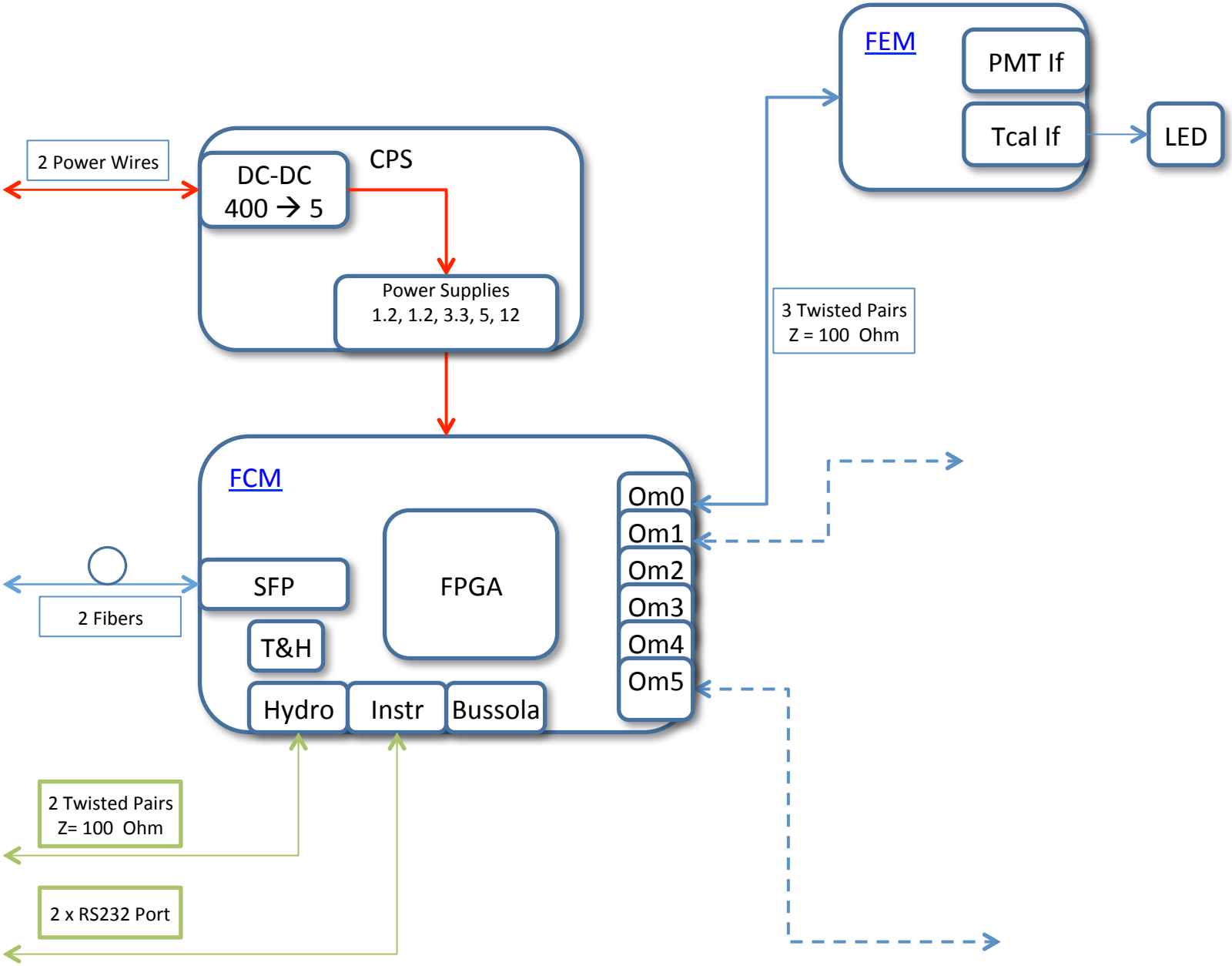
