

# Quench detection system for vertical cryostat

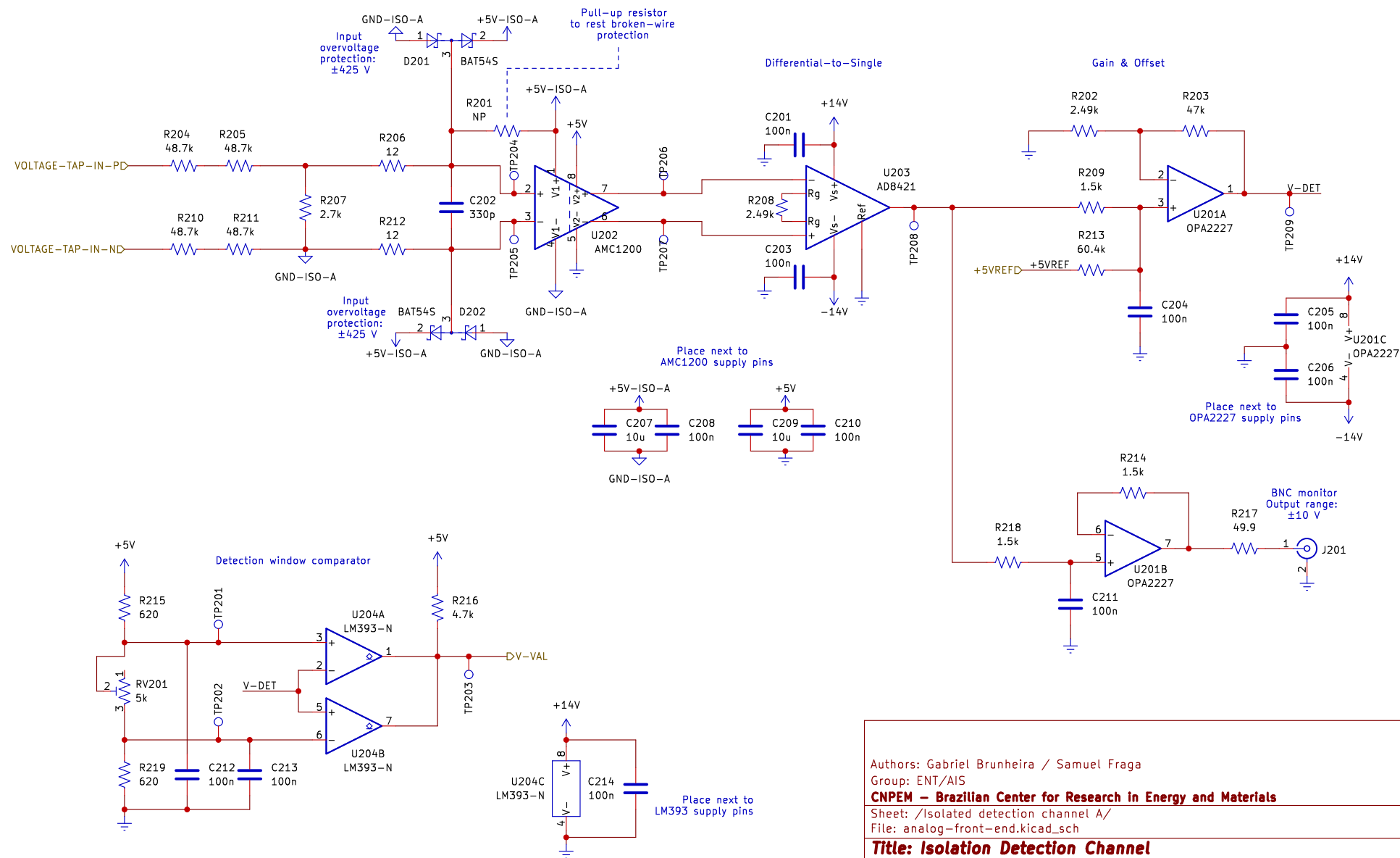
Authors: Gabriel Brunheira / Samuel Fraga  
Group: ENT/AIS  
**CNPEN – Brazilian Center for Research in Energy and Materials**  
Sheet: /  
File: qds-cv.kicad\_sch

**Title: Quench Detection for Vertical Cryostat**

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# Isolated detection channel



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Sheet: /Isolated detection channel A/

