

# 1U PCDU

## A Basic Power Conditioning and Distribution Unit

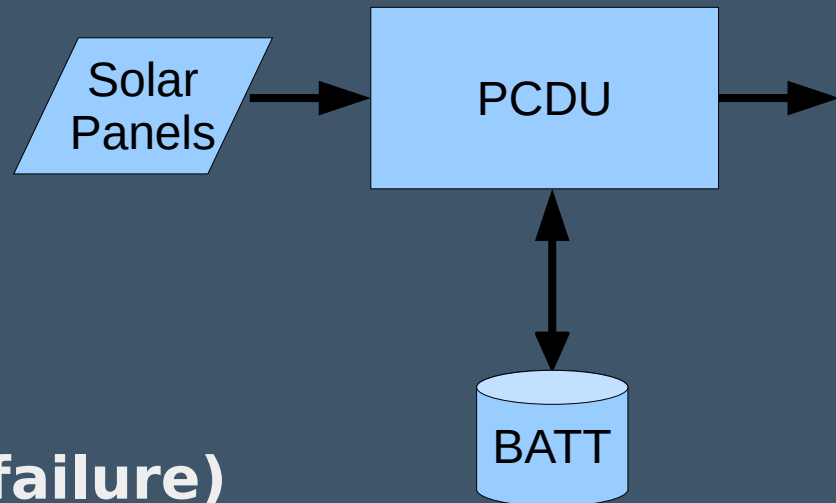
Artur Scholz, Jan Maas, et al.  
LibreCube Initiative

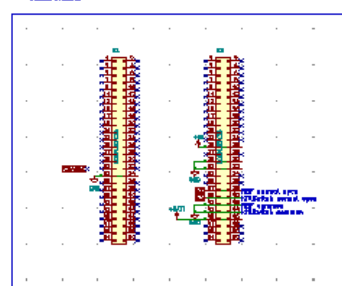
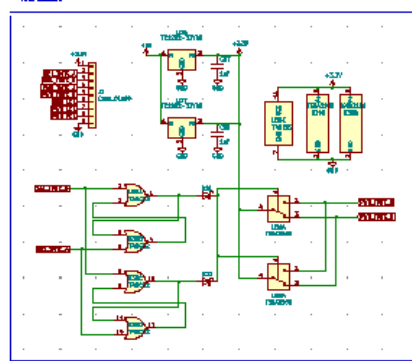
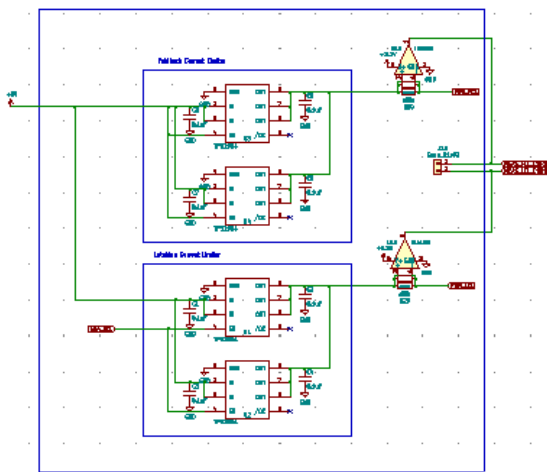
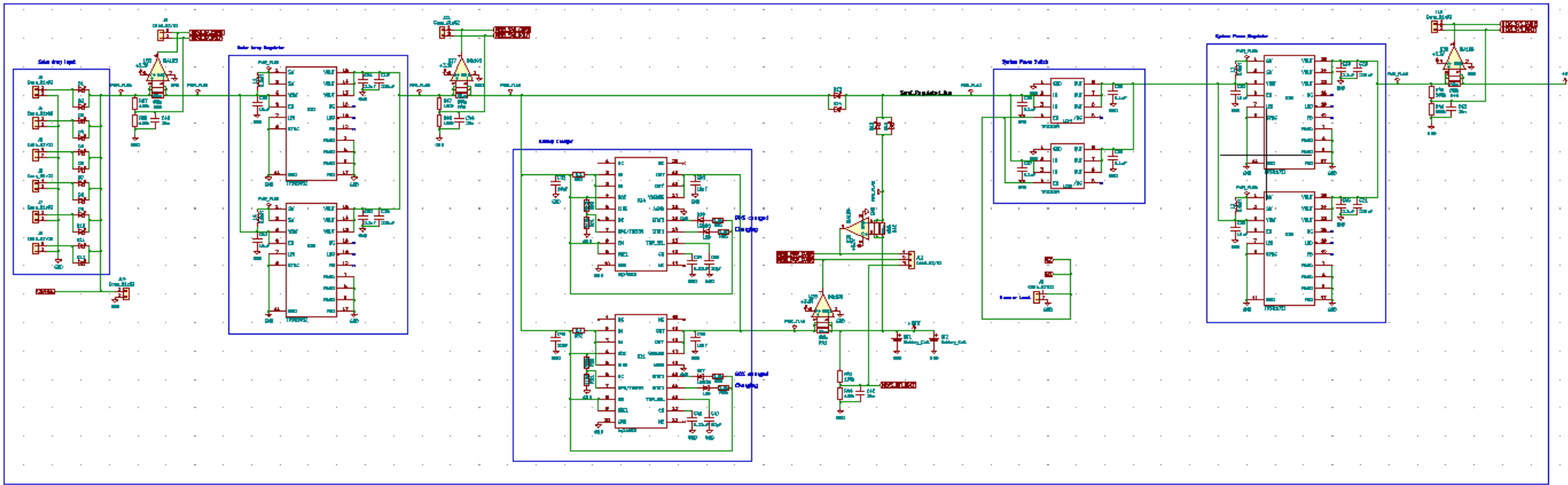
<https://gitlab.com/librecube/prototypes/system-pcdu>