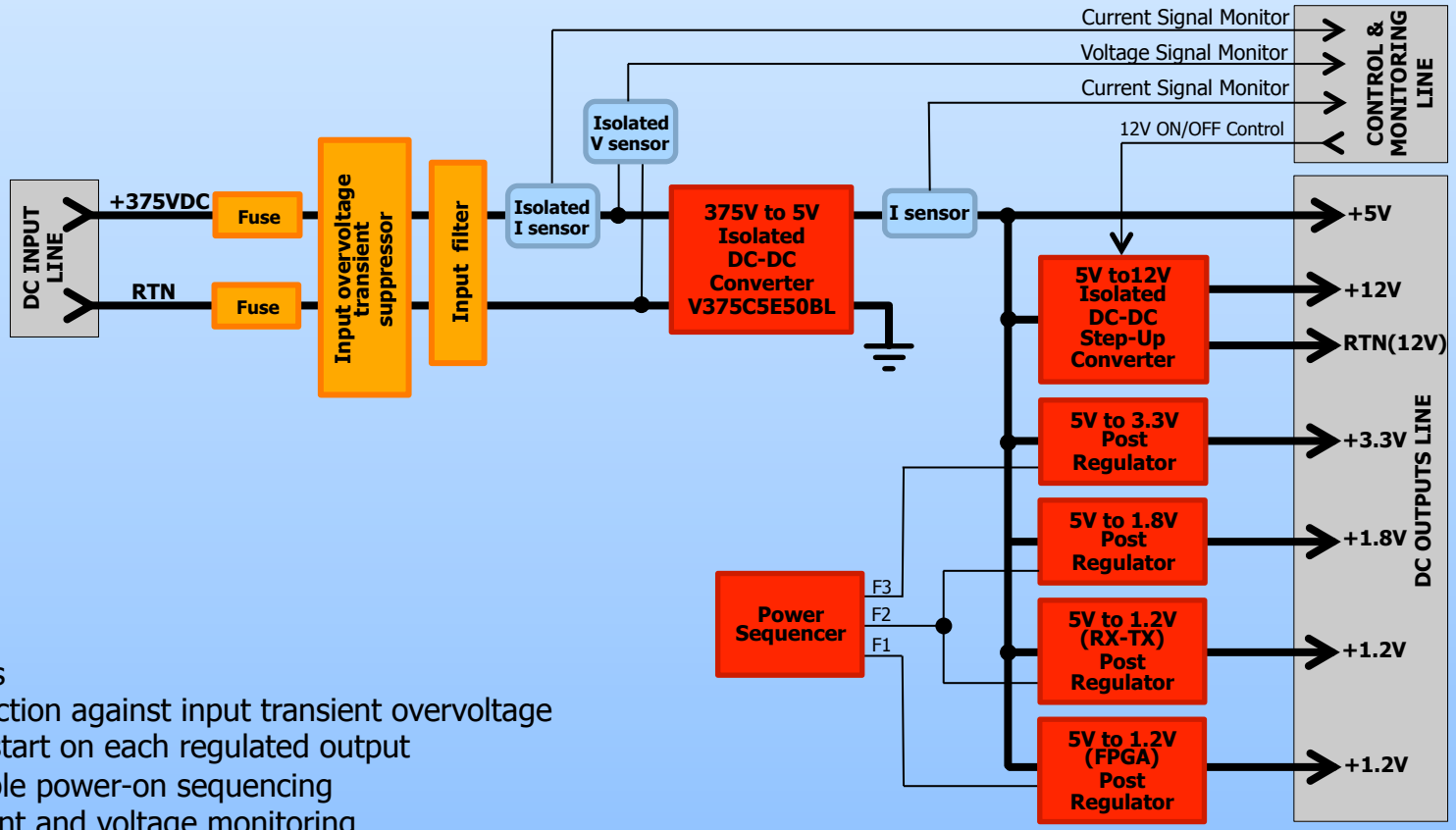
Fase3 Off-shore Electronics



