

Architecture of educational OUFTI-1 nanosatellite of University of Liège, as tested in preparation for space flight



Xavier Werner¹, Sébastien De Dijcker¹, Valery Broun², Gaëtan Kerschen³, Jacques G. Verly¹

¹EECS, University of Liège; ²ISIL, Haute Ecole de la Province de Liège; ³LTAS, University of Liège - Belgium

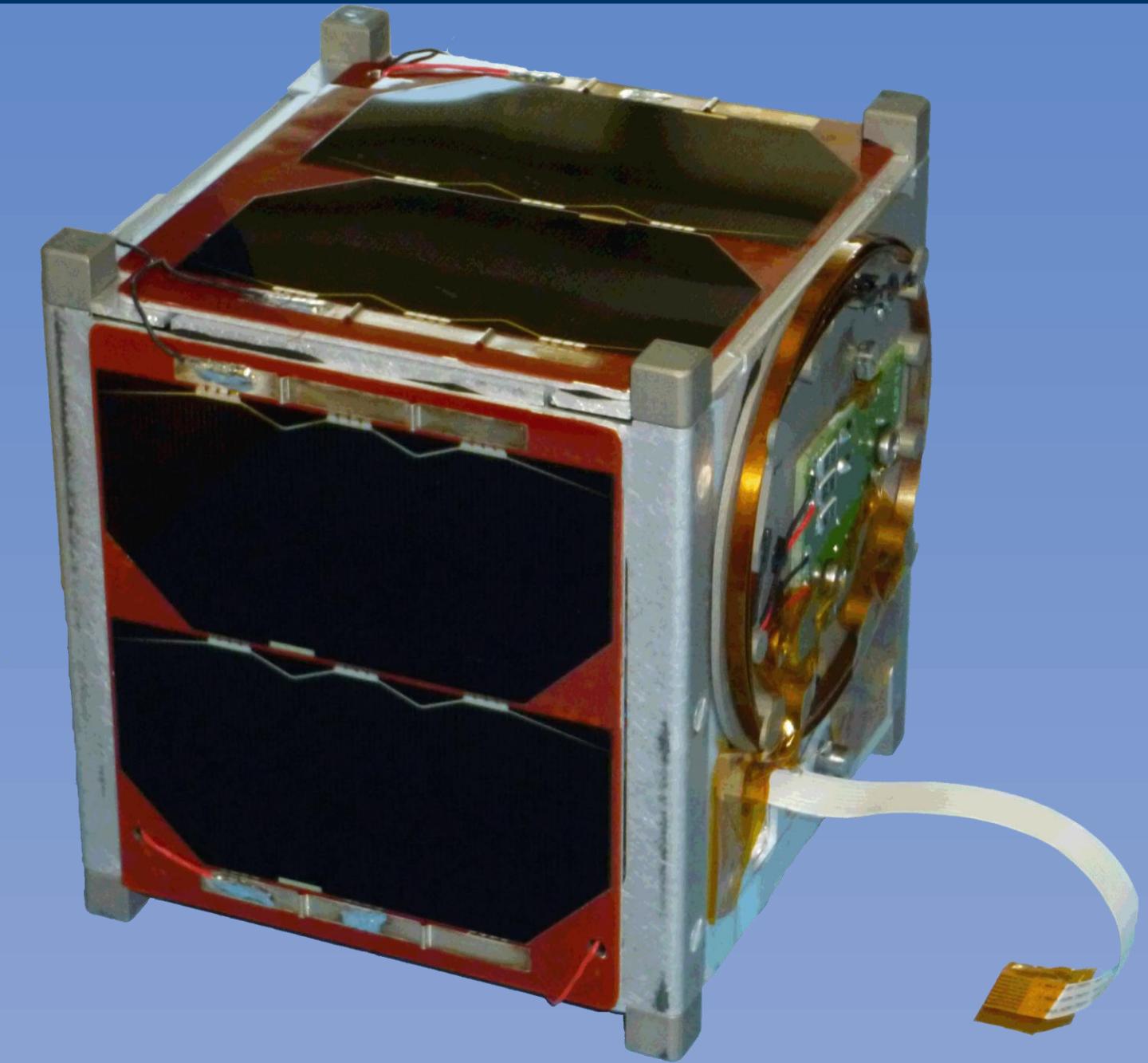
Payloads

D-STAR telecom

- New amateur-radio digital communication protocol
- First deployment and use in space!

