

# CASPER\* Workshop

Green Bank, West Virginia  
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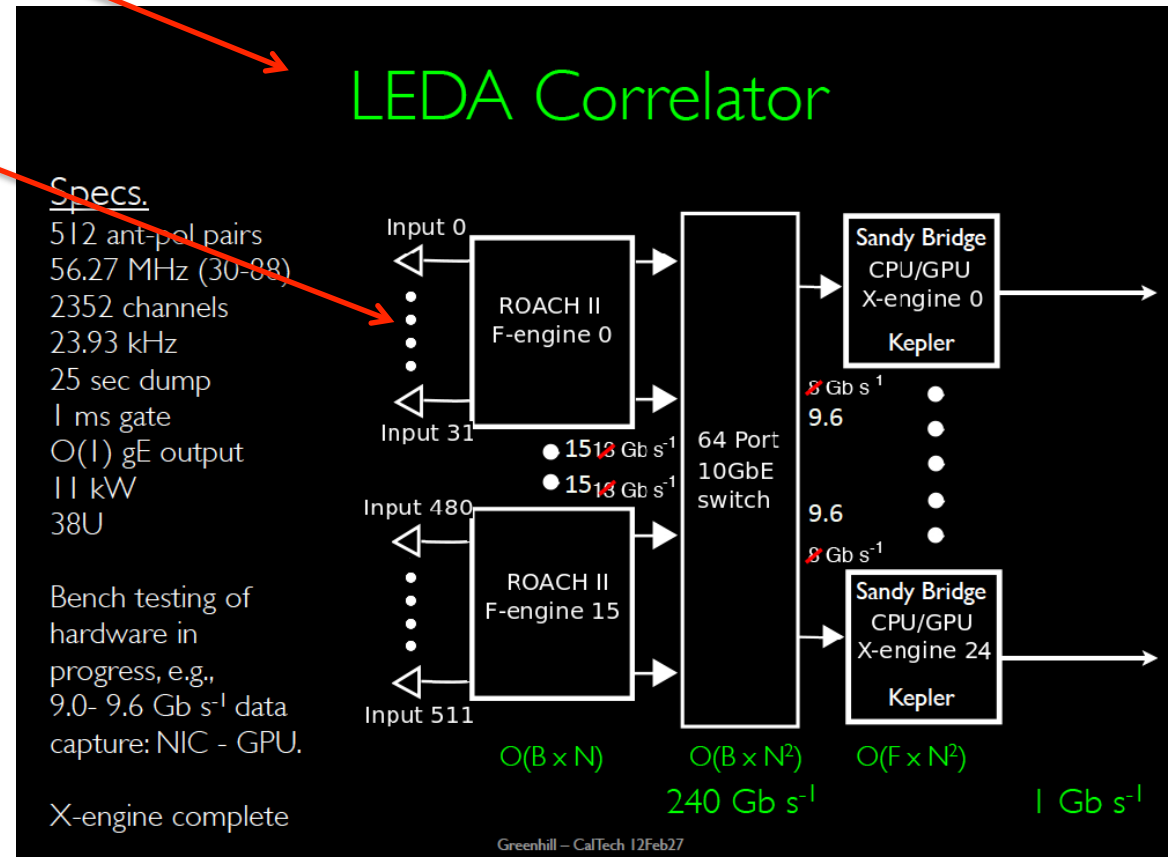
*\*Collaboration for Astronomy Signal Processing and Electronics Research*

