

# Raven-I Sentinel

# Version 1.0

## Version Goal

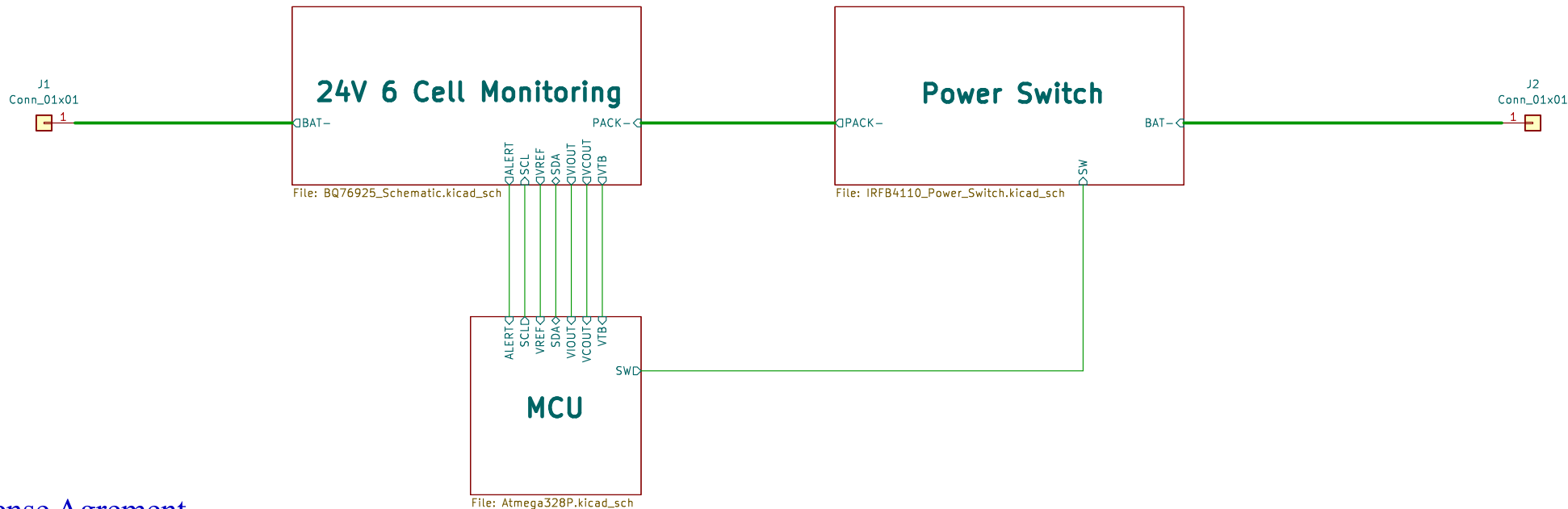
1. Kick start development of a value-oriented, robust BMS with external communication capabilities.

## Legend

### General Comments

### Justification

## Warnings



# License Agreement

1. This PCB design is licensed under CC BY-SA 4.0
2. This PCB design is provided "as-is," without warranty of any kind, either express or implied, including but not limited to the warranties of merchantability, fitness for a particular purpose, or non-infringement.
3. The author(s) shall not be held liable for any damages, injuries, or other consequences arising from the use of this design.