Power **S**upply **S**ystem Simplified Block Diagram



Features

- Protection against input transient overvoltage
- Soft start on each regulated output
- Flexible power-on sequencing
- Current and voltage monitoring
- 50W Maximum total output power (including DC-DC converter efficiency)
- Low output voltage ripple
- Isolated +12V power supply for Oceanographic Instrumentation

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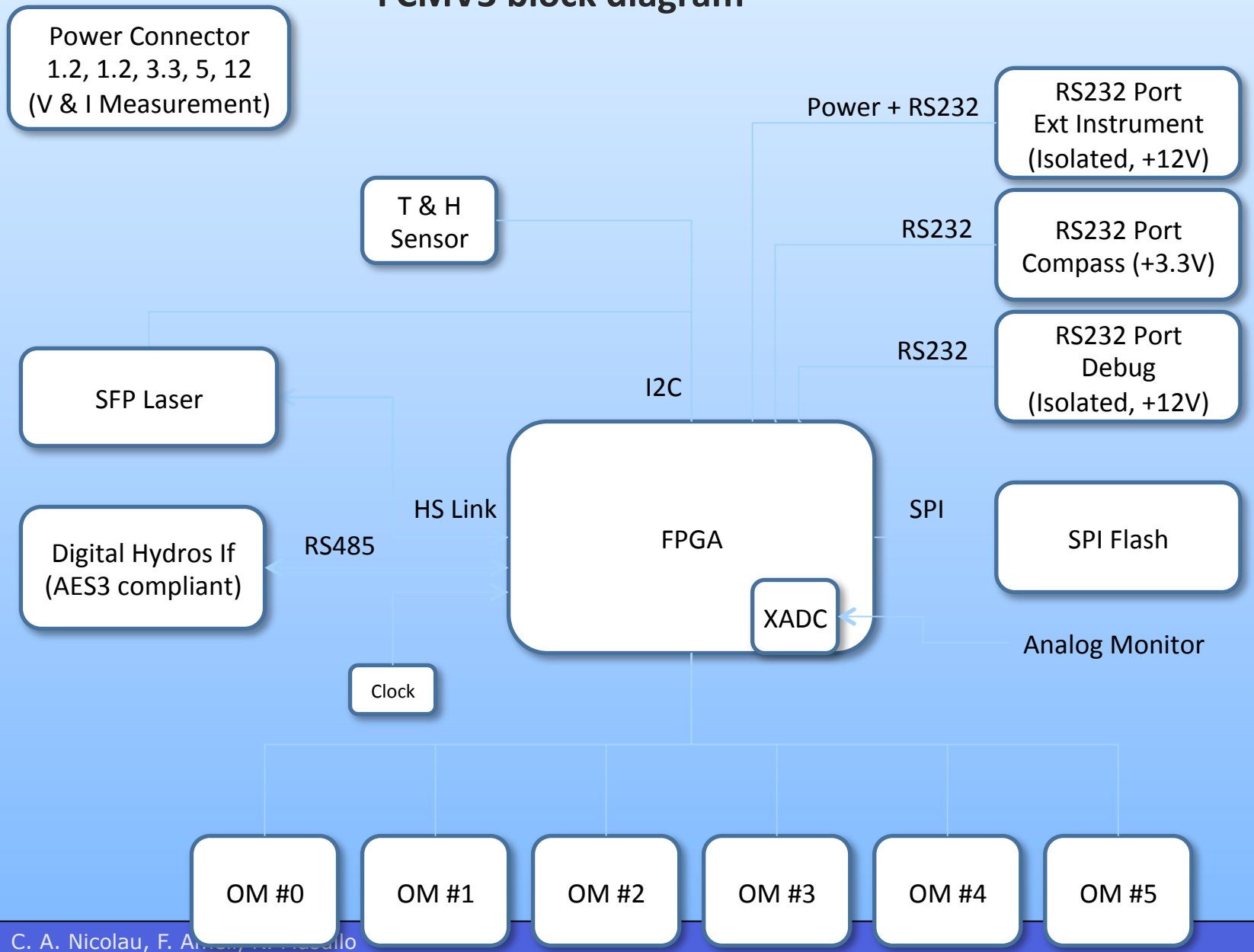
FCMV3 block diagram