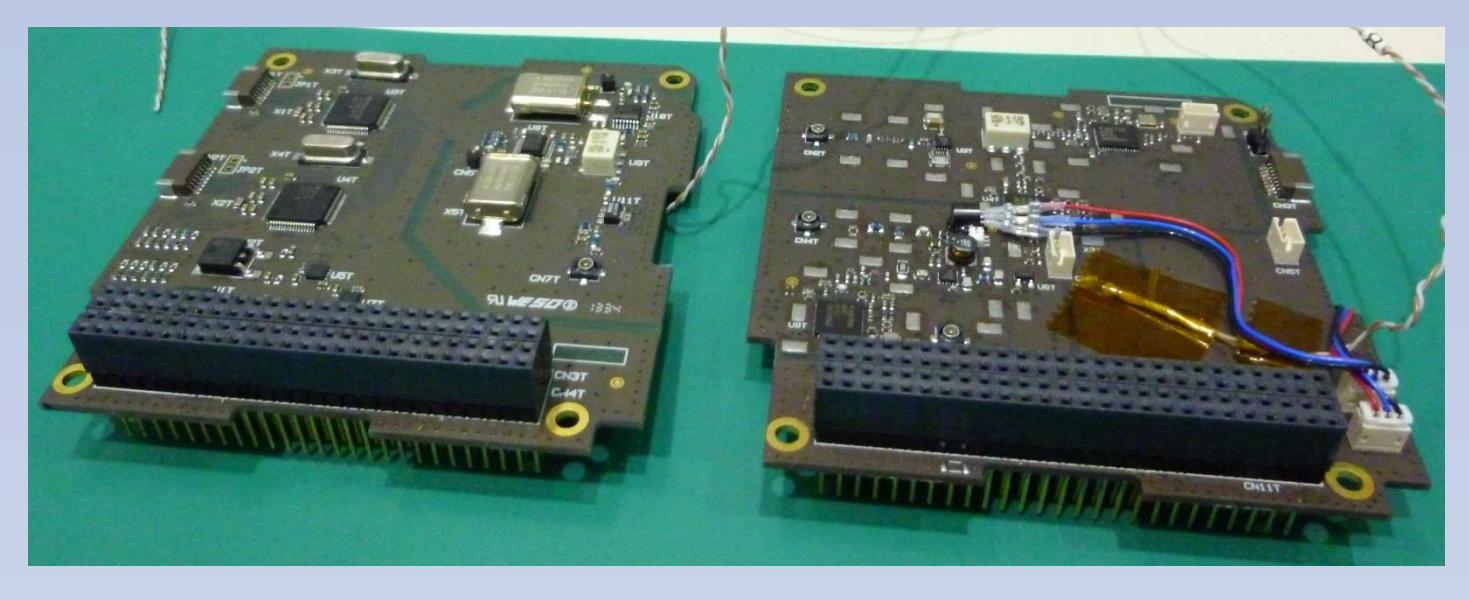
New solar cells

- Triple junction
- High efficiency: 30%
- Developed and provided by AzurSpace

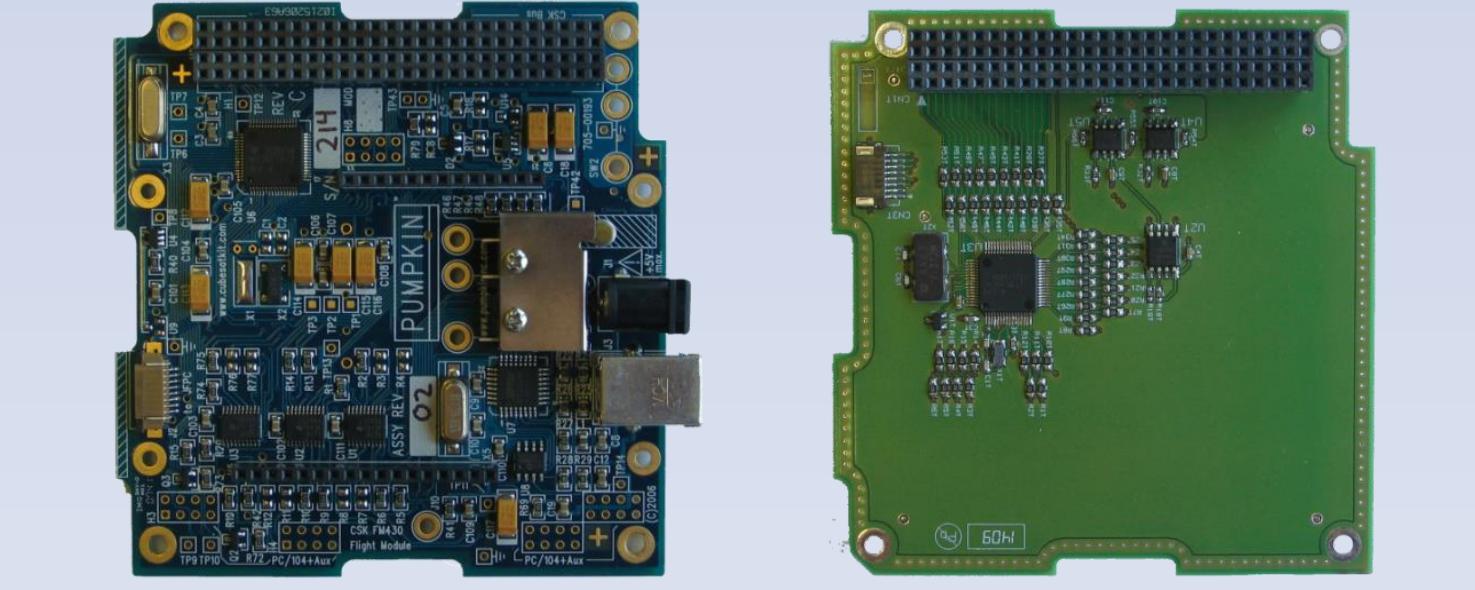


Space segment (satellite)

