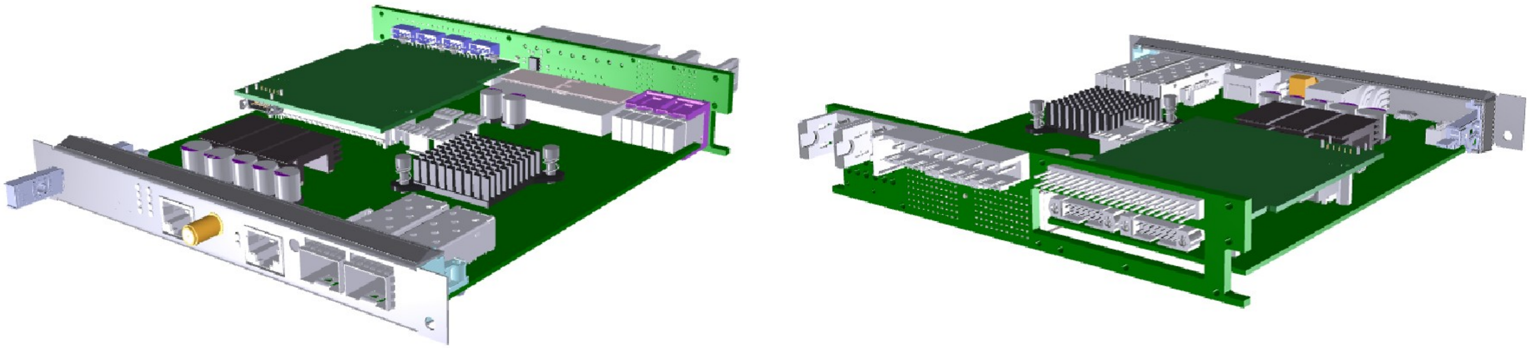
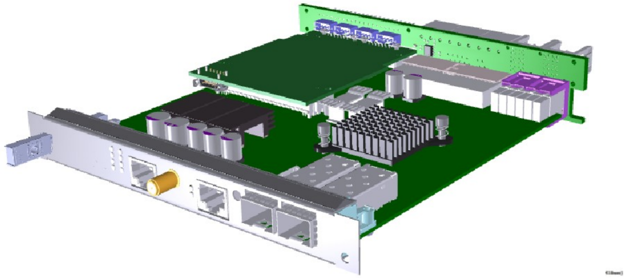
Status of TMCB2 + TMCB-backplane

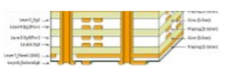


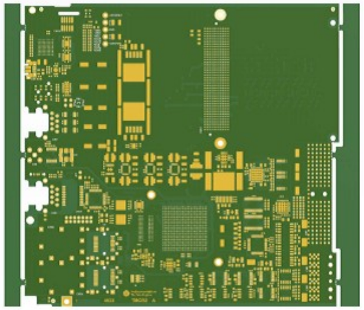
Marie Kristin Czwalinna
Status of TMCB2 + TMCB-backplane

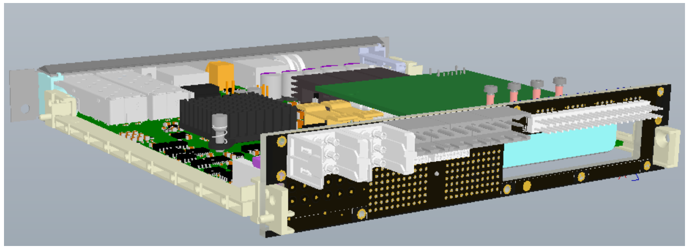
MSK collaboration workshop
Hamburg, 12. - 13. May 2014

Overview









TMCB2

- design by Instrumentation Technologies
- 8 layers PCB
- Spartan6 + board management function (MMC)
- MTCA.4 frontplate (double width, mid-height)
- 2x SFP+ (3.125 Gbps), 1x Ethernet, 1x Trigger input, micro-USB (FW uploads)
- 24 analog channels (14 ADCs, 10 DACs)
- 20 GPIO (configurable 3V3/5V)
- 2x I2C (1x interface to FRED, 1x user-I2C)
- 4x temp. sensor inputs (4-wire)
- FMC (low-pin count; with additional power supply 12V/7V)

Backplane

- in-house design (S.Hanasz)
- vertical backplane, 10 layers
- fits into 1U chassis
- mechanical frame from Elma

Status

TMCB2

- ✔ final review done
- ✔ I-Tech is now applying last corrections
- ✔ Ordering of components started
- production of 14 boards will start immediately

  (prototype board ~ 2.4 kEur)
- projected delivery : **18.06.**

TMCB-backplane

- ✔ final review done
- last corrections to be implemented
- final version to be send to I-Tech
- depending on price?

  production at I-Tech or other.
- delivery date latest **18.06.**

mechanical fixture for TMCB2+backplane

- ✔ step-models and information send to Elma
- ✗ design pending (50% done): delayed by tedious communication problems
- appointment at Elma on 15.05. for clarification
- delivery date: ?