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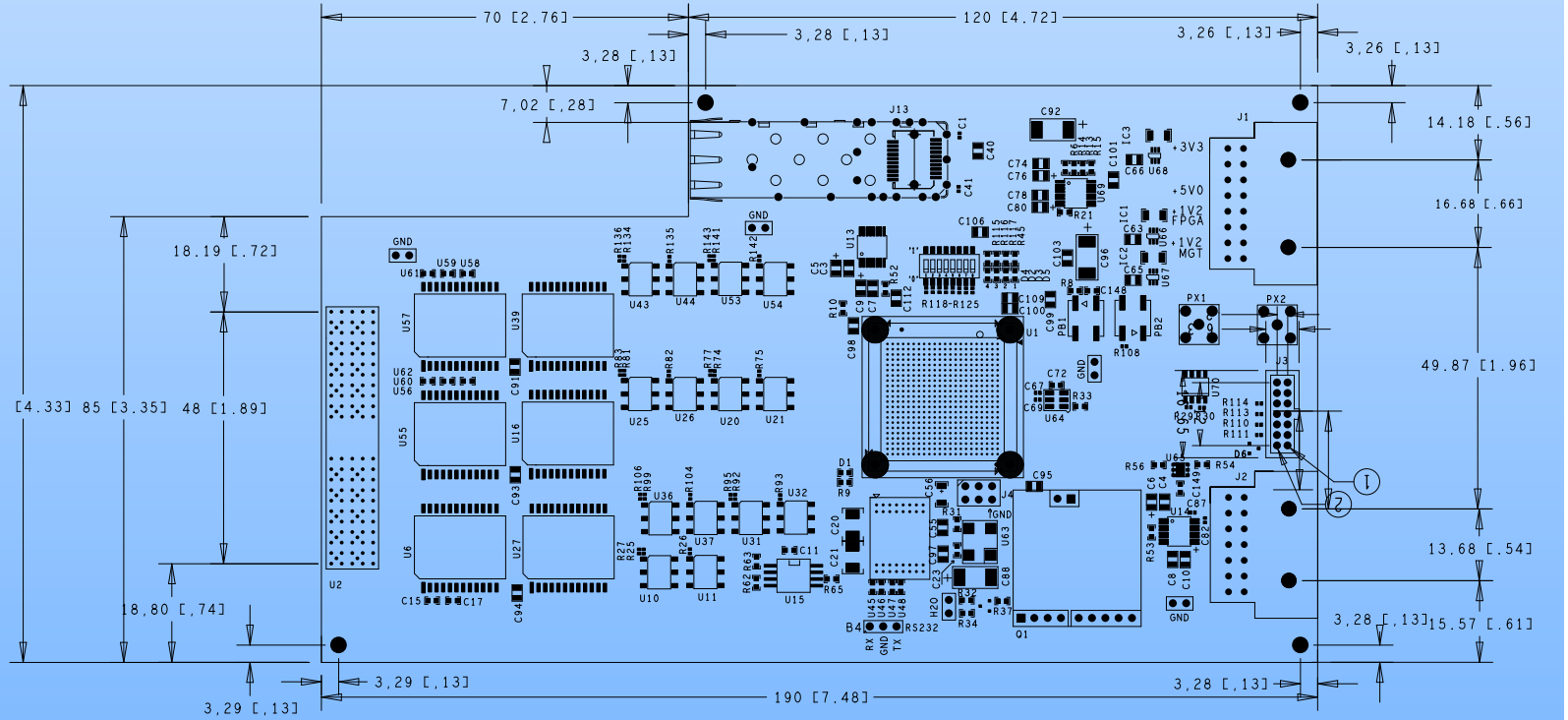
FcmV3 PCB layout

- Estimated Power Consumption: 1W (SFP Laser) + 3W (Board)
- Delivery: PCB is ready, complete by the end of this year
- Front connector will be changed with stacked 2x4 RJ45