File: analog-front-end.kicad\_sch

**Title: Isolation Detection Channel**

Size: A4

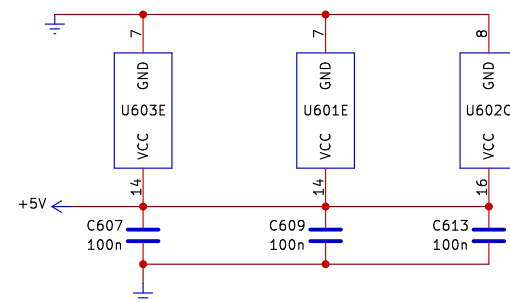
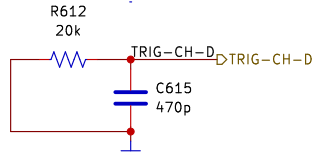
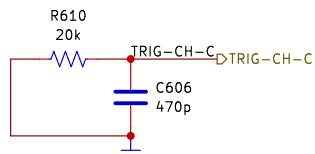
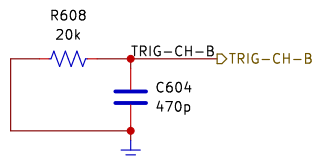
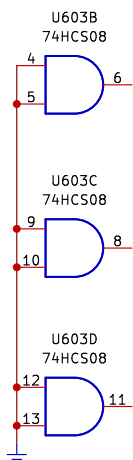
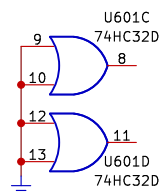
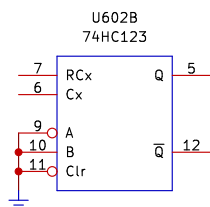
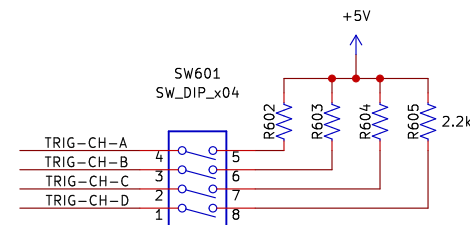
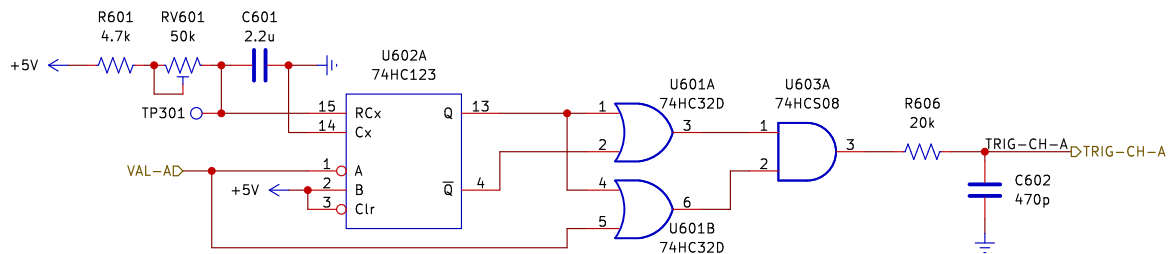
Date:

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# Detection validation



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Sheet: /Detection validation/

File: detection-validation.kicad\_sch

**Title: Detection Validation Circuits**

Size: A4

Date:

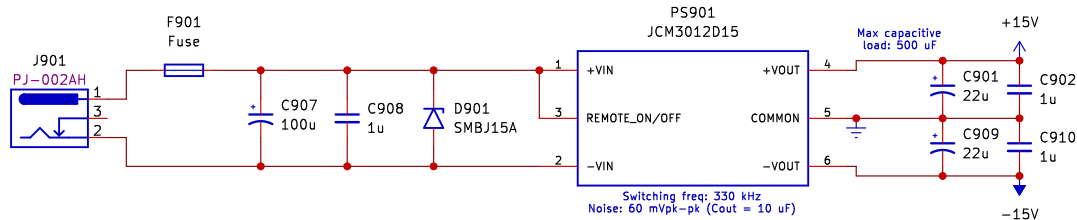
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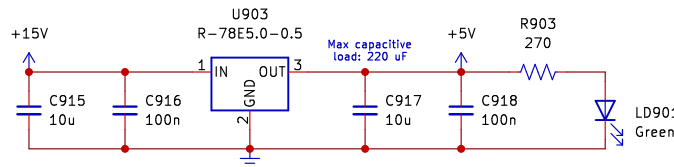
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# Power supplies