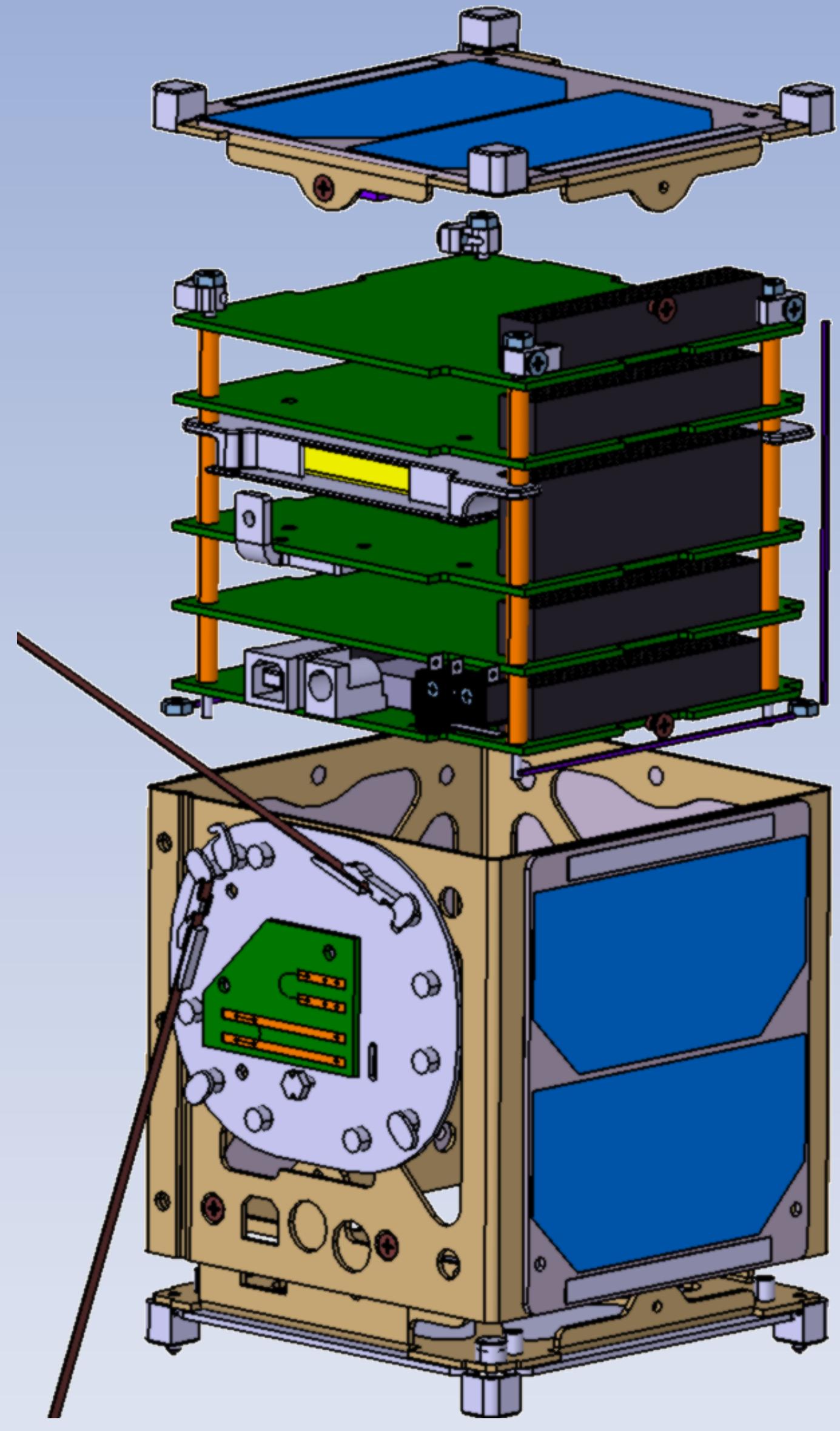
COM: D-STAR + AX.25 + BEACON