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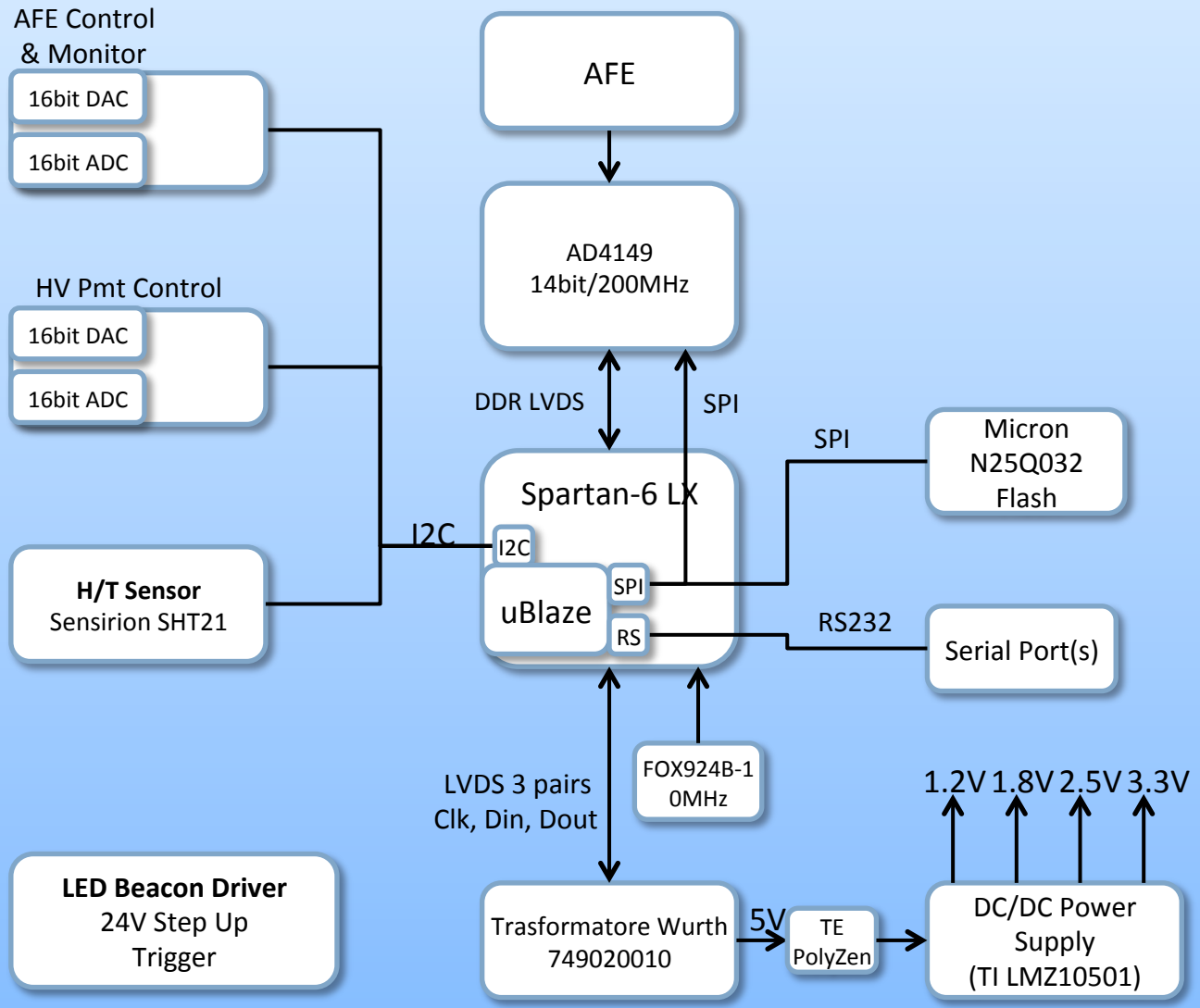
FEM V3 Schema



