

Veto module test in Pisa

BULLKID digest meeting 11/12/25

Tommaso Lari

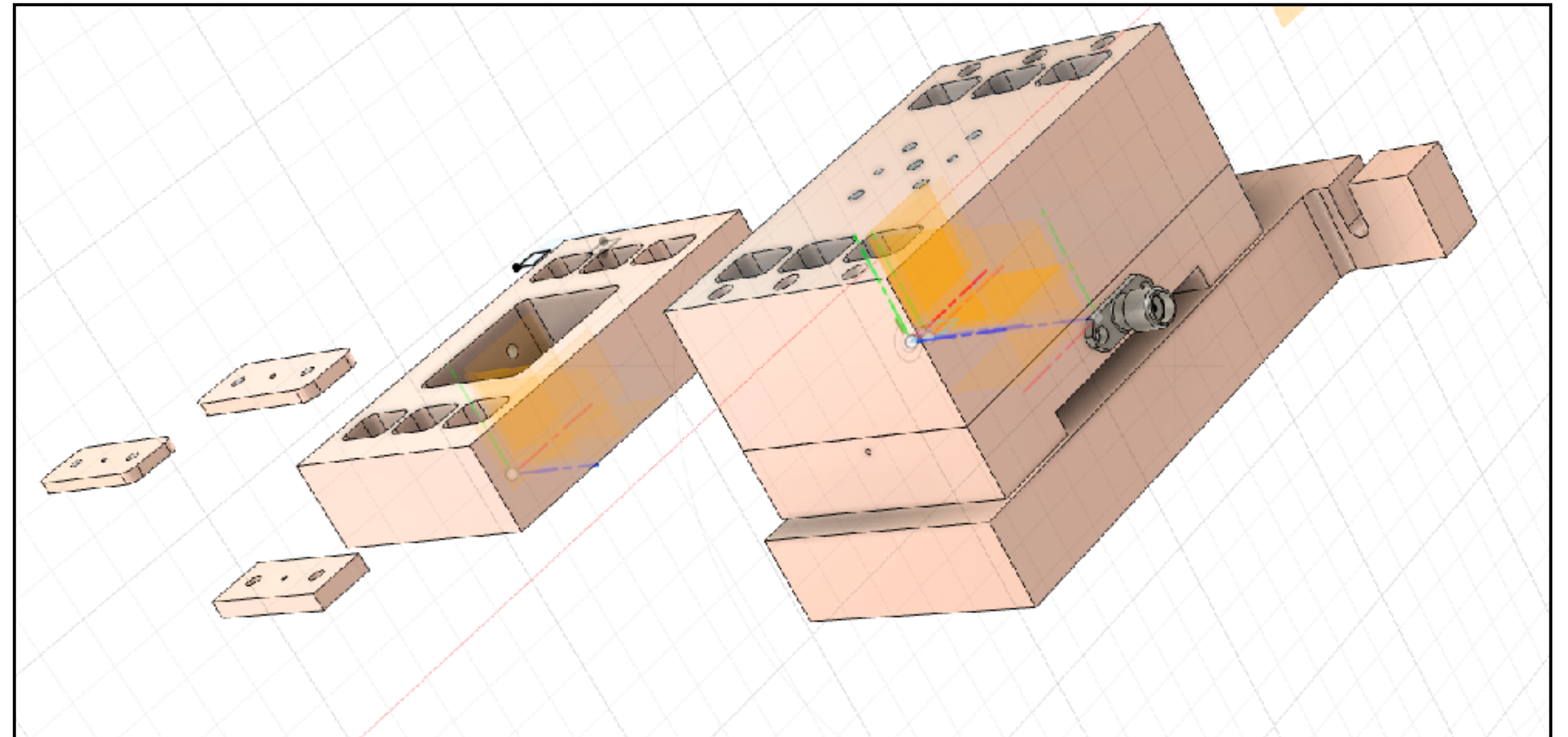
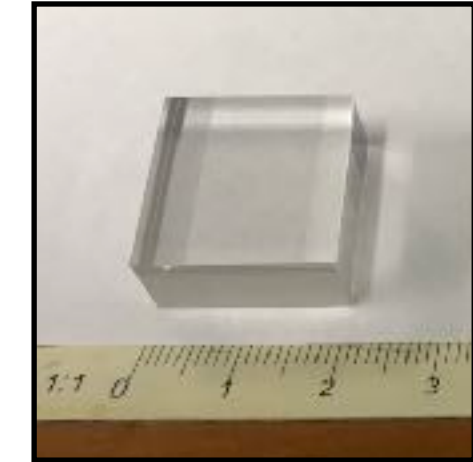
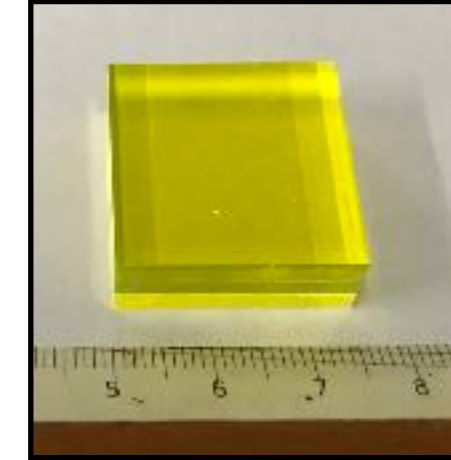