$$\overline{T_{\zeta}NBTE_{\kappa}}=$$

M S Ali

Sheet: /

File: BQ76925\_ATMEGA328P\_6S\_20A\_BMS.kicad\_sch

**Title: Raven-I Sentinel**

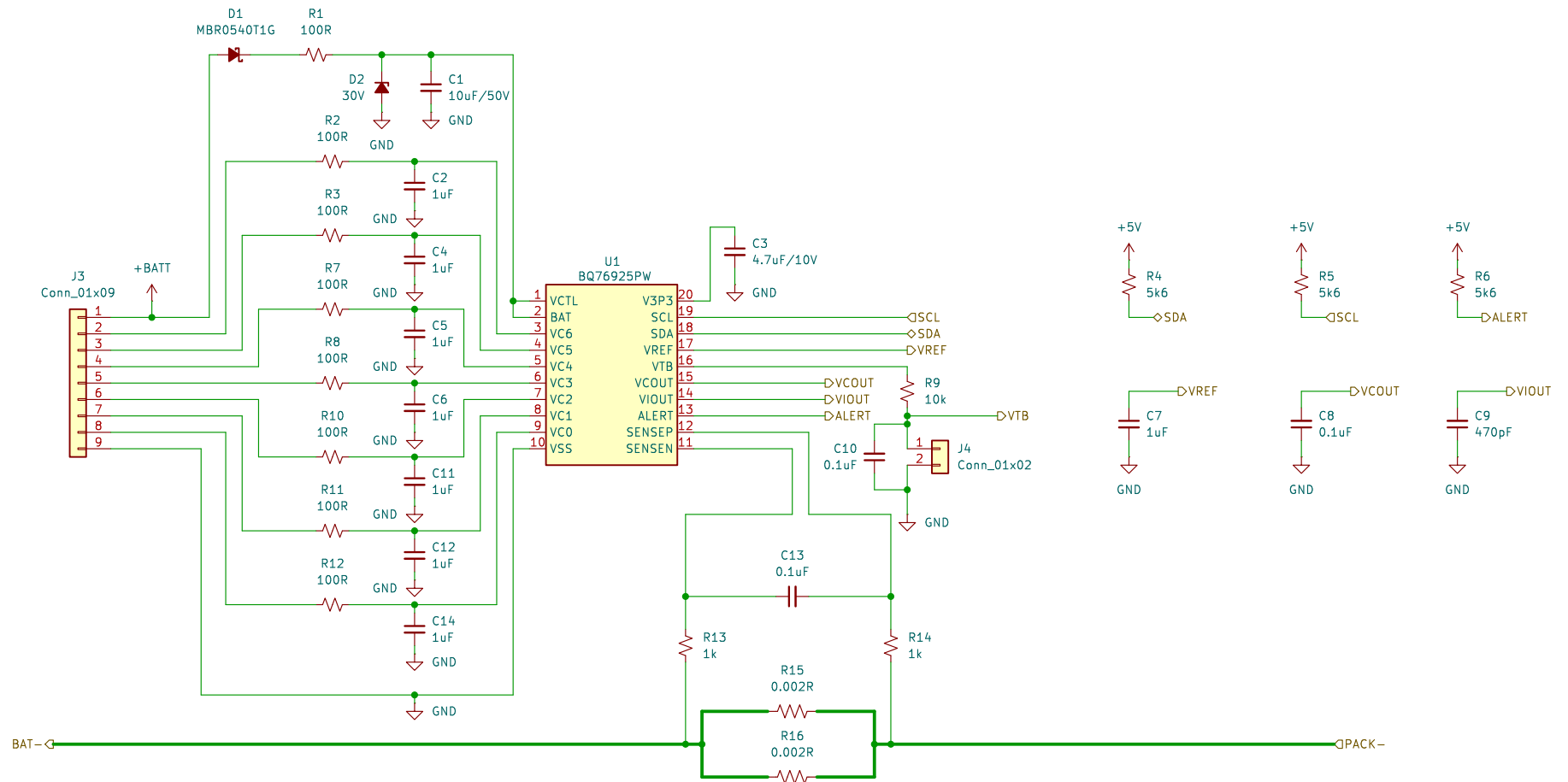
Size: A4	Date: 2024-11-23
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KiCad E.D.A. 8.0.1