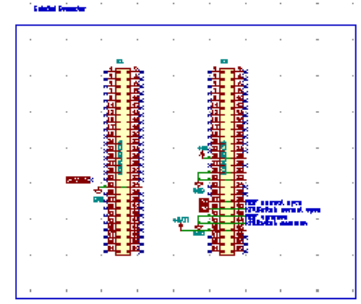
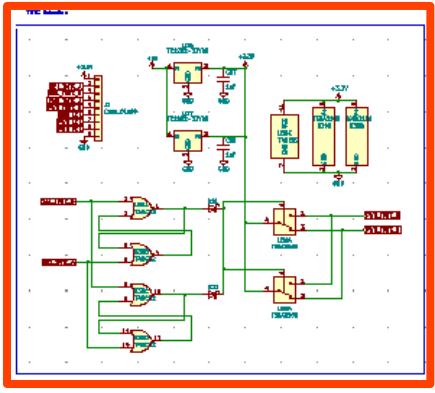
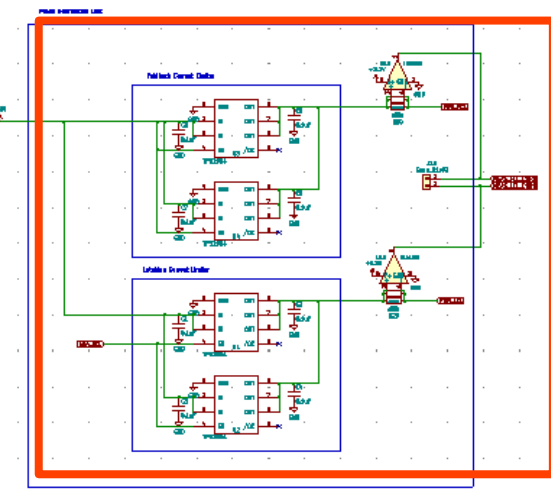
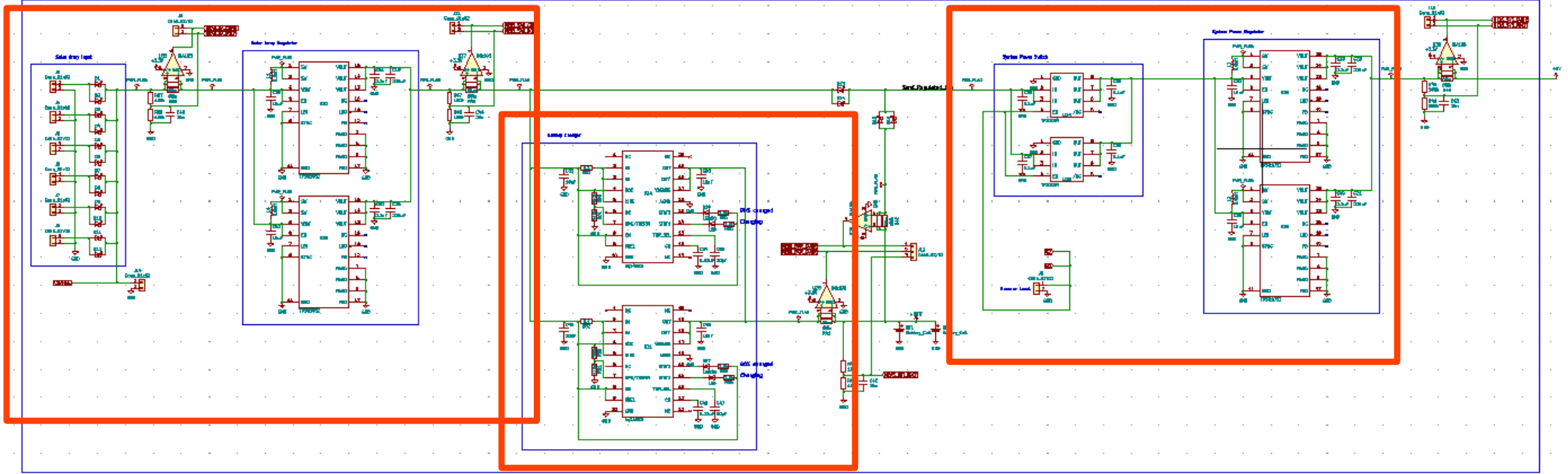
**The Power Conditioning and Distribution Unit (PCDU) is integral part of Electrical Power System (EPS). It regulates input power, manages power storage, and output power regulation.**