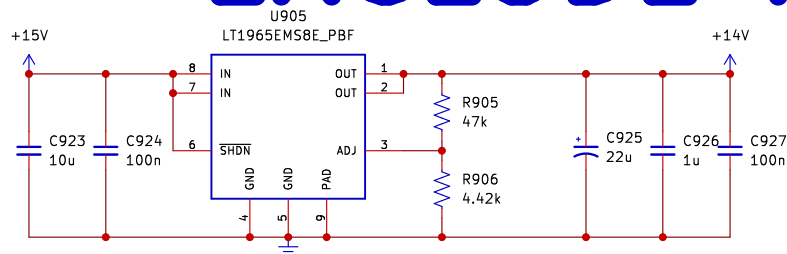
## ±15V main isolated DC-DC converter



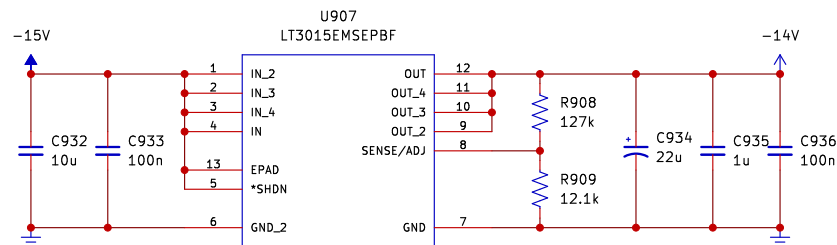
## +5V DC-DC converter



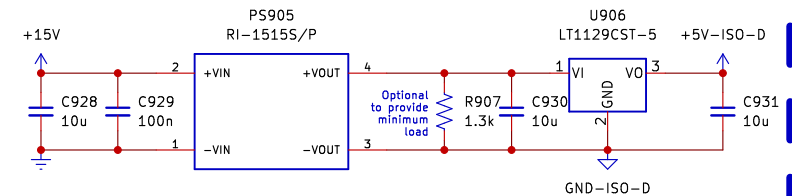
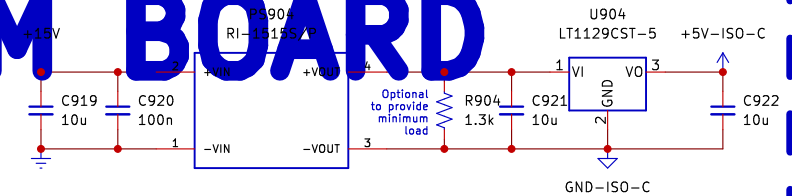
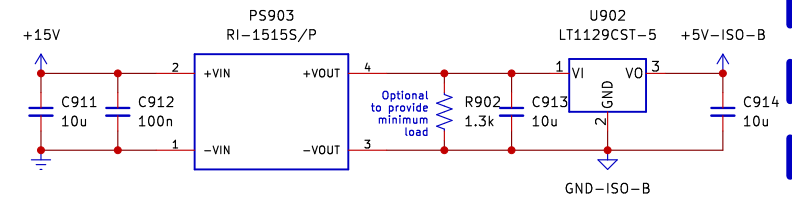
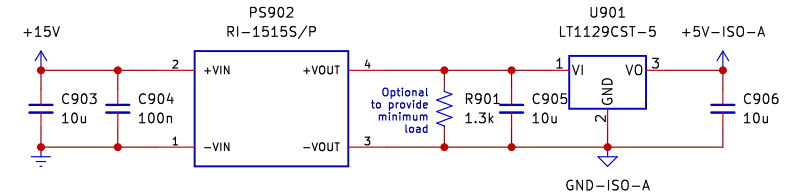
## +14V linear regulator



## -14V linear regulator



## Isolated power supplies



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**Title: Power Supplies**

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# Triggers aggregation, indication and actuation

**Triggers aggregation, indication and actuation**

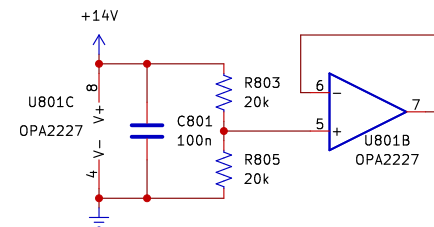
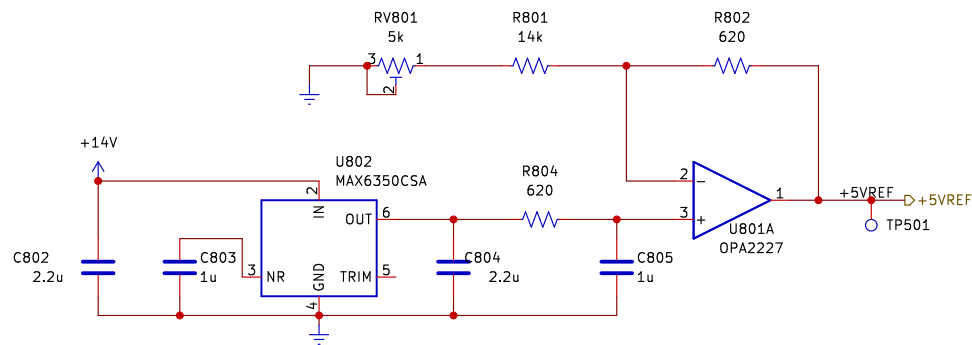
Authors: Gabriel Brunheira / Samuel Fraga  
 Group: ENT/AIS  
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 Sheet: /Quench trigger/  
 File: quench-trigger.kicad\_sch

**Title: Triggers Aggregation, Indication and Actuation**

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# +5V reference circuit



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