Rev: 1.0

Id: 1/4

## BQ76925 Schematic 24V 6 Cell Monitoring


$$\overline{T_{\zeta}NBTE_{\kappa}}=$$

M S Ali

Sheet: /24V 6 Cell Monitoring/  
File: BQ76925\_Schematic.kicad\_sch

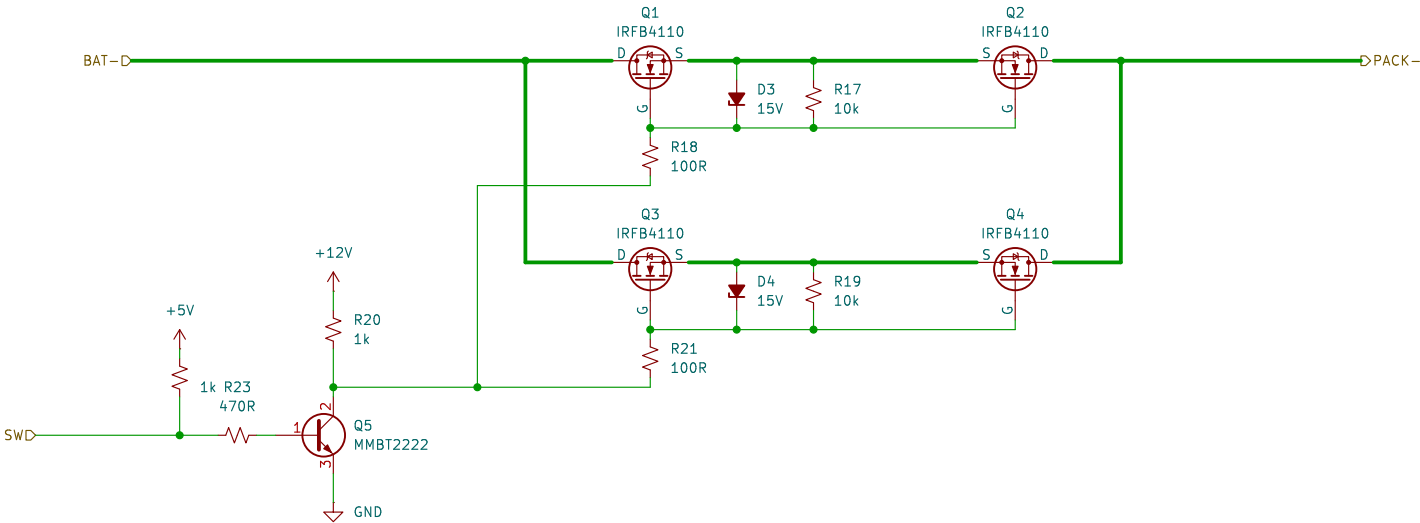
**Title: Raven—I Sentinel**

Size: A4	Date: 2024-11-23
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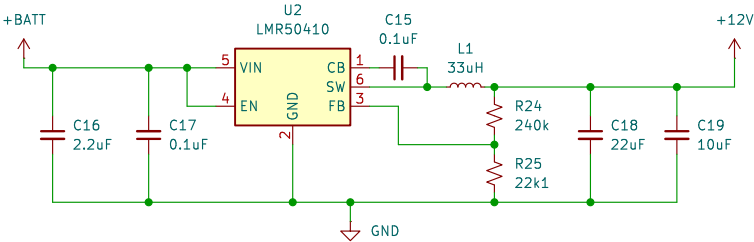
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KiCad E.D.A. 8.0.1	

Rev:  
Id: 2/4

20A Power Switch



VBAT to 12V



T<sub>5</sub>NBTEκ=

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Sheet: /Power Switch/  
File: IRFB4110\_Power\_Switch.kicad\_sch

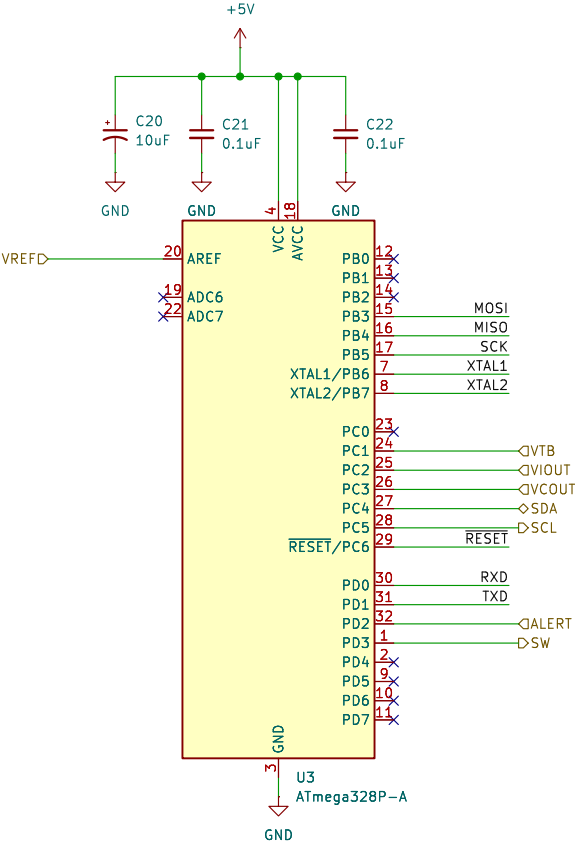
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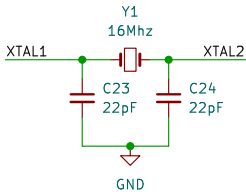
KiCad E.D.A. 8.0.1

Rev:  
Id: 3/4

MCU



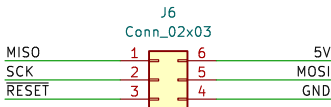
MCU - Crystal



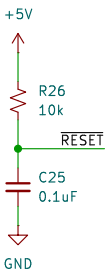
MCU - UART



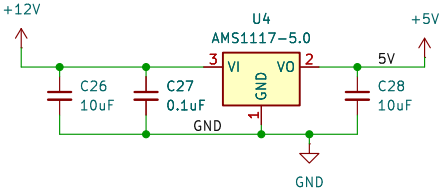
MCU - Programmer



MCU - RESET



12V to 5V LDO



T<sub>ç</sub>NBTEκ=

M S Ali		Sheet: /MCU/	
Size: A4		File: Atmega328P.kicad_sch	
Title: Raven-I Sentinel		Date: 2024-11-23	
KiCad E.D.A. 8.0.1		Rev: Id: 4/4	