



DARK ENERGY  
SURVEY

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## Front End Electronics Status



# Heater Status

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- Mark and Lee have bench tested the first assembled Heater board. Board checks out OK!
- Merle is assembling 5 additional boards
- Power measurements on single Heater Board

(From Lee)

- Power supply current with 20v p-p on both inputs and 20 ohm load on both outputs;

PS1 1.2A +15 Driver

PS2 1.16A -15 Driver

PS3 7.0mA -15 Iso

PS4 7.0mA +15 Iso -> 216 Watts (max) for 6 boards + supply inefficiency

Temperature reading with board fully loaded;

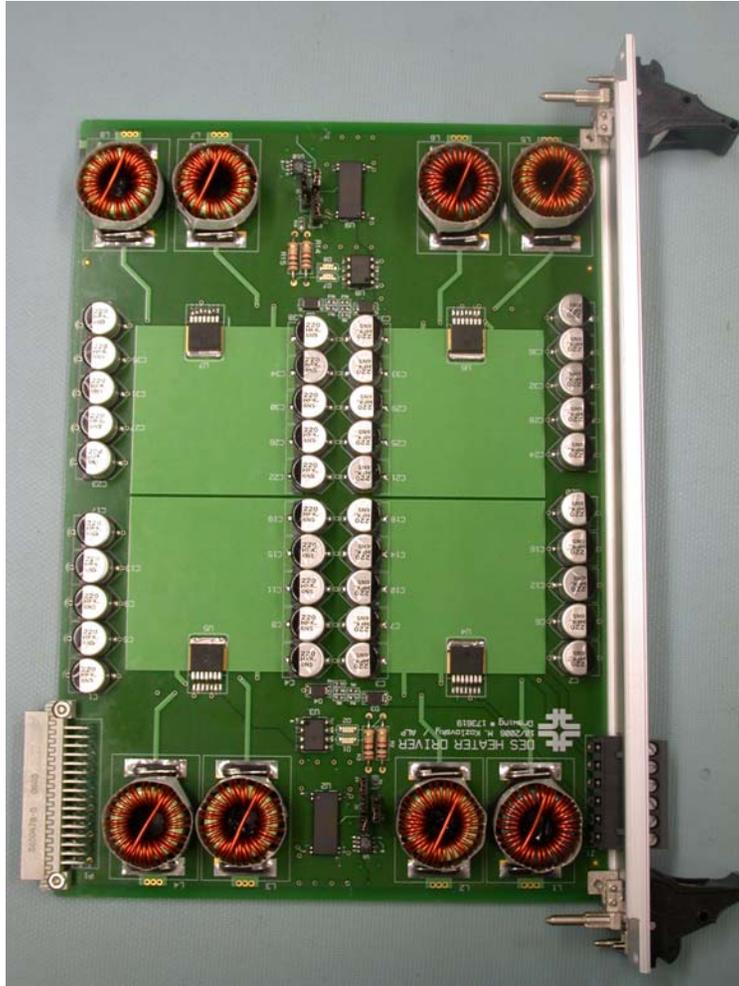
104 °F (40 °C) Center of heat sink pad (All four pads were the same)

121 °F (50 °C) U4, U5, U6, U7 (OPA548FKTWT)

