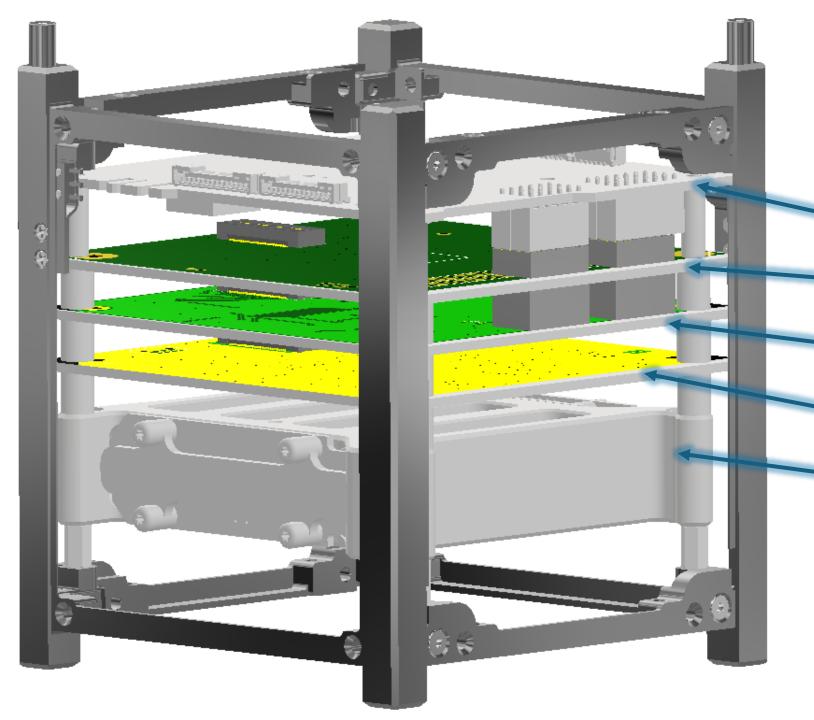
Fox+ Mechanical

Andrew Robinson

KA3WDW

18Dec2024



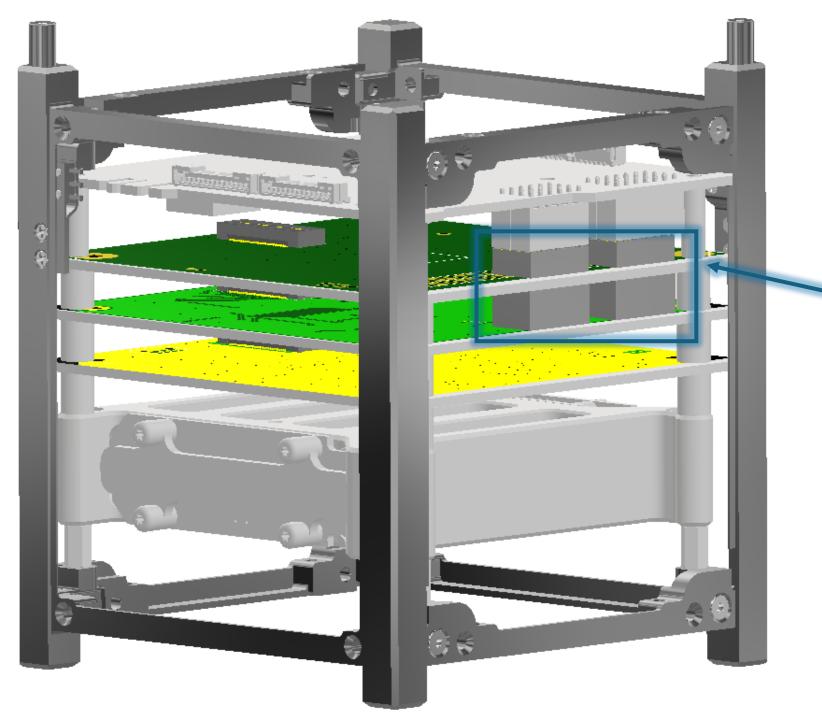
ISISpace PIU

LIHU

ICR

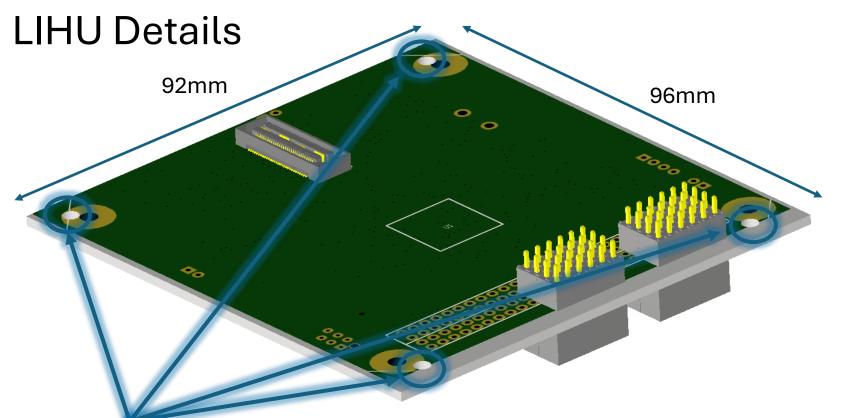
RXTX

ISISpace Battery

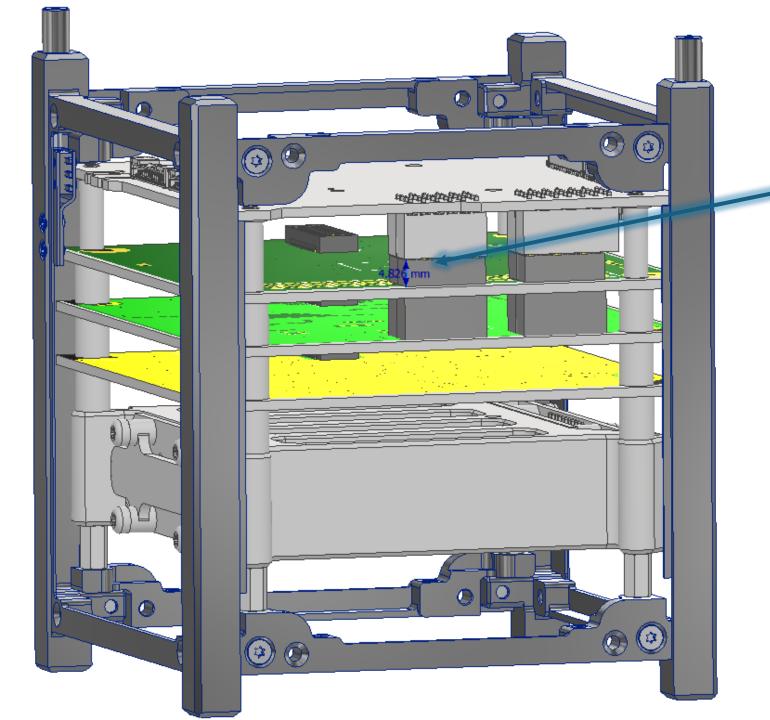


(4) Samtec ESQ-106-12-G-D

To be completely honest, not sure how these PC-104 type connectors install. The solid model for this part (from Mouser) had these two pieces, so I put one on the "bottom" of the board and one on the "top."