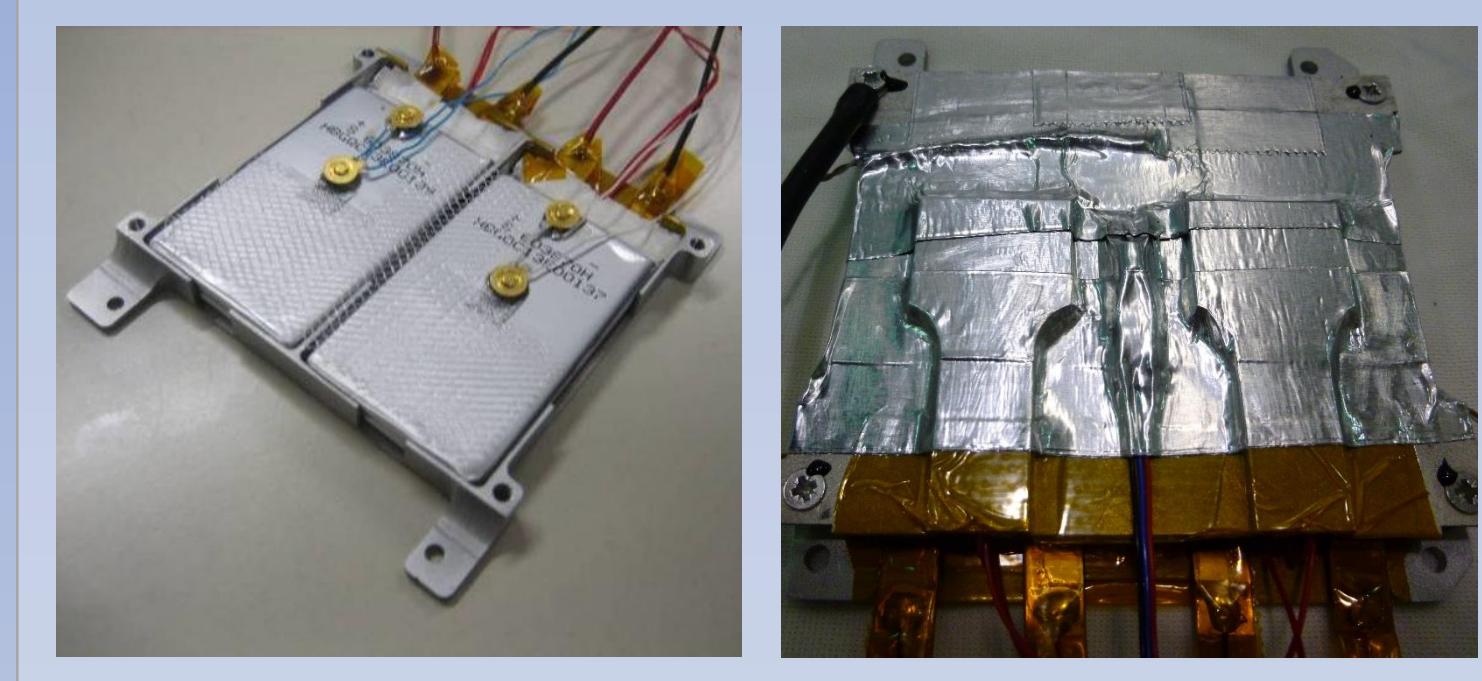
OBC: COTS & home-made



