

HCAL DIF Status

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DIF Progress

- Design and schematics finished in Nov. 2010
- PCB layout finished in Dec. 2010.
- 5 PCBs ordered, have been recd.
- All parts in hand except for the Xilinx FPGAs
- Initial plan of having DESY (the desired FPGA was not in stock in US) ship them ran into customs issues
- On order in the US now (expect delivery shortly)

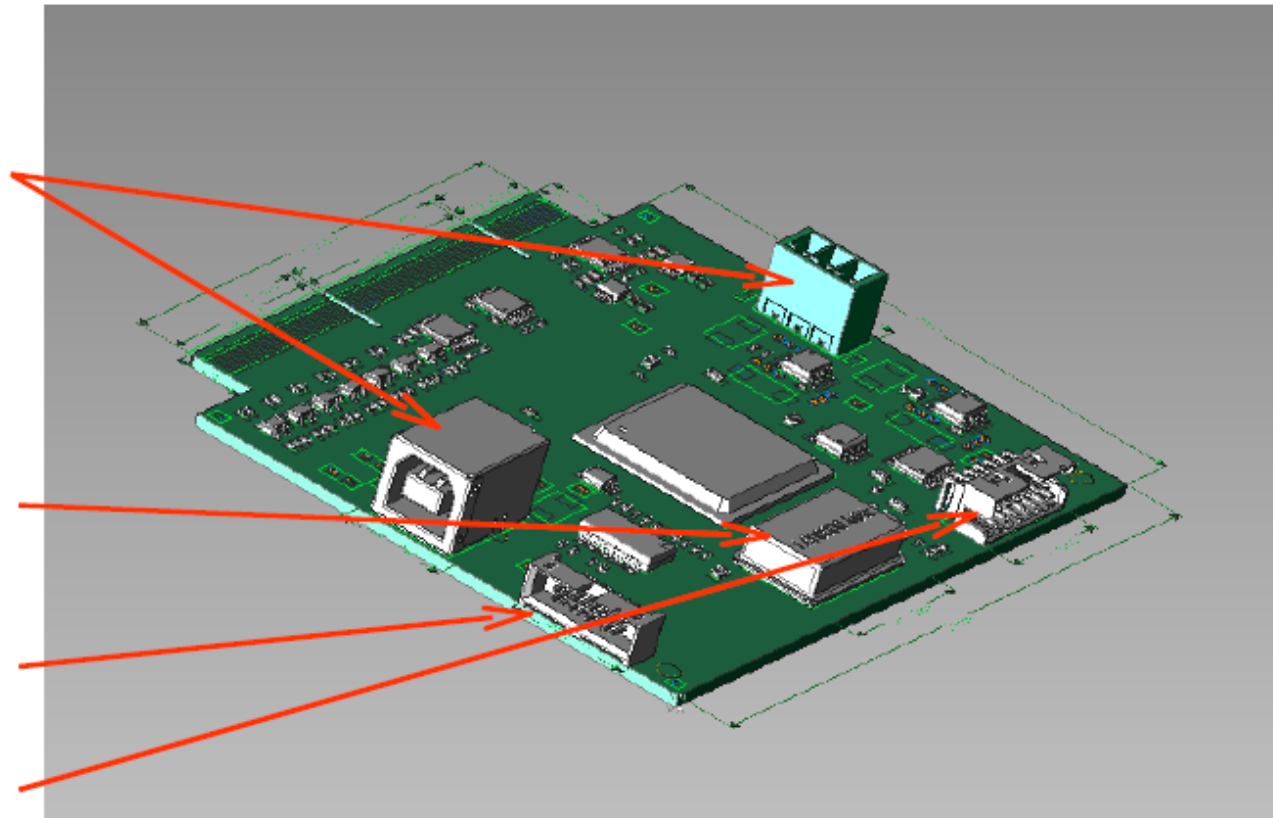
DIF Top View

USB and Auxiliary power connectors. These are only used for stand alone testing. They exceed the 7.5mm height limit.

