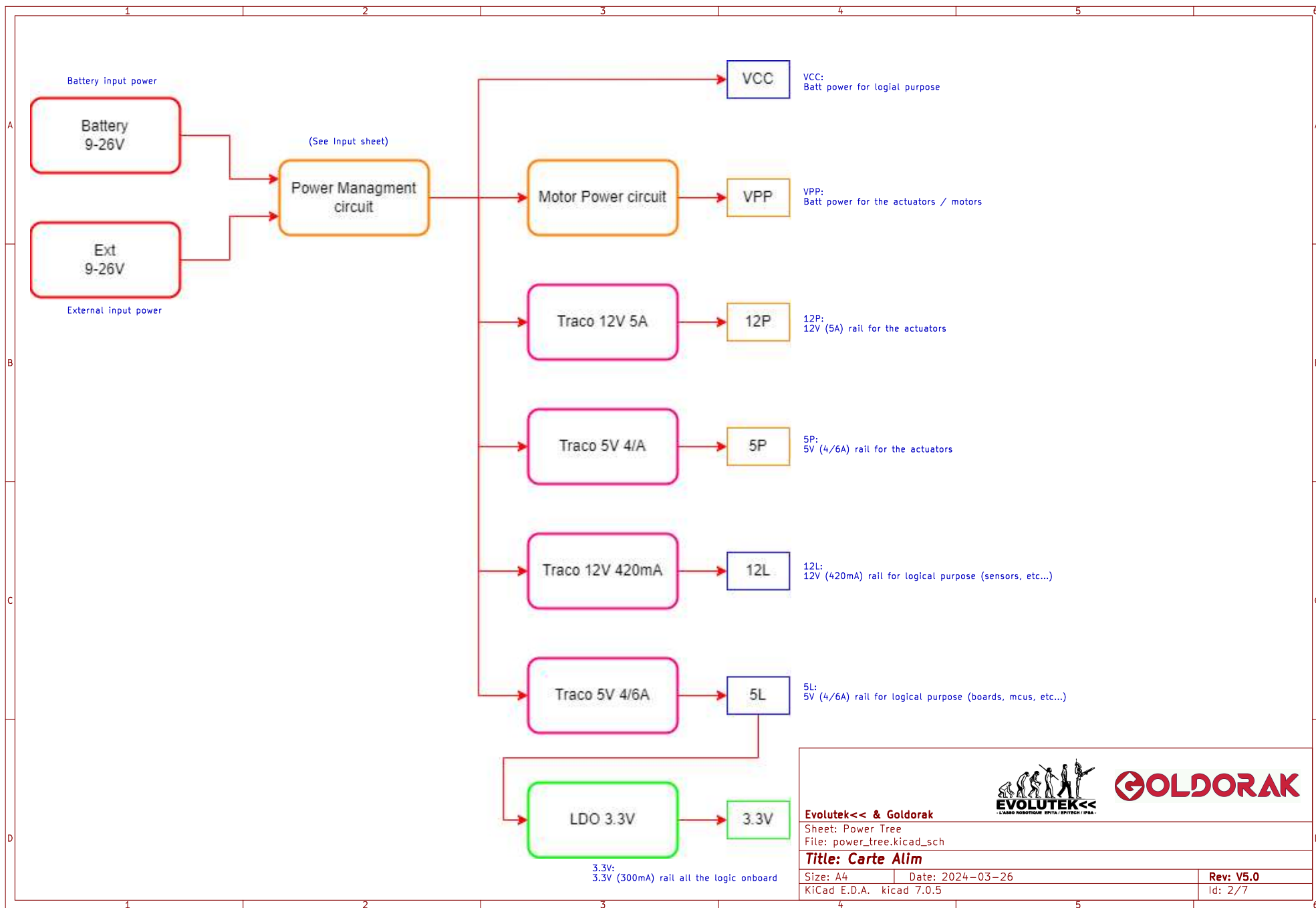
Sheet:  
File: Carte Alim.kicad\_sch

**Title: Carte Alim**

Size: A4 Date: 2024-03-26  
KiCad E.D.A. kicad 7.0.5

**Rev: V5.0**  
Id: 1/7





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Sheet: Power Tree

File: power\_tree.kicad\_sch

**Title: Carte Alim**

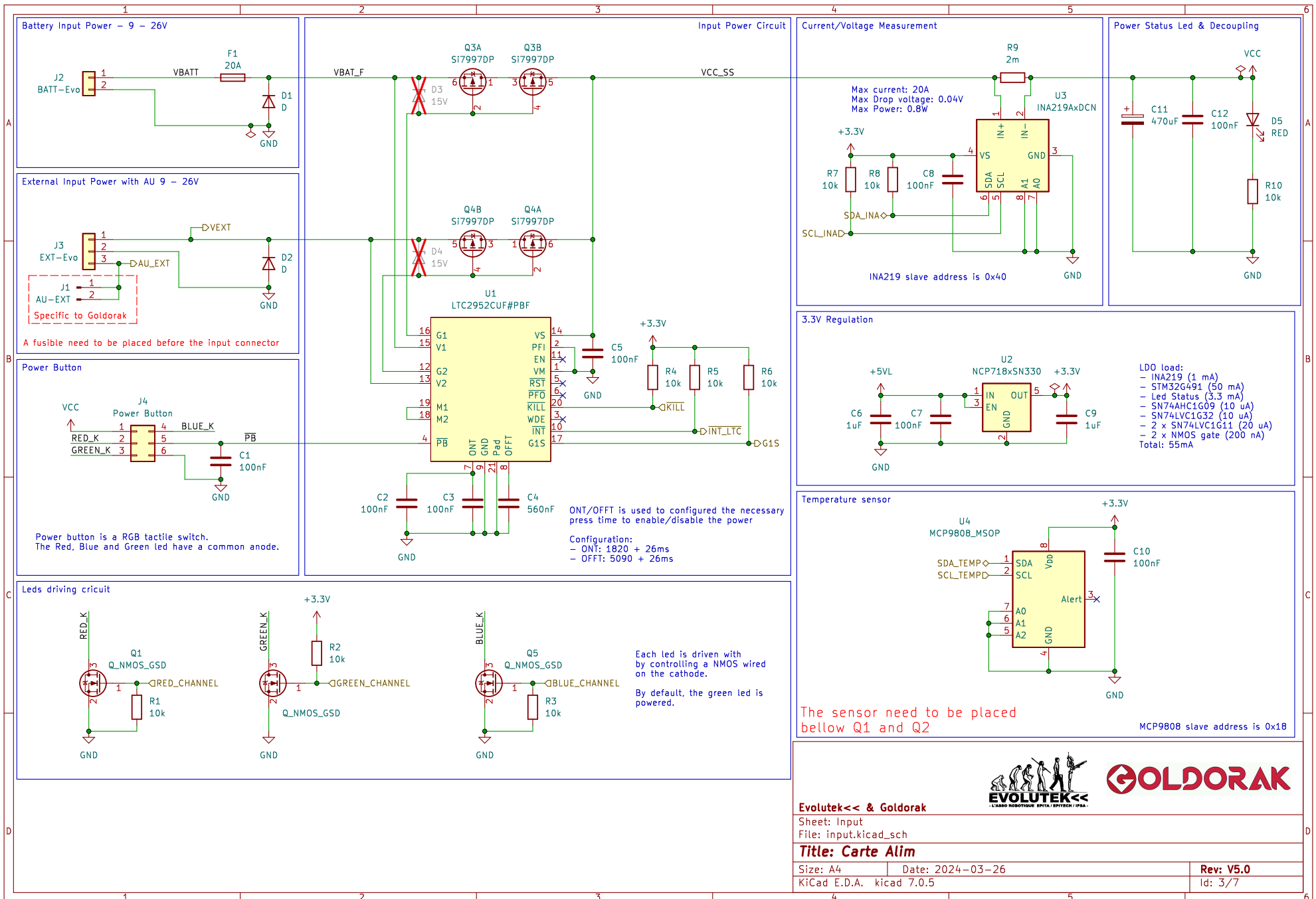
Size: A4

Date: 2024-03-26

**Rev: V5.0**

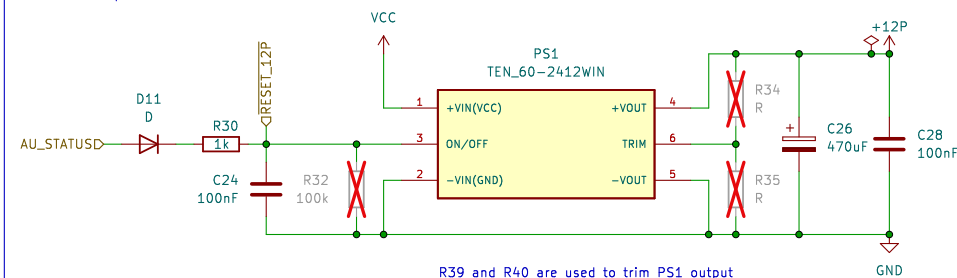
KiCad E.D.A. kicad 7.0.5

Id: 2/7