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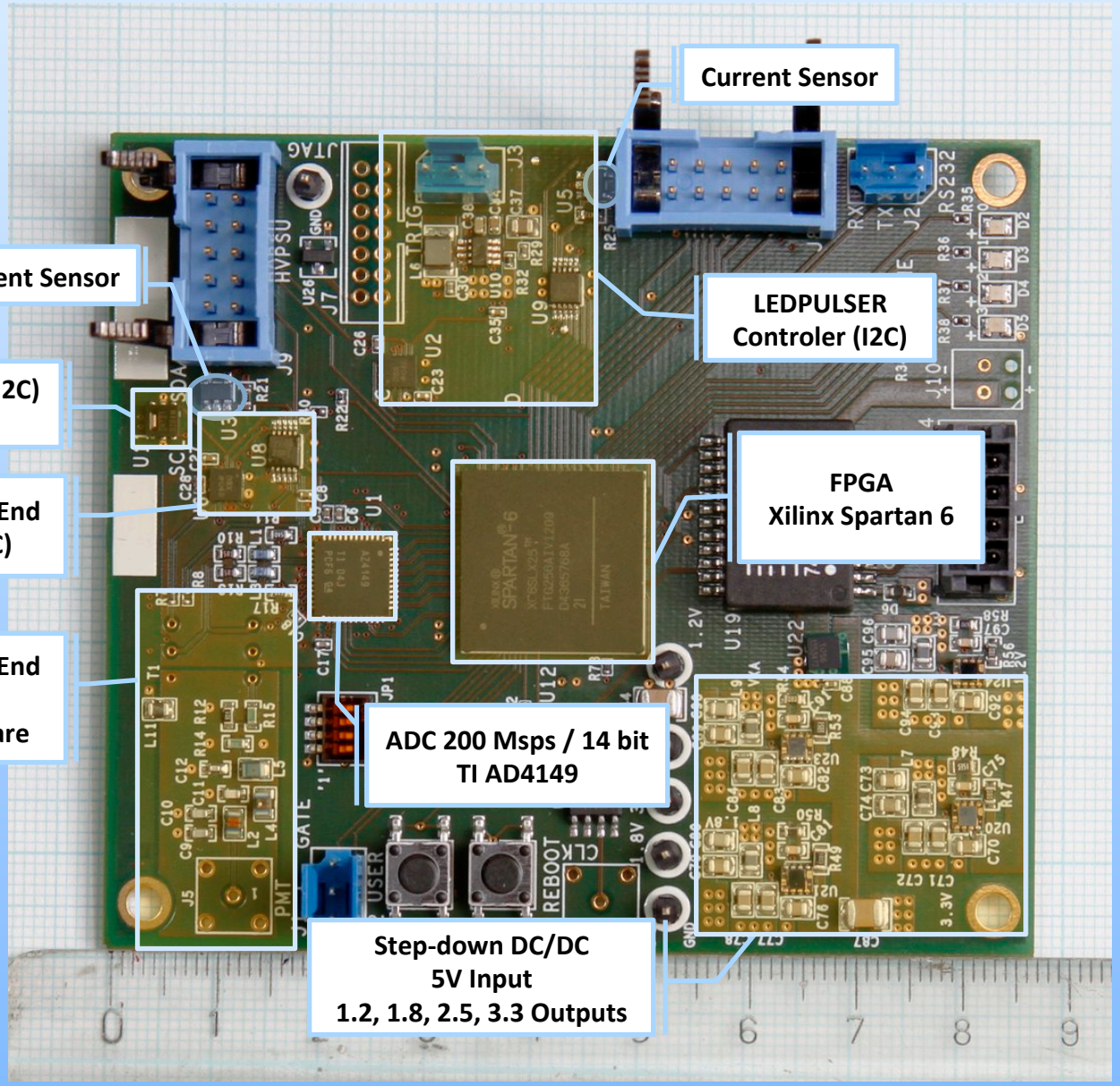
FEM V3
Componenti