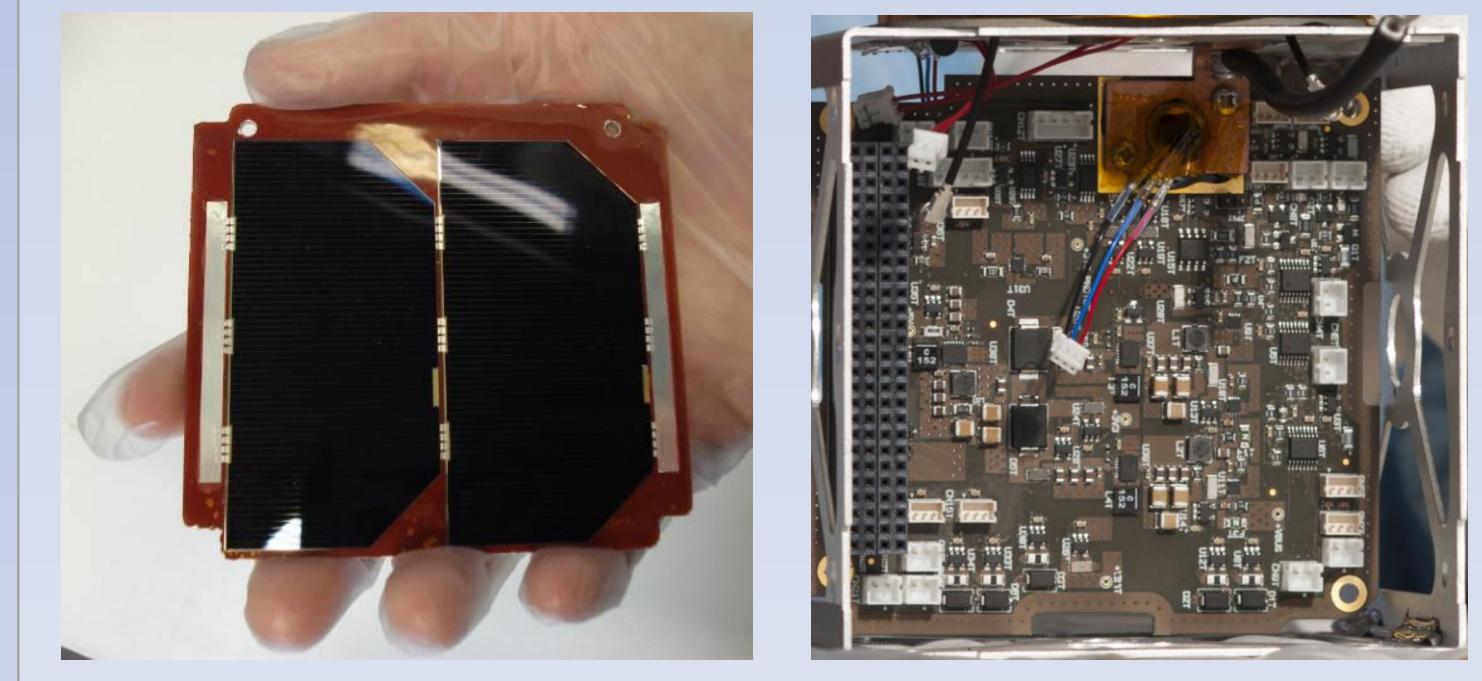
MECH: antenna deployment



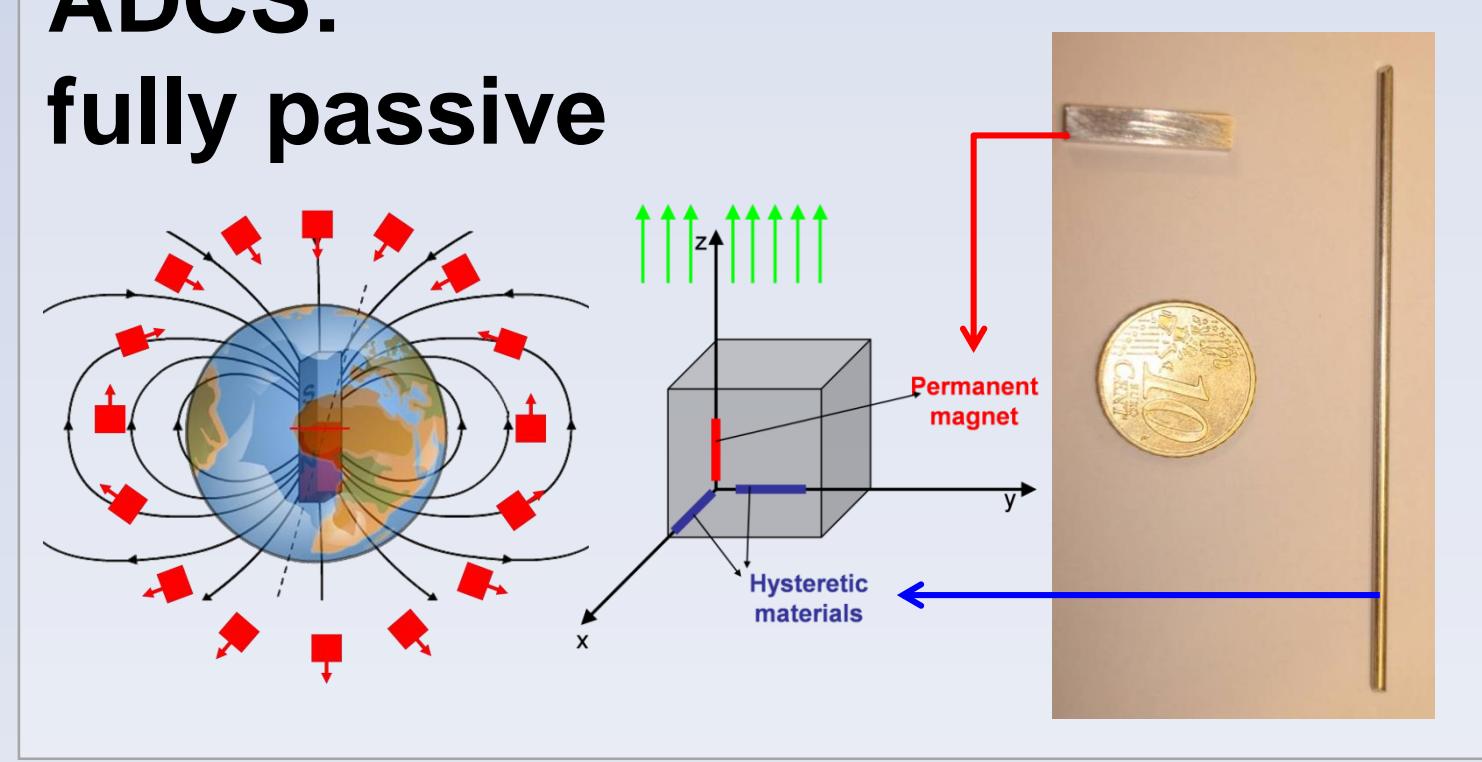
THER:



EPS:



ADCS: fully passive



Telecommunication system

