

Electronics Planning

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APC - 14/10/2022

Installation Schedule

- Readout boards must be mounted on the xARAPUCA frame, preferably prior to mounting the module
- Downstream cathode (4 modules → 4 boards) available as of 14/12
 - Hardly feasible to install before 18/12
 - Likely/needed shift to first week of January
- Top membrane (2 upstream, 2 downstream → 4 boards):
 - Also to be installed before the end of the year

SoF → 4 boards needed by end of December/early January

- Boards (DCem + laser adapter) to be sent out for fabrication next week
 - Ryan calculates 2 weeks to order + 4 weeks lead time on turnkey orders
 - should be received end of november max.
 - Less time if in-lab cabling?
 - BOM: choice of best cryo-safe components being finalized
- DCem: possible minor modifications or use 1.1
 - PoF receivers are available. Cabling??
- Laser Adapter: layout modified following argon4 improvements
 - Lasers: several orders placed by Fermilab, unknown delivery time, probably hand-soldered.
- Integration & testing plan needs to be defined asap
- 2-3 weeks in December to integrate and test 4 boards, and bring them to CERN.

HD amplifier → 2 boards (8ch) needed by end of December

- Adapter board (x4 channels) sent out for fabrication
 - Considering 6 weeks lead time, reception end of november.
- Milano has produced 30 1-channel amplifier cards
- To be tested in CRP5 coldbox:
 - Installation last 2 weeks of November/Run first two weeks of December
- Testing in CB and installation will be very close.

SoF-based copper

- No additional production needs
- Will be first tested in CRP2b coldbox (end of October)
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