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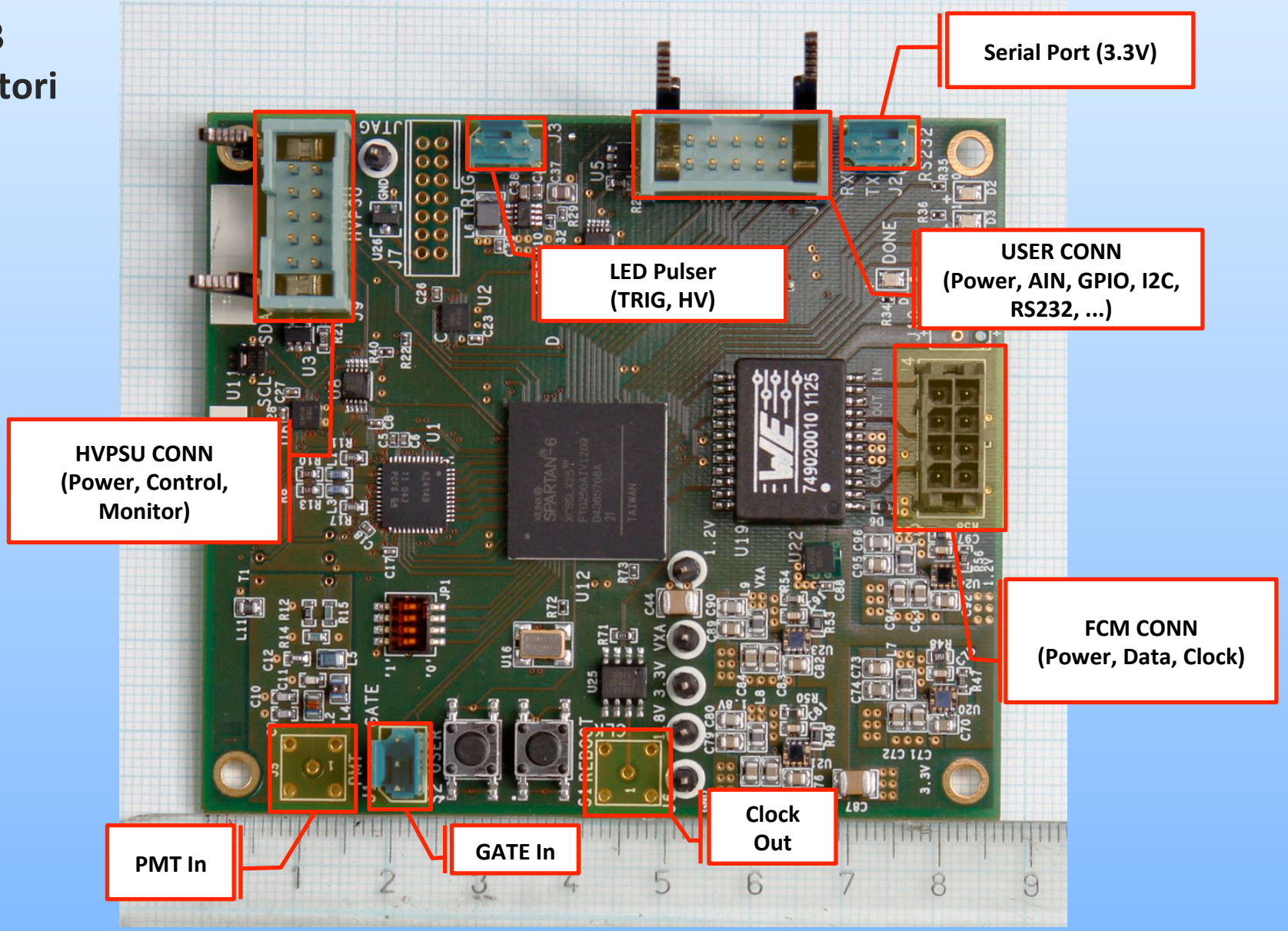
FEM V3
Connettori



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FEM V3

Consumi (preliminari)

- 60 mA @ 1.2V (70mW – XLX Core)
- 20 mA @ 2.5V (50mW - XLX Diff. I/O)
- 150 mA @ 1.8V (270mW - Fast ADC + Sig. Cond.)
- 130 mA @ 3.3V (460mW)

180 mA @ 5V (900 mW con DC/DC attivi)

Stato sviluppo

- ✓ Test elettrici
- ✓ Setup embedded controller (Microblaze)
- ✓ Controllo Fast ADC
- ✓ Controllo periferiche I2C (T&H, ADCs, DACs)
- ✓ Controllo LED Pulser
- ✓ Controllo HVPSU

Problemi riscontrati

- Montaggio componenti

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Floor Consumption

Power consumption (estimated/preliminary)

- PSS: 4W
- OMs: 6 x 1W
- FCM: 4W

~14 W for a full functional floor

Development state

- ✓ FEM: prototype under test
- ✓ FCM: prototype by the end of 2012
- ✓ PSS: by mid January 2013

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