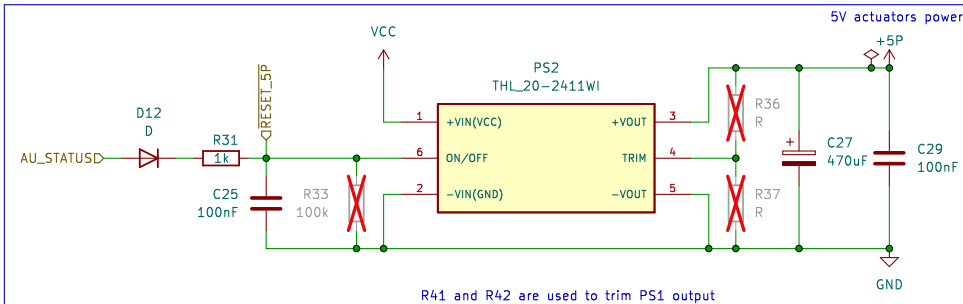
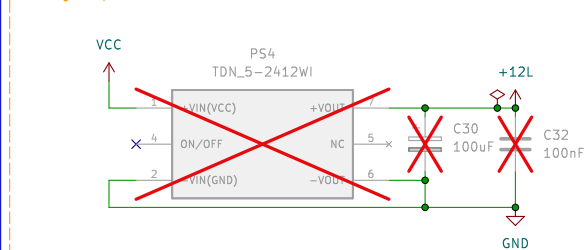


Rev: V5.0  
Id: 4/7

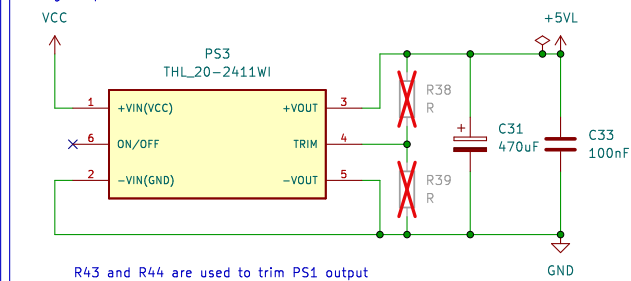
# 12V actuators power



# 12V logical power



# 5V logical power



# Documentation

ON/OFF control pins are used to enable (high level) or disable (low level) the output of the converters (+ or - 5% max).

You can trim the converters output by using:

- R34 / R36 / R38 to trim up the voltage
- R35 / R37 / R39 to trim down the voltage