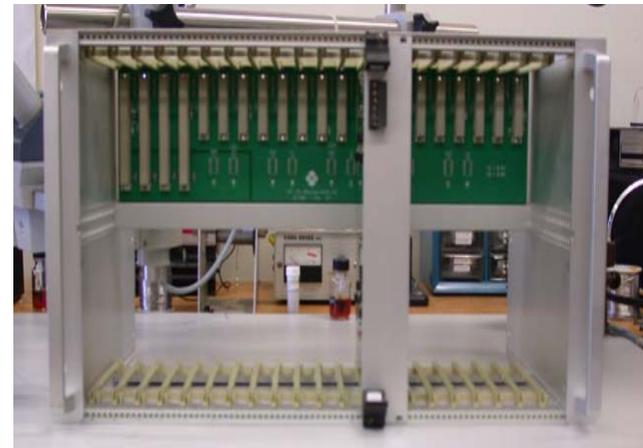


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# Heater Pictures



DES Meeting, February 1, 2007



**Current System requires 12-slots of a 6U crate  
Backplane used to distribute power**



Heater Power Supply

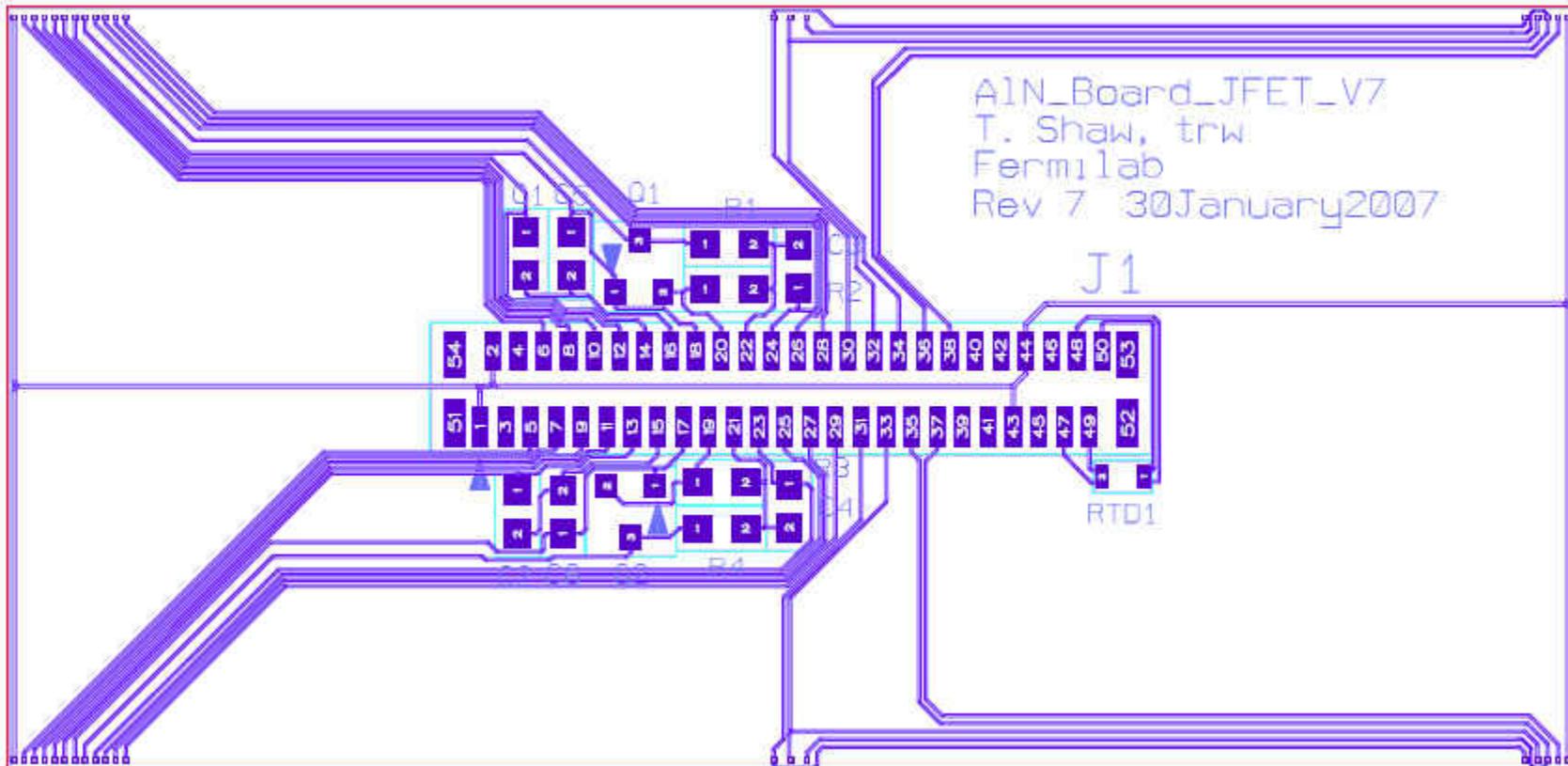
T. Shaw

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# AIN – V2 possibility

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Flat Flex Connector; hi-frequency bypass caps on VDD, Vog, Vr biases; JFET drivers with load resistors



