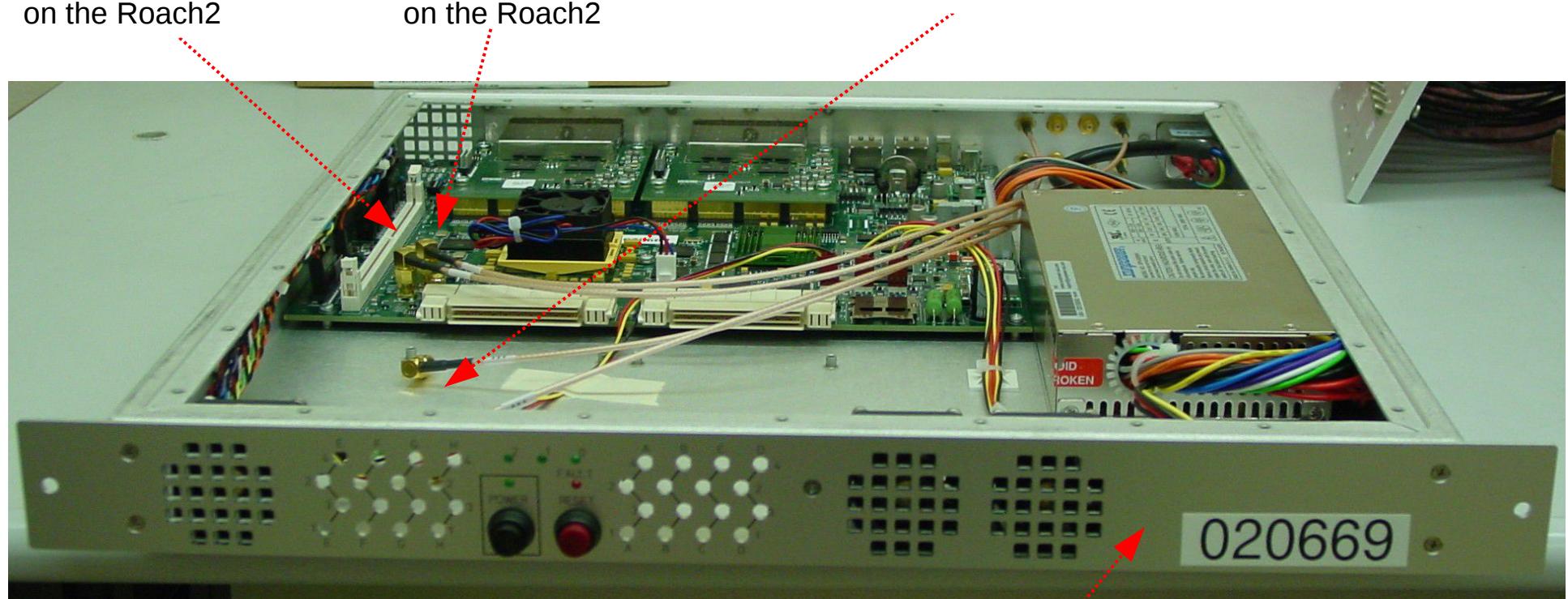


This is the aux_sync_in cable to J10 on the Roach2

This is the aux_sync_out cable from J11 on the Roach2

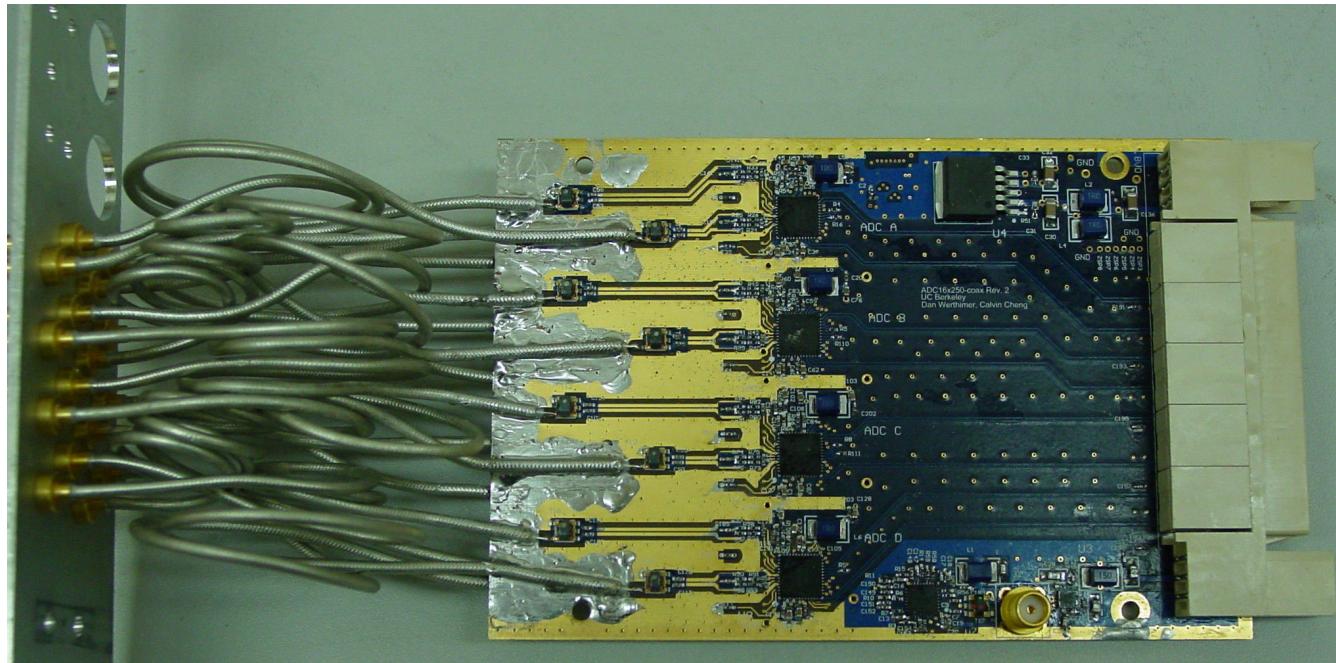
Here are the two clock signals for the not-yet-installed ADC16x250-8 coax rev2 boards.



