





## Ideas / Comments

- Participants: Hermann Stein, Mengu Cho, Adi Rahamimoff, Kuren Patel,
- CAN BUS maybe included (User definable)
- For heavy loads, there should be a solution to mechanically integrate this subsystem, e.g. metal structure support
- GPIO Pins should be there to provide flexibility
- DCDC Converters Noise on communication lines
- I2C Termination is important, i2C Bus acts as antenna when transmitting
- Standard Making is compromise, dont leave PC104 out, PC104 Interface required
  - Dont define to many Pins
  - Every Pin and Decision requires a reason (Why is Pin7 3.3V?)

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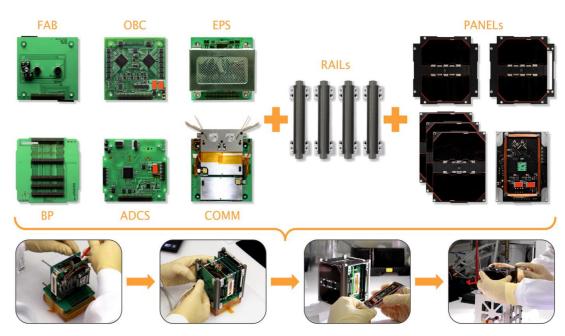






## Ideas / Comments

- Look at the standard from a user point of view
  - Needs specific GPIO Pins (there should be a good balance between already defined and definable pins.
- Why is the PC104 standard so successful
  - Ist the only one available on the market
  - Computer Keyboard is another example
- For UNISEC Europe a Interface to PC104 is required
- Joint University Projects can help to find a common standard



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## Minimum Requirements

- **UnREG Battery Voltage**
- Common GND
- 4x (TBD ?) 3.3V & 5V & UnReg dedicated Power Lines for Subsystems (controlled & monitored by the EPS)
- All Communication Lines are difficult to include (except I2C)
- Kill Switch Logic
- Standard compatibility to CubeSat Definition e.g. mechanical load (vibration) as well EMI, EMC and Thermal, simulated and tested (FEA)

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