Local Oscillator. Can be DIP (shown) or surface mount.

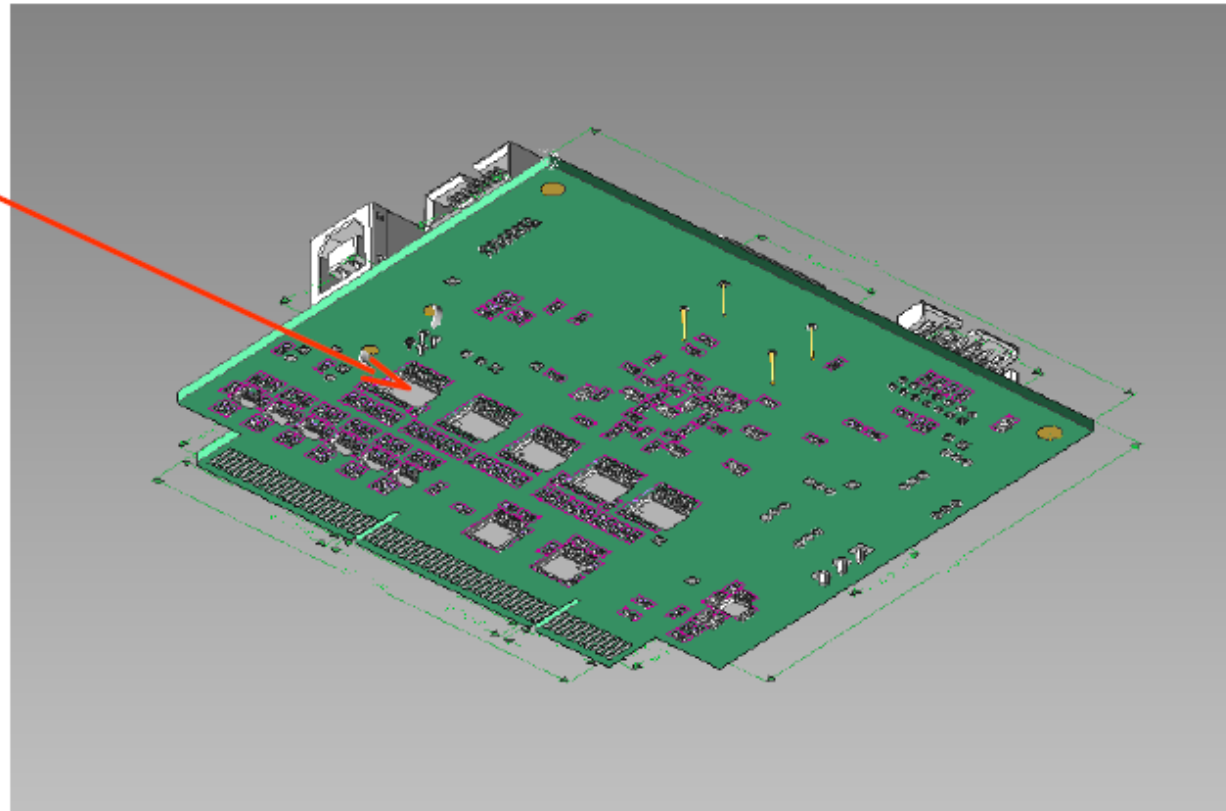
DIF-DIF connector

JTAG connector



DIF Bottom View

The tallest part on the back of the board is the 74LV245DB at 2mm. Height restriction in the spec is 2.6mm. Could use the 74LV245PW (TSSOP, 1.1mm) on the next version. This thin shrink package was not easily available when parts were ordered.



Next Steps

- Assembly will begin immediately following the FPGA delivery
- Plan to assemble 2 boards initially to check for major errors
- Currently no means to check the boards beyond the rudimentary level
- Would really like to get the firmware and the LDA-DIF or USB interface