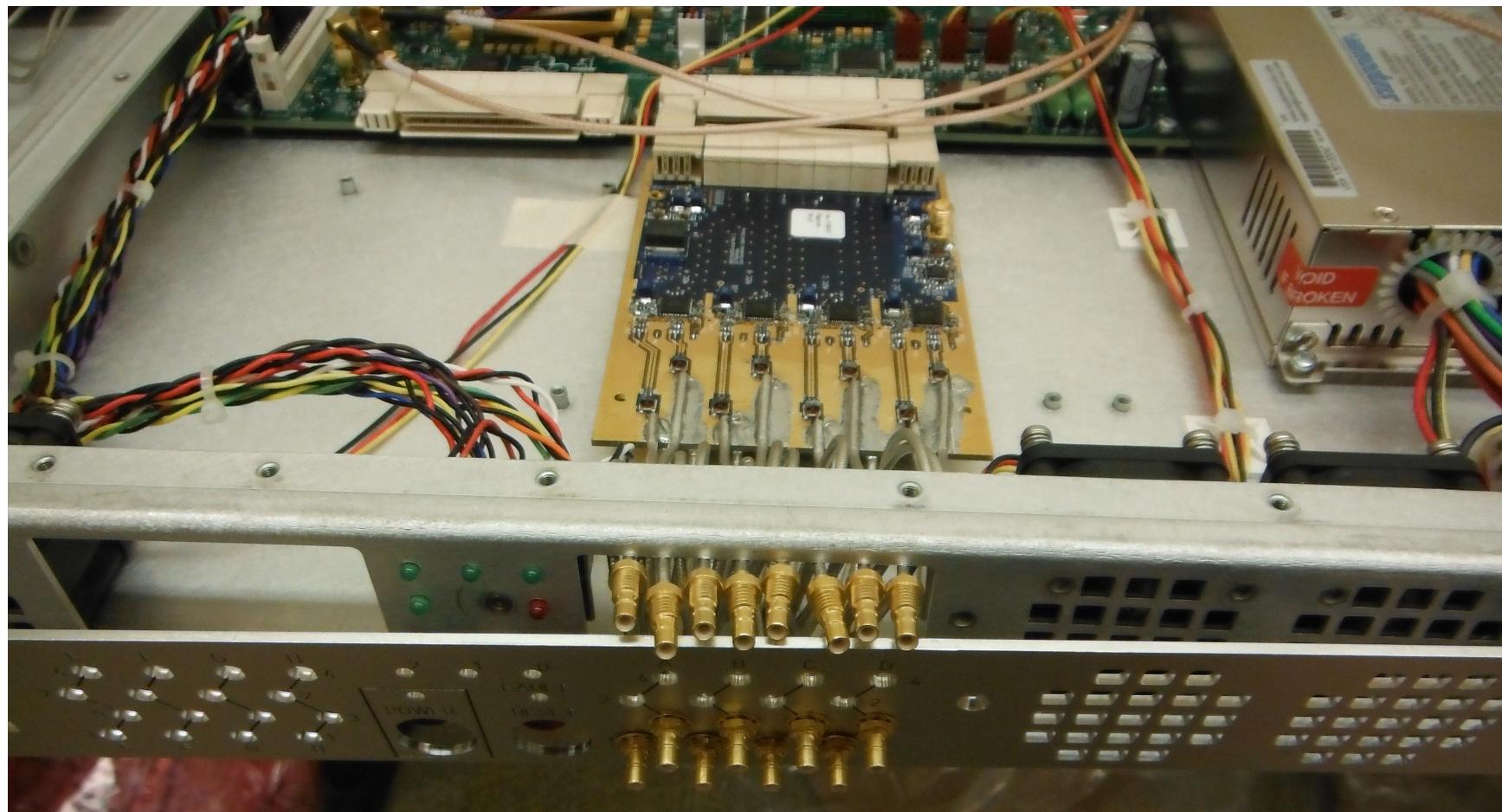
Custom face plate mounted to customized chassis.
new holes for 2 * 16 SMB input connectors
and moved power and reset buttons, and power, fault and
just 3 GPIO LEDs (0, 1 and 2).

There are no SMB connectors in this picture because those
are soldered directly to the ADC16x250-8 coax rev 2 boards
and those weren't installed when this picture was taken.