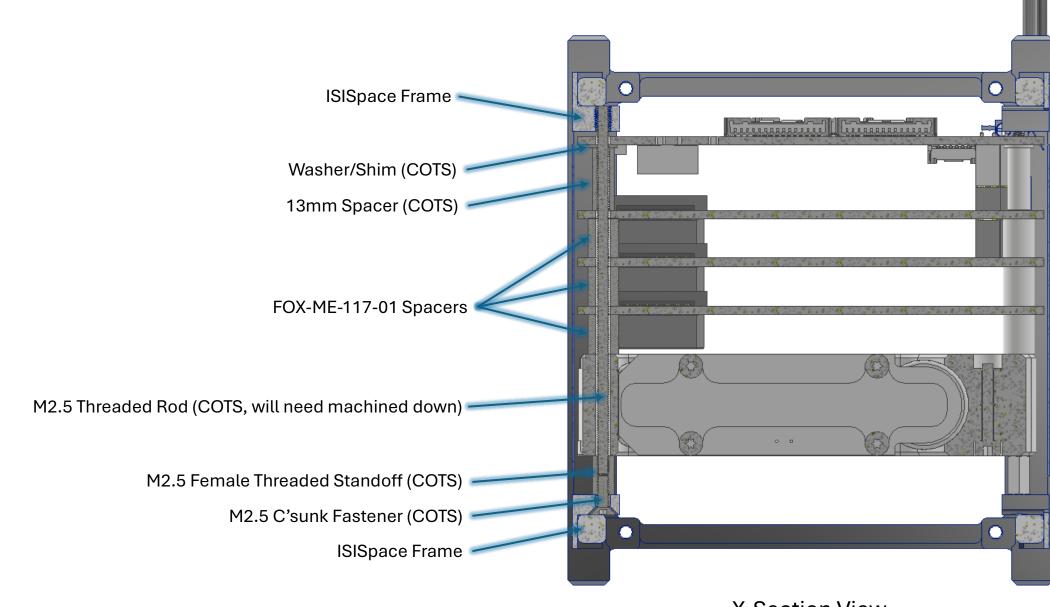


(4) Thru holes align to the ISISpace hole pattern LIHU board with the (4) ESQ-106-12-G-D connectors. The two on the right should be ESQ-107-12-G-D but that STEP model wasn't available (easily) through Mouser. This position aligns with the ISISpace PIU CSKB-Lite connector in the assembly model.



That piece on the top (is it needed?) is 4.826mm, so could save some space if it isn't required.

Stack Up Hardware

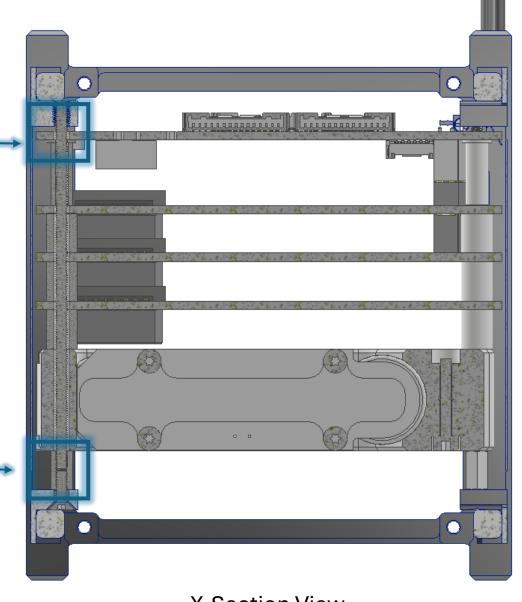


X-Section View

Potential Re-Arranging

Small gap here; will need to put a washer/shim/spacer there (easy)

Originally wanted to not have this threaded spacer here and have the ISISpace battery sit on the frame. I would then move this threaded spacer to the "top" of the battery (in place of the FOX-ME-117-01 spacer) and run a long M2.5 c'sunk thread from the frame through the battery to the threaded spacer. Couldn't seem to located a good reliable M2.5 c'sunk fastener long enough. If we hear back from ISISpace and M2.5 isn't the right size (from the model, seems small) then we might be able to re-configure. With this layout there is some dead space under the battery.

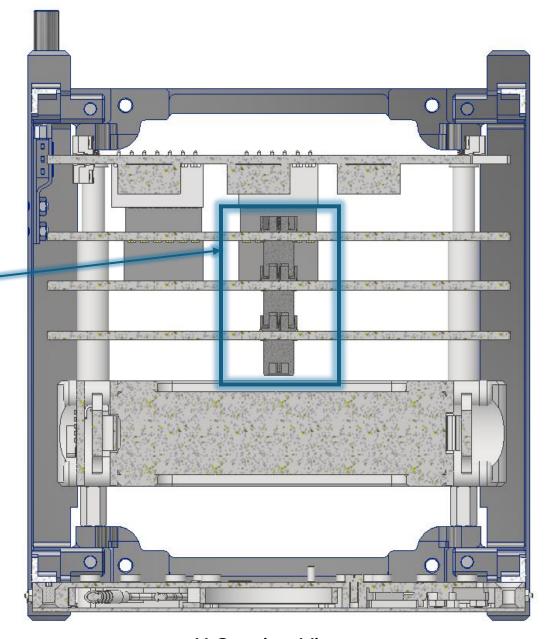


X-Section View

This mounting scheme shown matches the stack up on the 1U frame that I have

QxH Engagement

QxH engagement maintained by using heritage FOX-ME-117 spacers between boards



X-Section View