option 1

- SCROD revB with ZYNQ FPGA (XC7Z045-1FFG900C, $1597 or $1026*)
option 2

- one FPGA per carrier (XC7Z030-1FBG484C, $202)
- SCROD has FPGA (XC7A100T-2FGG676C, $189) and fiber transceivers
  - SCROD is then just a high-speed serial switchbox (splitting and merging streams of data)
- advantages:
  - fewer board-to-board interconnects needed (one or two high-speed serial links per carrier)
  - lower overall EMI (trigger bits, etc not sent over interconnects)
  - all trace lengths between FPGA and ASIC known exactly (none depend on which position they're in vertically in the stack)
  - overall cost for FPGAs (~$1000) is approximately the same as option 1*
- drawbacks:
  - have to write two sets of firmware and get 5 FPGAs to work in concert
  - need isochronous channel for trigger bits (perhaps just regular serdes IO)
3d model