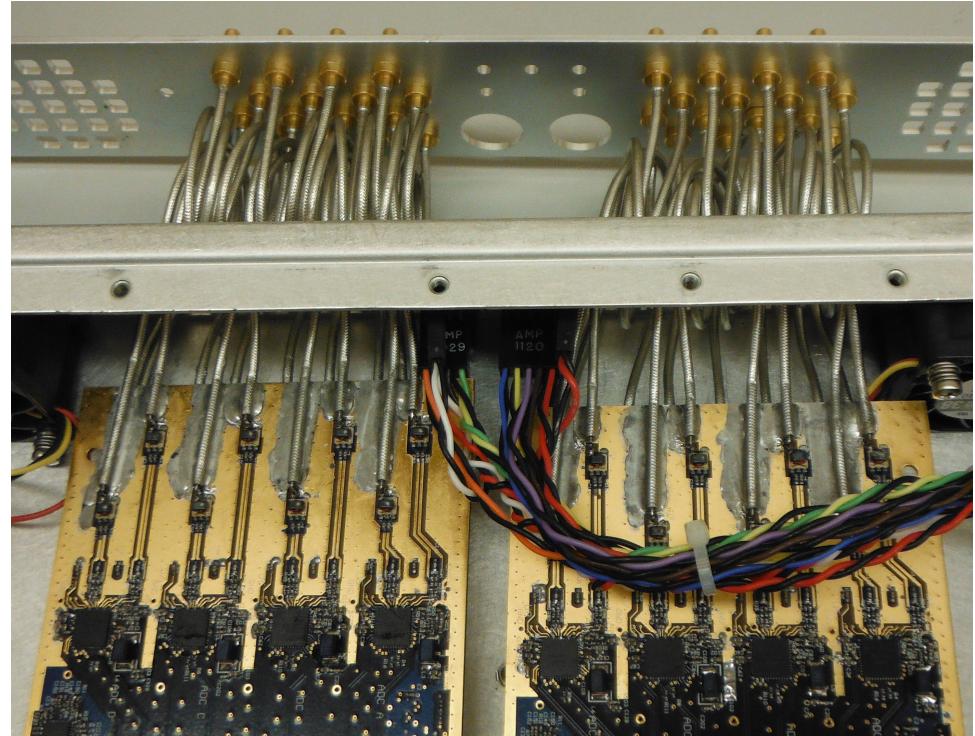
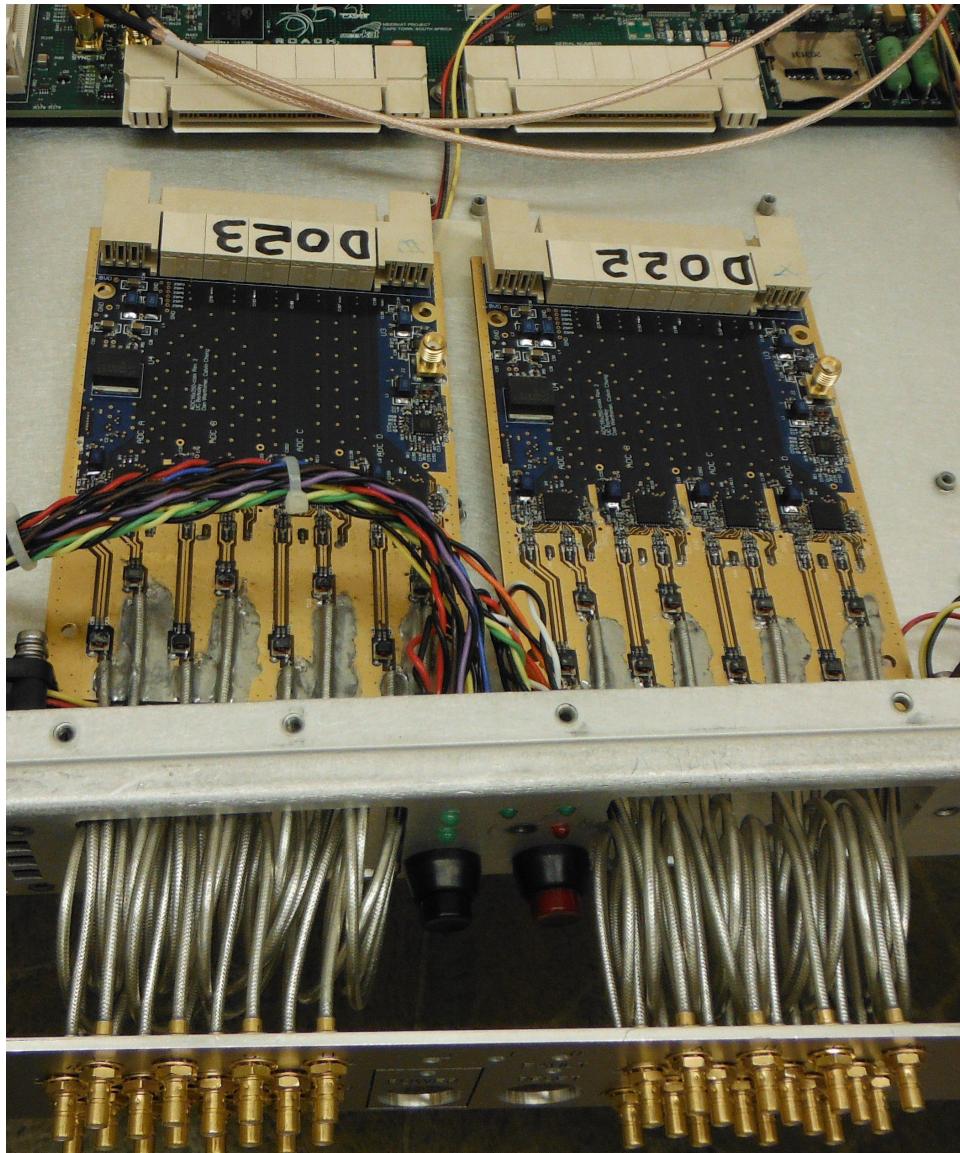
Birds eye view of the ADC16x250-8 coax rev 2 mounted to the SMB connector alignment jig, as used during cable installation, and close up view of the 1 board's worth of SMB jack connectors.