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Sheet: Converters

File: converters.kicad\_sch

Title: Carte Alim

Size: A4

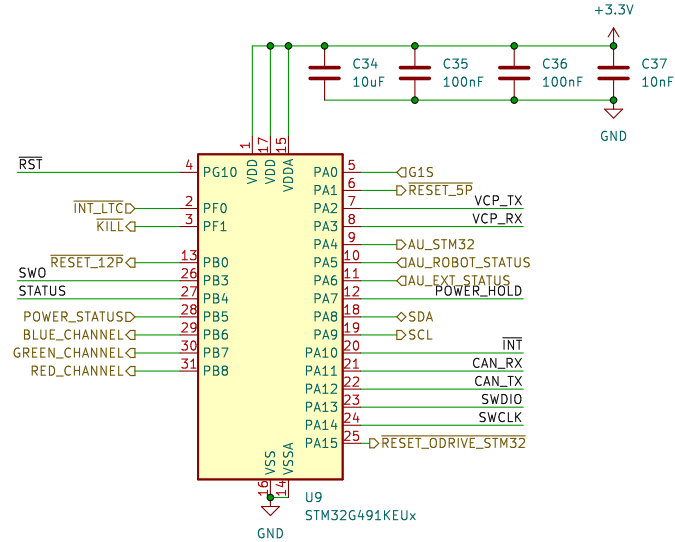
Date: 2024-03-26

KiCad E.D.A. kicad 7.0.5

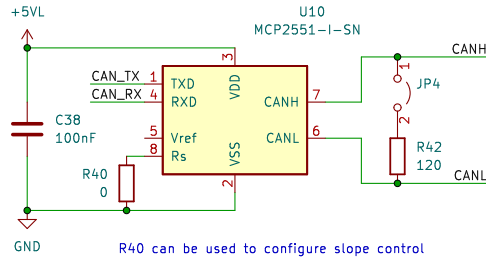
Rev: V5.0

Id: 5/7

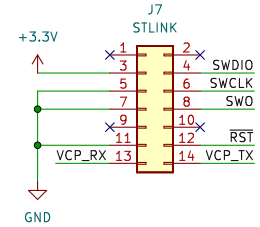
# STM32



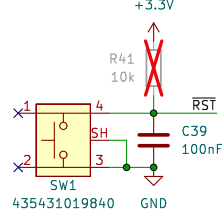
# CAN



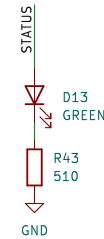
# STLINK



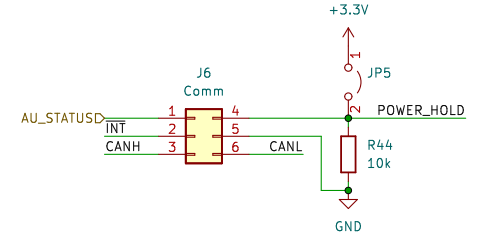
# Reset button



# Status led

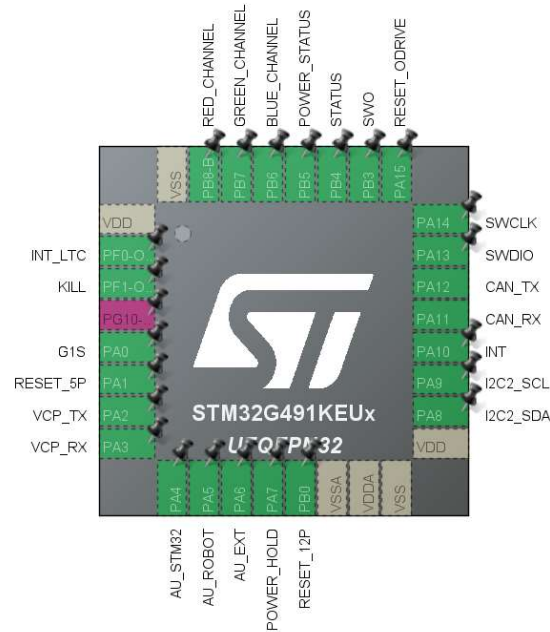


# Power Control Connector



# Mapping STM32

- TIM4 is used to drive the RGB power button led
- FDCAN1 is used to interface the STM32 with the CAN bus
- I2C2 is used to communicate with all onboard sensors
- UART2 is used for debugging
