



ePIC SVT WP3

Updates on Q-Flex evaluation

Joellen Renck

8/8/2024

General introduction

- We are waiting for the final paperwork approval to receive funding for the eRD113 work
- Joellen bio and introduction
 - Electrical Engineer at LANL
 - Expertise in FPGA firmware development with some experience in PCB design
 - Worked on designs for space, sub-orbital flights, and ground testing applications
- Layout of the work plan
 - Contribute to the FPC evaluation and characterization
 - Contribute to the ancillary chip development and readout integration

Results so far on reaching out to Q-Flex

- Started conversation with electrical engineer at Q-Flex to check the possibility of manufacturing OB Bridge FPC type A prototype provided by STFC UKRI
- Initial constraints stated by Q-Flex:
 - Can create 2-layer Aluminum flex circuits
 - Can not electroplate vias or have PTHs for Aluminum designs
- Engineer wants a condensed CAD model with CAD layers only corresponding to stack up layers (i.e., 4 layers)
 - Simpler model can either be provided by UK or created by LANL by merging and deleting layers in UK provided CAD model
- After simpler model is provided, Q-Flex will provide feedback on stack up
 - Potentially will propose a revised stack up