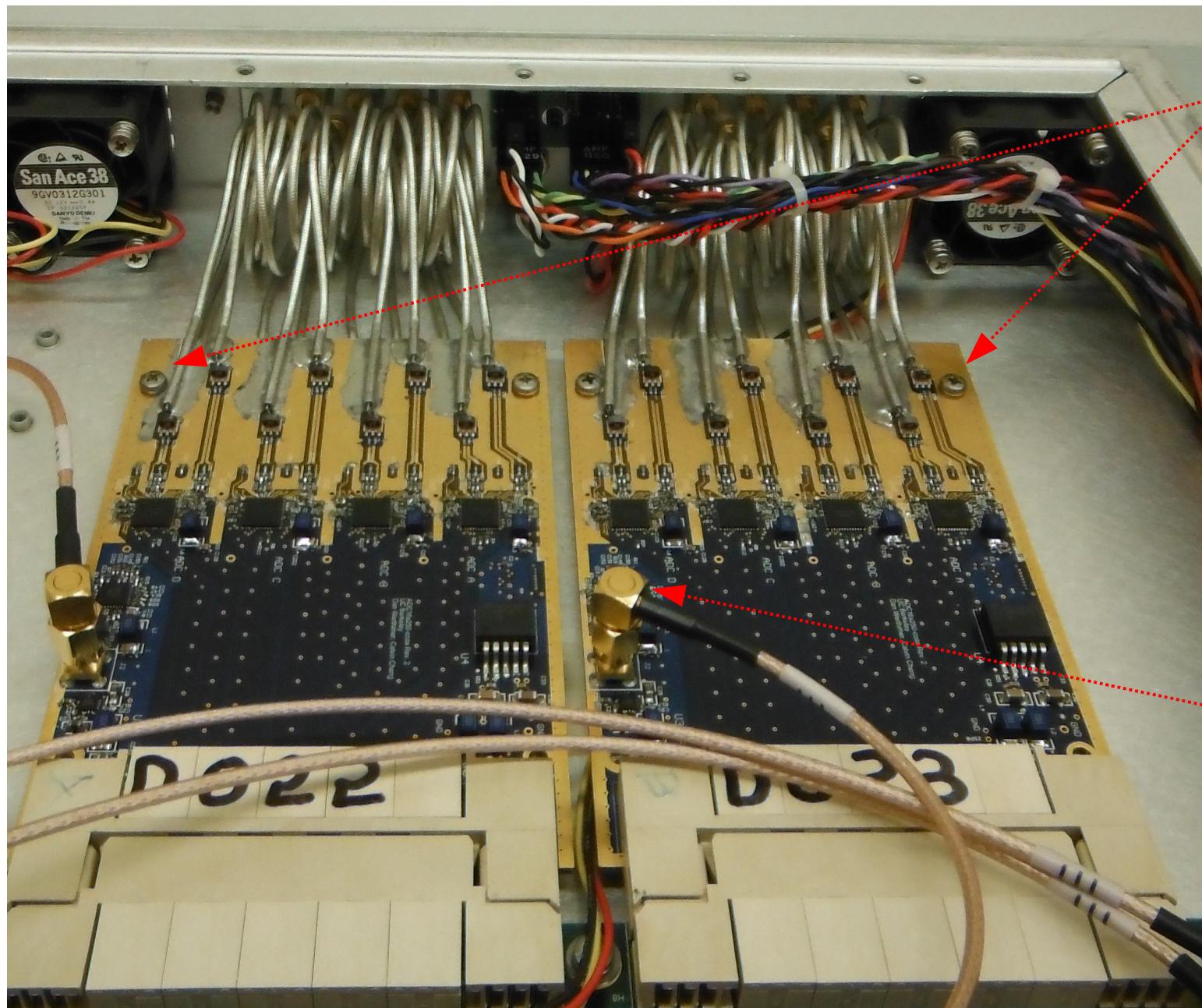


Near the start of installing a ADC16x250-8 coax rev 2 into the chassis.
Installing the SMB jack connectors into the face plate takes a bit of finesse.



Near the end of installing two ADC16x250-8 coax rev 2 boards into the chassis.