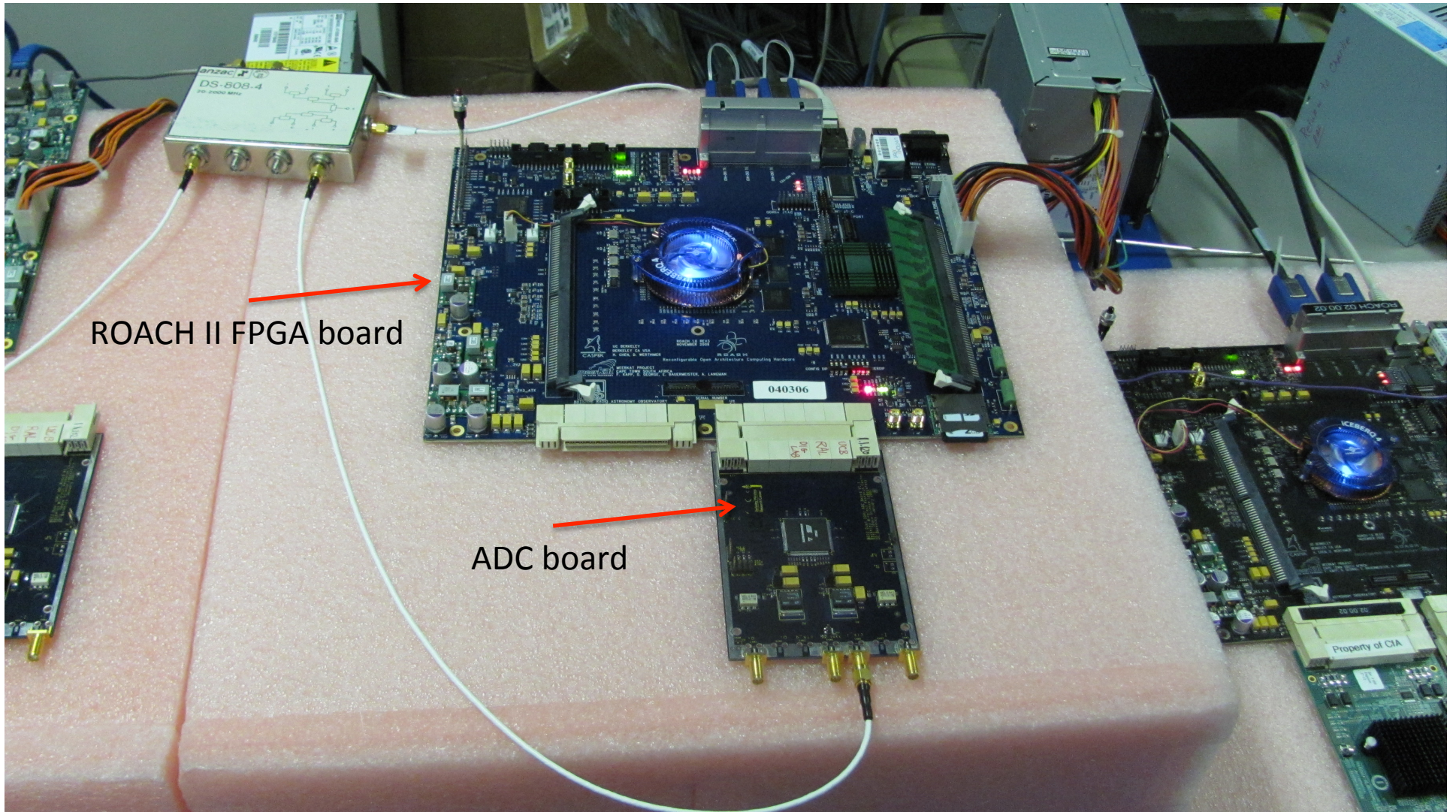
# Open Source FX Correlator Designs

- ROACH II board as FPGA F-engine
- Network switch corner-turner
- GPUs for X-engine
- FPGA & Correlator software for PAPER, MEERKAT, LWA/LEDA, etc.

- ADC boards
  - \$1K ea
  - ADC16X250-8
    - 16 channels, 8 bits, 250 MSPS, or
    - 4 channels, 8 bits, 1000 MSPS
  - KAT-7 board (from MEERKAT)
    - 2 channels, 8 bits, 1.5 GSPS

- ROACH II
  - \$3K board
  - + \$6K Virtex-6 FPGA (often donated by XILINX)
  - accepts 2 ADC boards:





ROACH II FPGA board

ADC board