- INT\_LTC / AU\_ROBOT / AU\_EXT / POWER\_HOLD are used as external interrupts
- PB8 (BOOT0) is mapped as and output PWM (need to set nBOOT\_SEL option byte to not use PB8 as BOOT0 pin)



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Sheet: STM32

File: stm32.kicad\_sch

Title: Carte Alim

Size: A4

Date: 2024-03-26

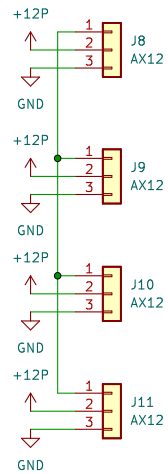
KiCad E.D.A. kicad 7.0.5

Rev: V5.0

Id: 6/7

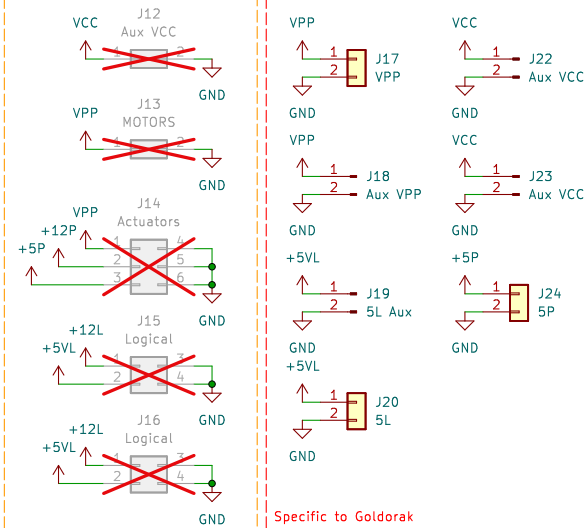


AX12



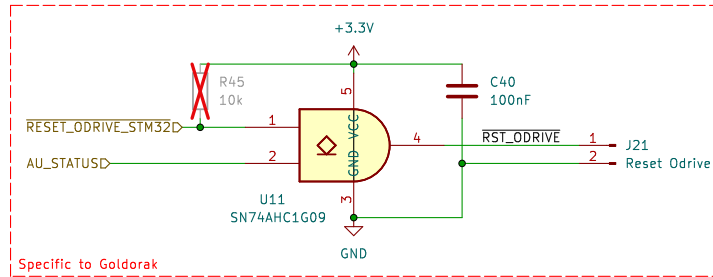
Output connectors

Specific to Evolutek



Specific to Goldorak

Reset Odrive



Specific to Goldorak



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Sheet: Output Connectors

File: output\_connectors.kicad\_sch

Title: Carte Alim

Size: A4

Date: 2024-03-26

KiCad E.D.A. kicad 7.0.5

Rev: V5.0

Id: 7/7