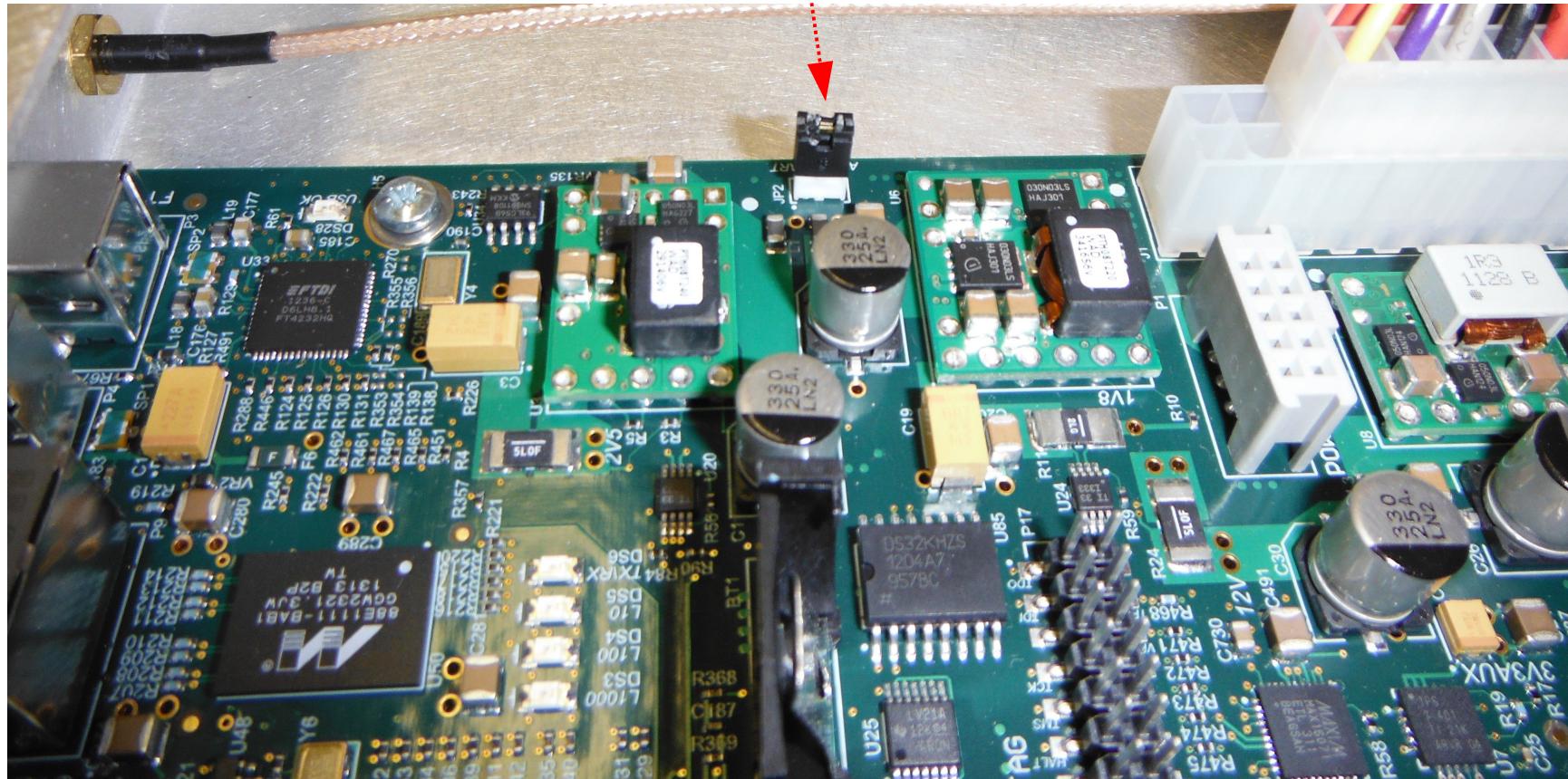




Enlarged view of the two ADC16x250-8 Cards. Note only two (2) M3x8mm screws are used to hold each ADC cards to the threaded inserts mounted to the bottom of the Chassis. This is on purpose. The Roach2 PCB is ~.093" thick but the ADC PCB is only ~ .062" but the M3 threaded chassis standoffs are 1 height and the PCBs are mated at the Zdok Connectors.

Also note the right angle SMA connector on the clock input cables. The cables have been routed away from the low level analog inputs.

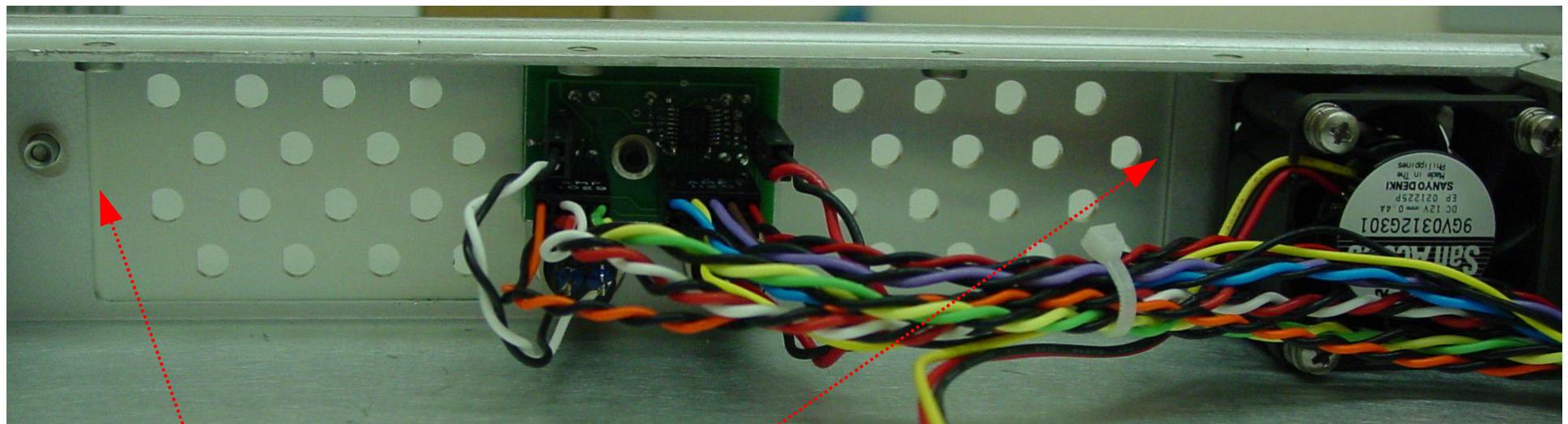
Close up view of the 2 pin shorting shunt JP3 to instruct the unit to power up once the chassis power supply is turned on (and no faults are detected).



