

on ASIC Board

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From last week

1) Who provide reference for anodes?

As in current implementation, HV reference and Anode reference joined at H8500 adapter board.

2) Do we need charge injector in CLAS?

Useful for testing and calibration, alternative to “dark” method, controlled by FPGA, design under investigation

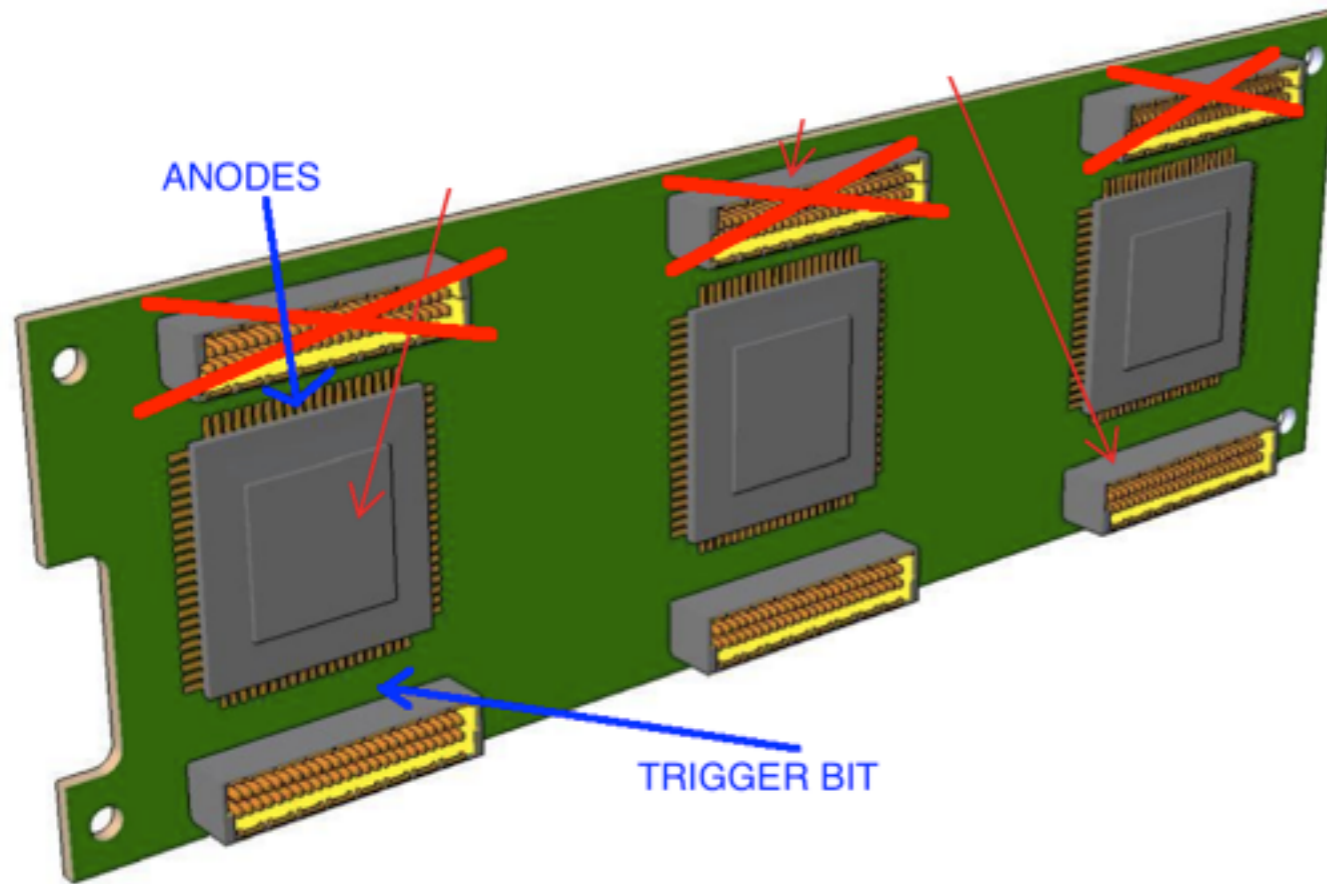
3) Low Voltage Power: dedicated connector and cables or using pins and ground of the board-to-board connector?

Samtec ERM5/ERF5, each pins capable of 1.5 Amp, no need of other resources

4) HSTL voltage swing generated on FPGA board?

HSTL levels both on FPGA or on ASIC board. Our proposal: $V_H=1.5$ Volt, $V_L=0.0$ Volt. Do fpga needs 1.5 Volts? Waiting for absorption specs by Omega group, then decide where.

Easy Signal Routing



- MAROC3 digital outputs (64 pins) is the biggest signals subgroup together with 64 inputs (from anodes)
- Airflow and connector must be parallel
- ASIC orientation as in figure (see blue text)
- Only 2 Samtec Erm5 (140) is an adequate solution that allow a single fpga board design (able to serve 2MAROC and 3MAROC version of the ASIC board)
- H8500 Adapter board oriented in order to have output connector parallel to MAROC “anodes” side