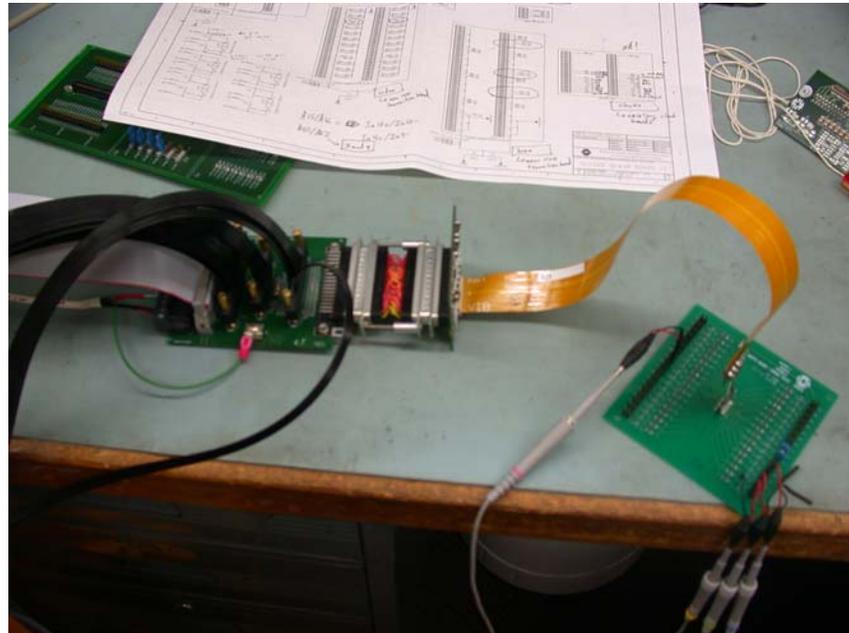
# 12-channel Board

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- New 12-channel focal plane definition drives clocks and bias levels properly
- Debugging video path
- Will study noise and then move board to SiDet





# New Cabling

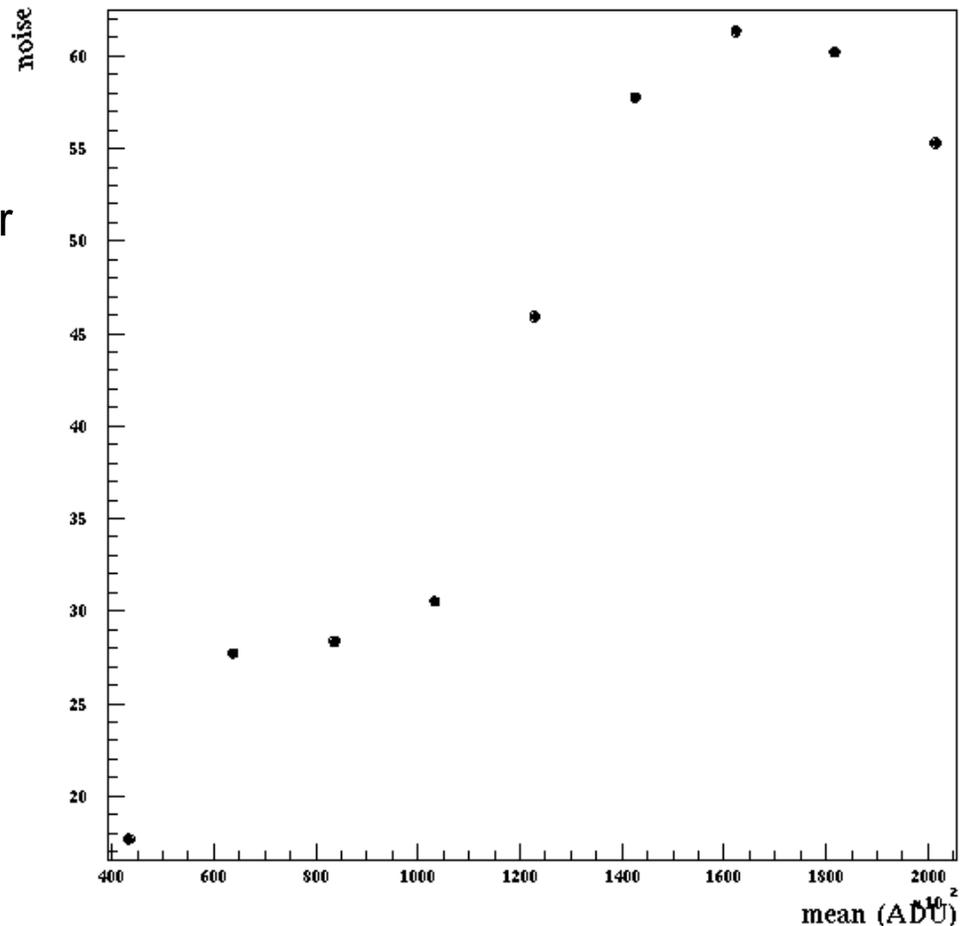
Noise on new cabling being studied.

New cabling used CCDI, 2-layer kapton cable and x6 pre-amp

Noise increases with signal intensity (this makes Juan complain!)

Investigating

- turn down gain inside dewar
- can substitute cabling pieces one by one to find noise contributor





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## Other News

- Dave is trying to revive our CCD cold box on the 14<sup>th</sup> floor. Missing a chiller – may have to order one.
- Clock Board still in assembly.
- S-Link work continues.