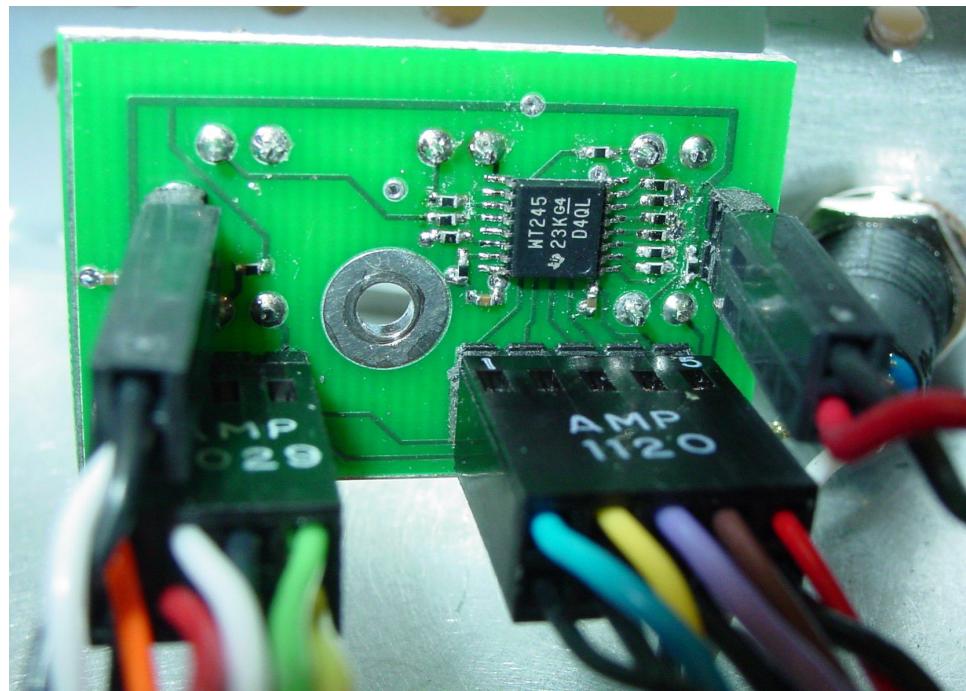


Front face of the chassis, with custom face plate, showing the new holes for the SMB jack analog input cables.
Due to lack of space only 3 of the GPIO LEDs, 0, 1 and 2 are available.

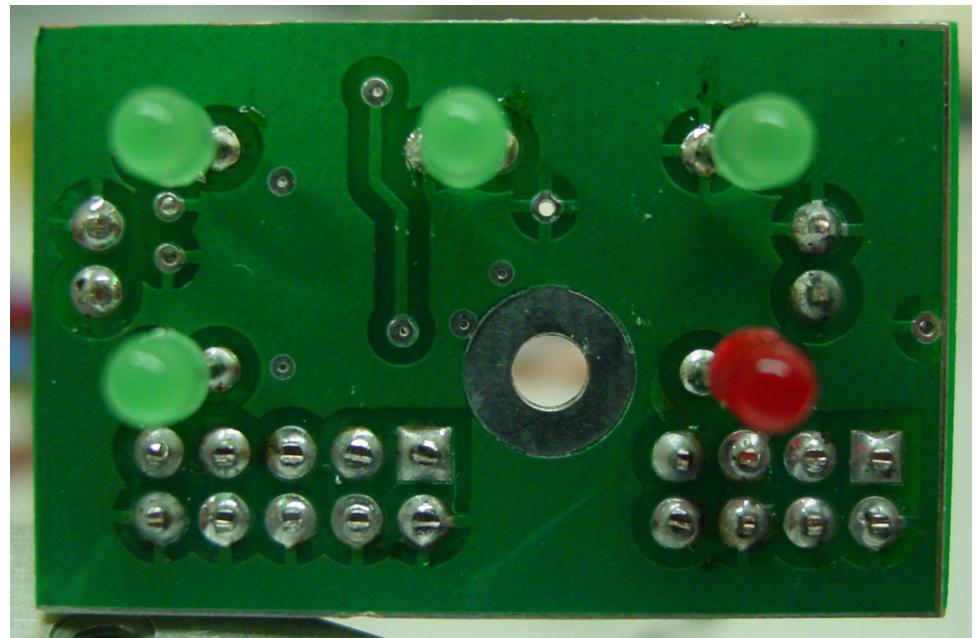
View of the interior side of the front of the chassis showing the custom LED PCB with LED/GPIO, and power, reset and fault cables.



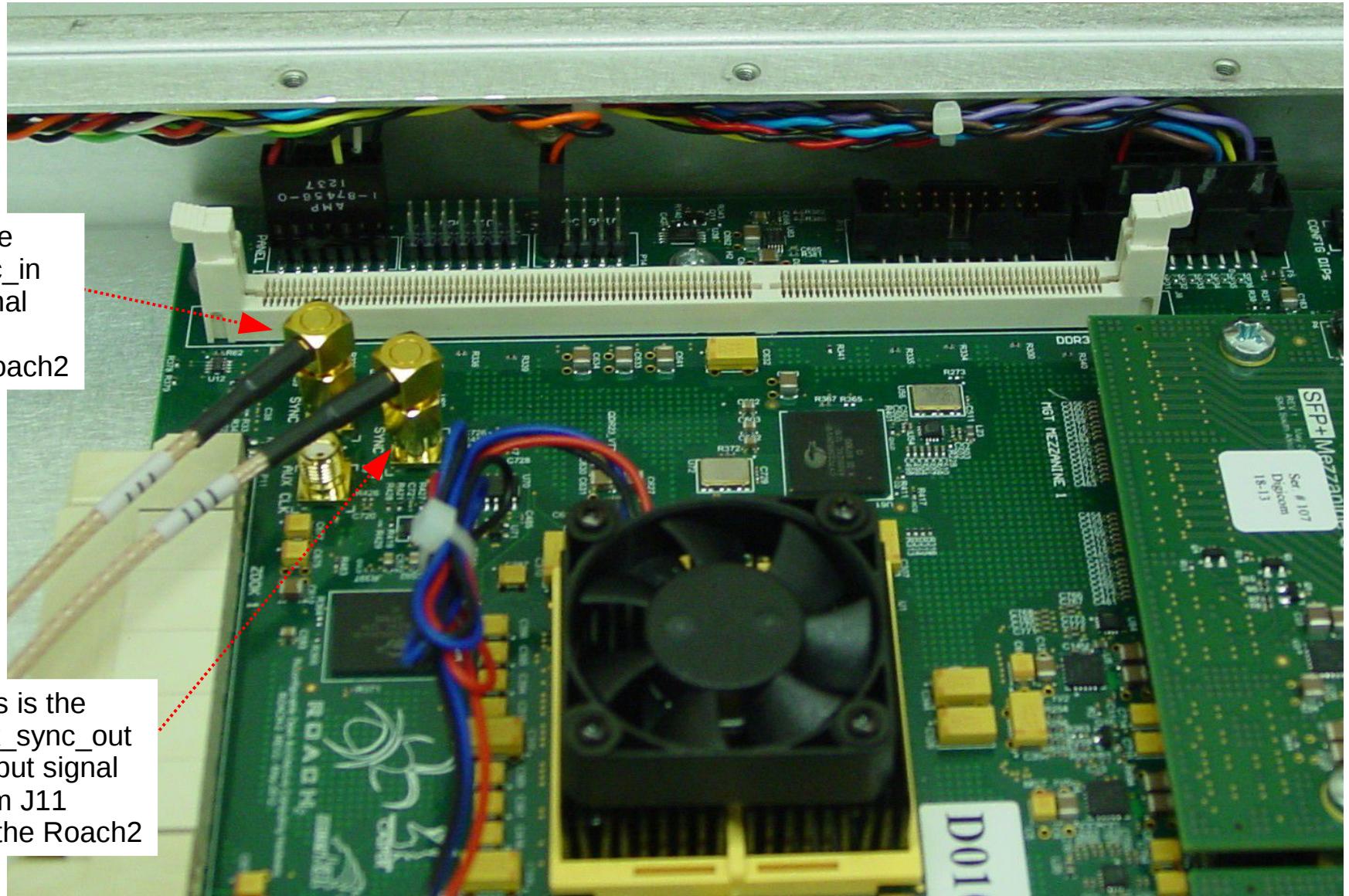
Note the two (2) large rectangular openings in the front of the chassis.
16 SMB coax cables pass thru each of these rectangles.



