HINCube – Electronic Power Supply

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- an activity in NAROM
Presentation

- The Norwegian national student satellite program (Ansat)
- The HINCube Project
- The Electronic Power Supply (EPS) System
ANSAT

- Norwegian Center for Space-related Education (NAROM), Norwegian Space Center (NSC) and Andøya Rocket Range (ARR)
- Four Cubesats
- 2007-2011
- HINCUBE

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The HINCube Project

• Students
• Ten groups
  – PM, Int&Test, Struct, PR, MIAS, OBDH, ADCS, COMM, PAY, EPS
• Five PCB-boards
  – OBDH, ADCS, COMM, PAY, EPS
EPS

- Solar Panels, Batteries, PCB board, Timer (antenna launch)
- Three voltage levels
  - 3,7V to the Coils (battery)
  - 3,3V to the Power Amplifier
  - 3,3V to the rest
- Mosfet Switches
  - COMM, PAY, ADCS, OBDH,
• Max Power Peak Point Tracker (MPPPT)
• Timer
• Micro-controller
  – Read sensor data
  – Communicate with OBDH
  – Turn Switches on/off
  – Control MPPPT
• Umbilical

EPS

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Questions?