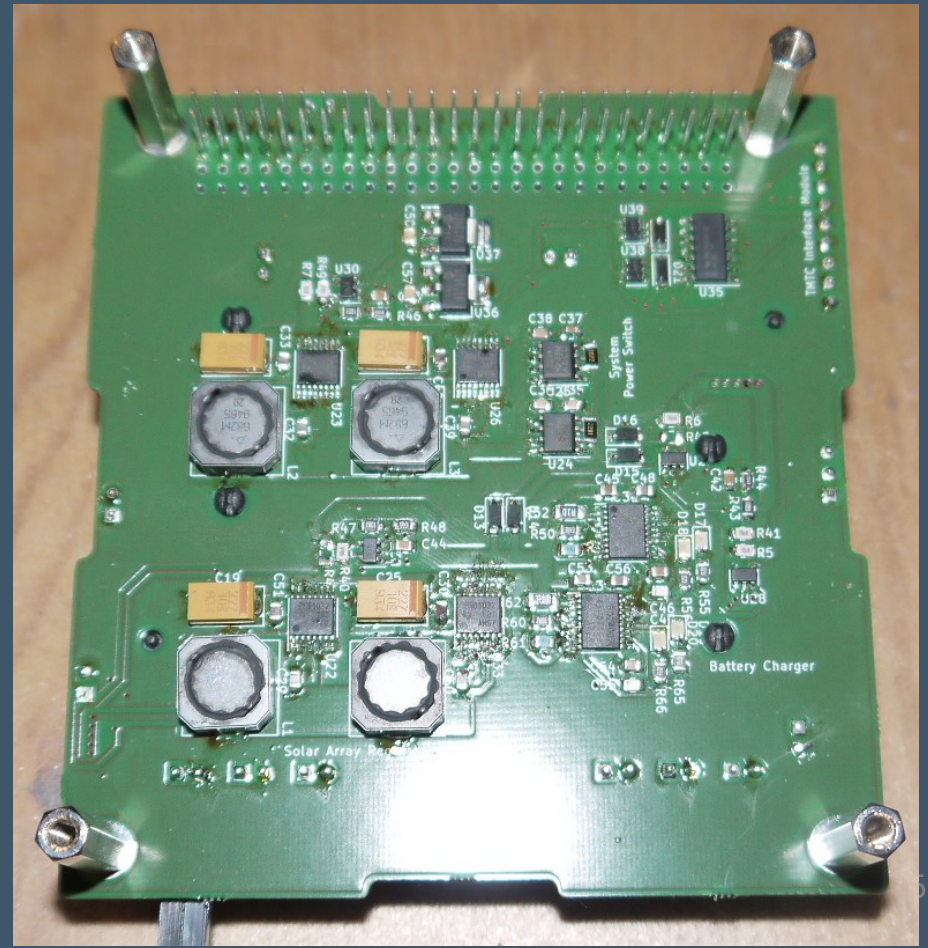
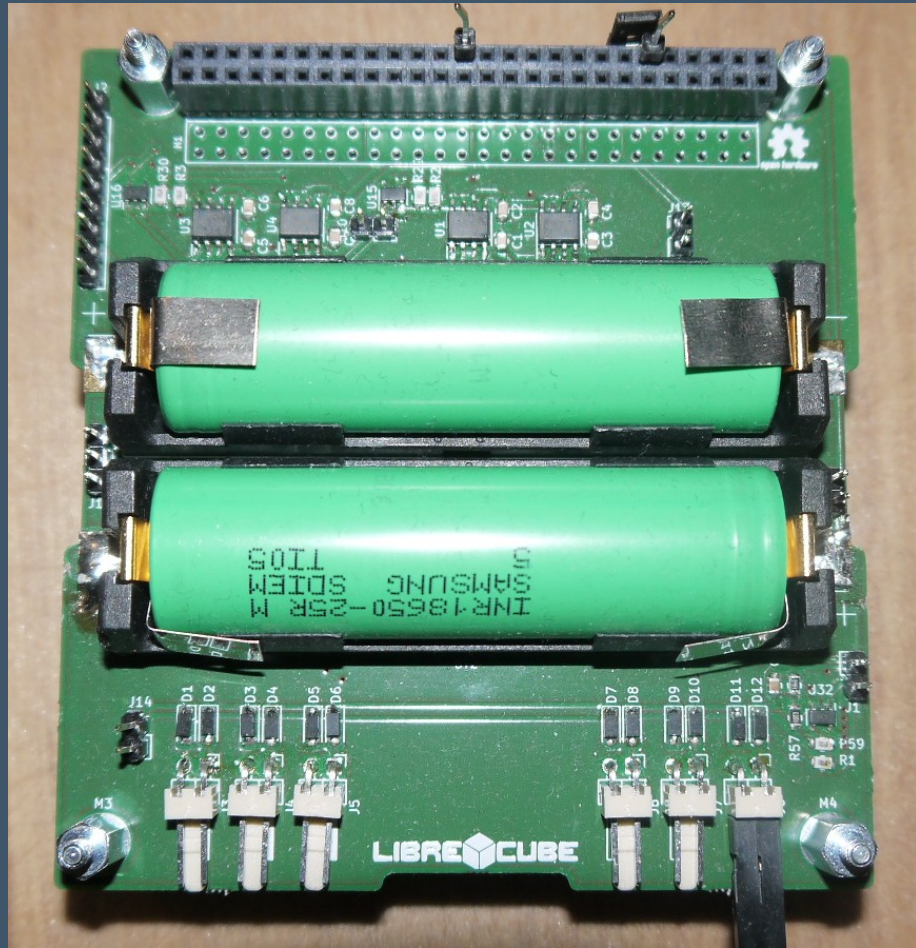
### **Goals:**

- **Simple and robust PCDU**
- **5V output at 5W+**
- **Fail Safe (no single point of failure)**
- **CAN interface to TC/TM (command and monitoring)**









## Next:

- Integrate and test CAN TM/TC interface
- Select Microcontroller (STM32)
- Finalize PCB

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