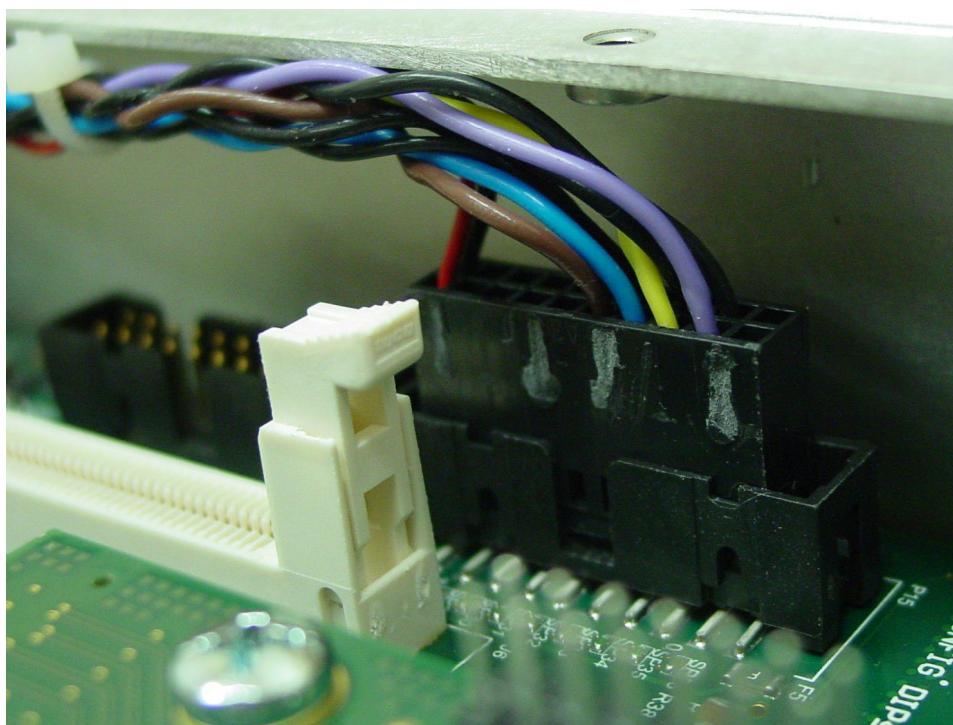
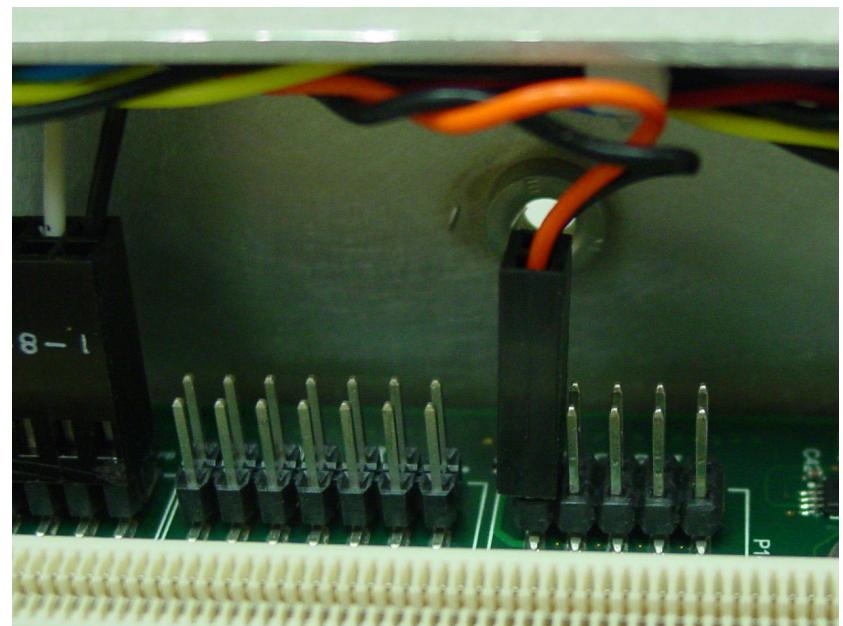
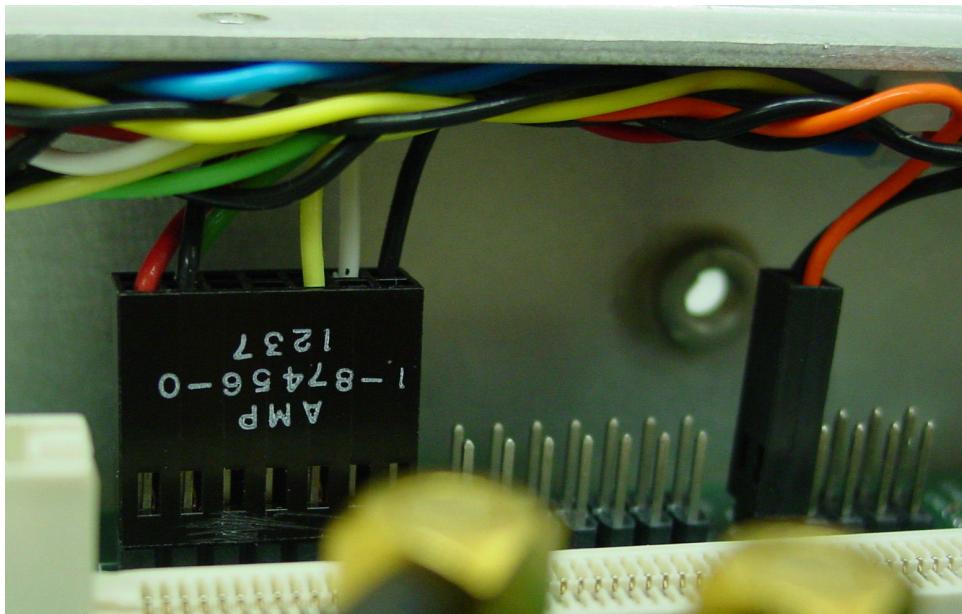
Below is a view of the front facing side of the LED PCB



