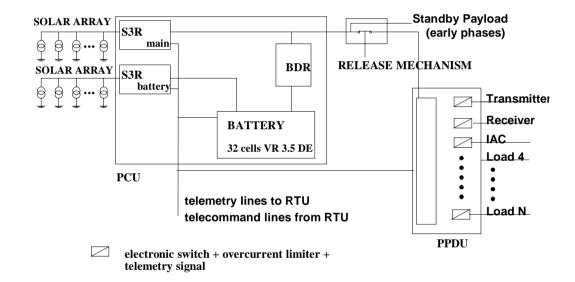


## **GALILEO GALILEI (GG) PHASE A STUDY**

## **ELECTRICAL POWER**

- Power demand:
  - constant through sunlight (59') and eclipse (36')
  - payload: 6 W
  - FEEP: 60 W
  - spacecraft: 46 W
- 185 W provided by GaAs solar array, sufficient for power provision & battery recharge
- sunlight-regulated bus is sufficient (28
  V in sunlight, 28 → 24 V in eclipse)
- small Ni-Cd battery (32 cells, 3.5 Ah)
- All regulation, protection and distribution functions can be unified in a single box (PPDU, Power Protection and Distribution Unit)



Power subsystem block diagram