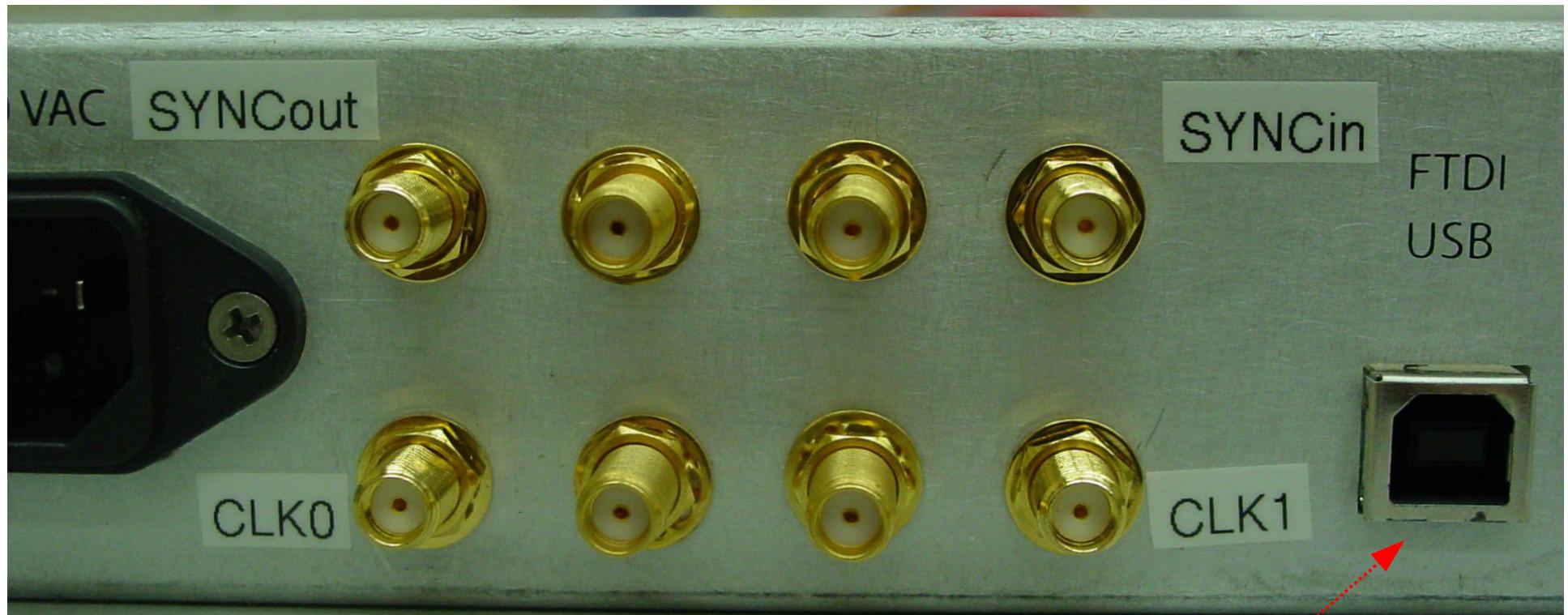
The custom power, fault and GPIO LED cable assemblies



More views of the custom power, fault and GPIO LED cable assemblies



Back side of the chassis showing where the two (2) sample clocks, each at +6 dBm, and Sync, at 0.8Vpp swing (approx) minimum, are to be supplied. All 3 inputs are received by 50 ohm loads.



This is the physical USB port to connect to the Roach2's 4 virtual USB ports.

Port 0 is the JTAG chain

Port 1 is the PSI serial bus (to read voltage and current sensors, access the EEPROM)

Port 2 is the PPC UART. This is the one to use to access the PPC's uboot environment for example.

Port 3 is for general purpose low level Roach2 mode bits.