KID + crystal test in Pisa

1

Planned Tests:

- Crystals (2.5x2.5x1) cm³ GAGG/BGO
- New holders design for thermalization
- Goals:
 - Demonstrate operation of single module.
 - Evaluate performance of GAGG.
 - Study effect of BGO time constant.
 - Simultaneous operation of two modules

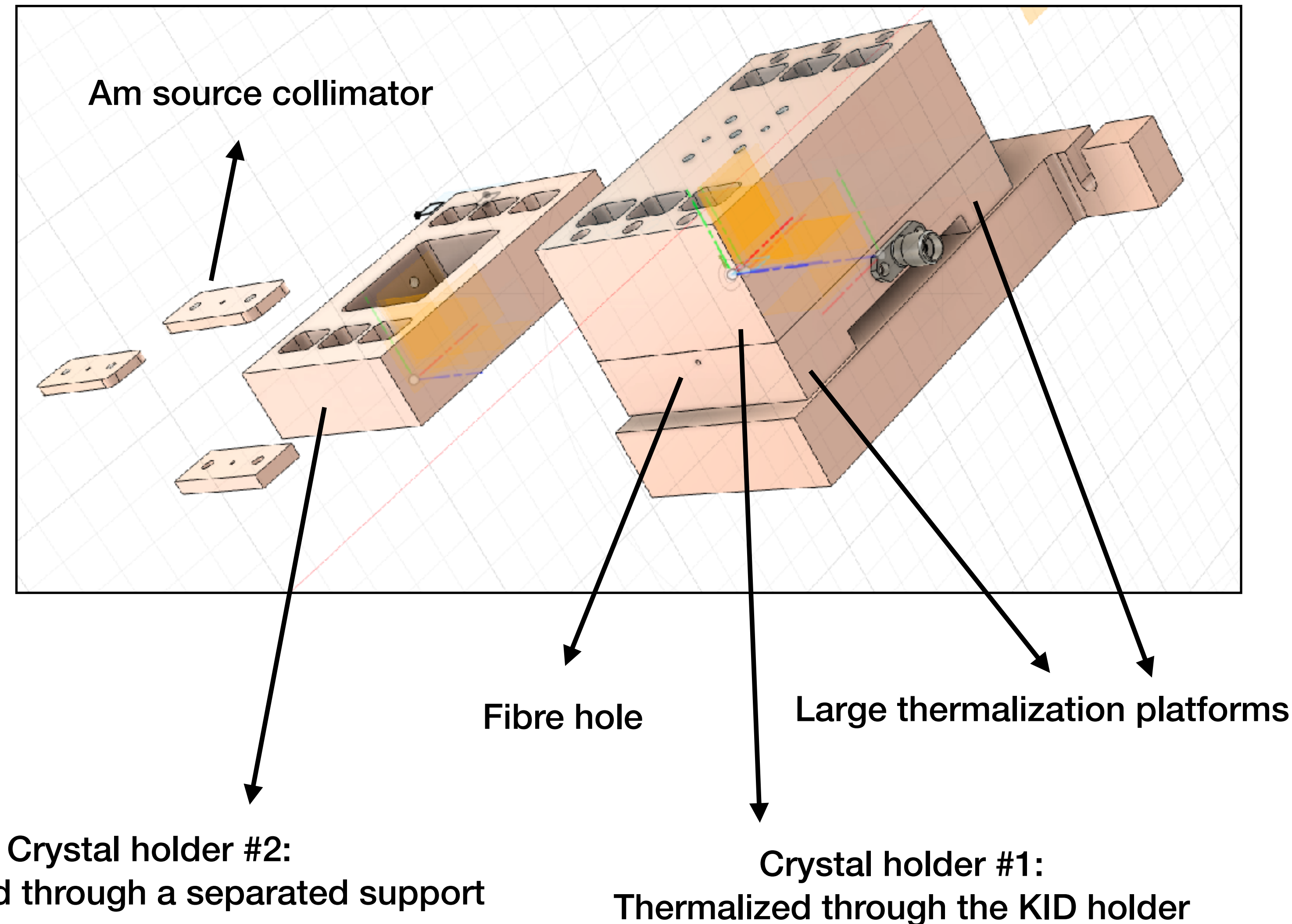


KID + crystal test in Pisa

2

Set-up Updates:

- **Holders for crystal and KID:**
 - Finalised design
 - Now Under production
- Installation of **fibre** for LED calibration (in progress)
- Readout Board:
 - **Zynq ZCU216** Evaluation board delivered
 - Acquisition PC (ordered to be delivered soon)
- **(2x2) cm² KID** 700-900 MHz (to be procured)

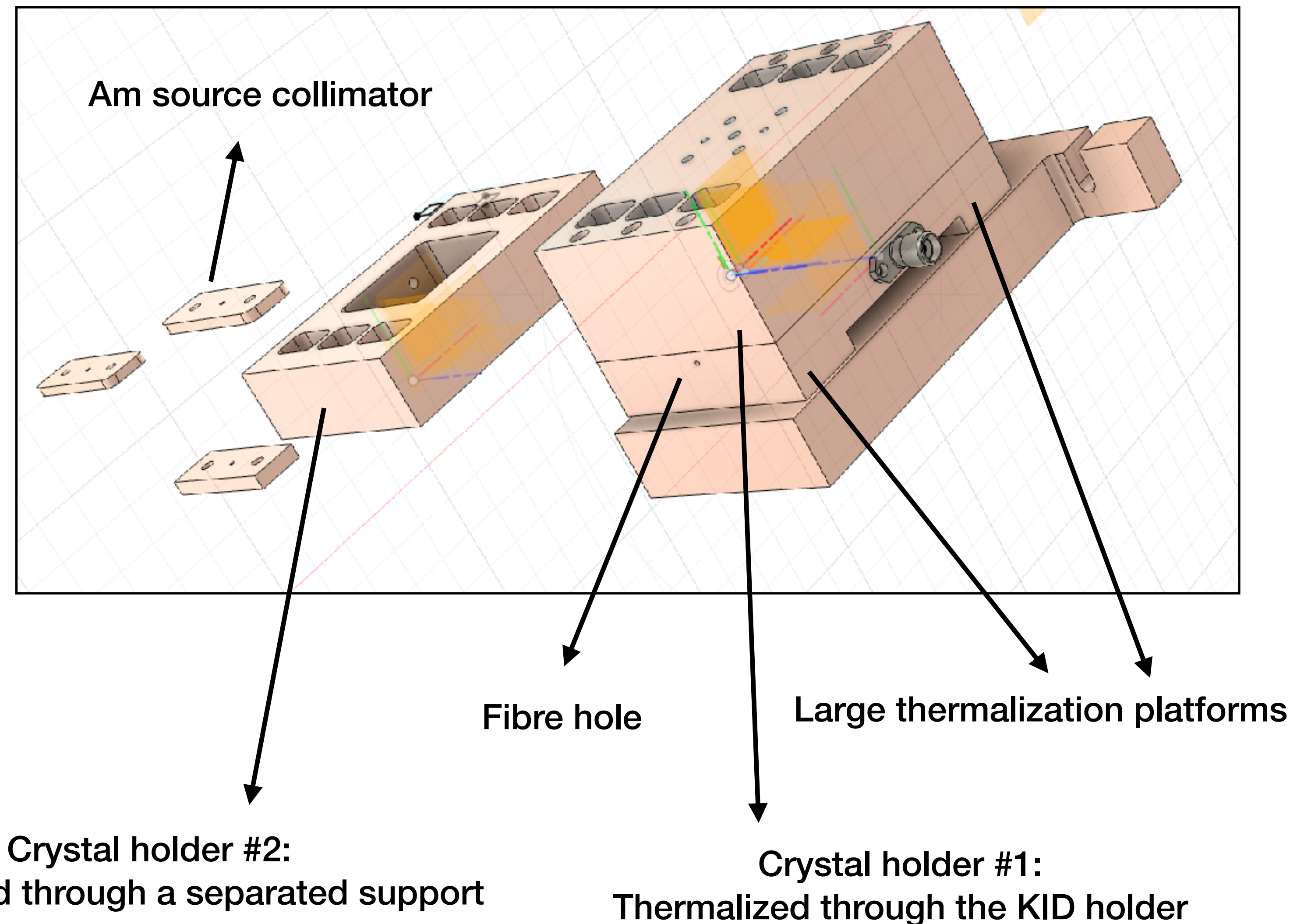


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3

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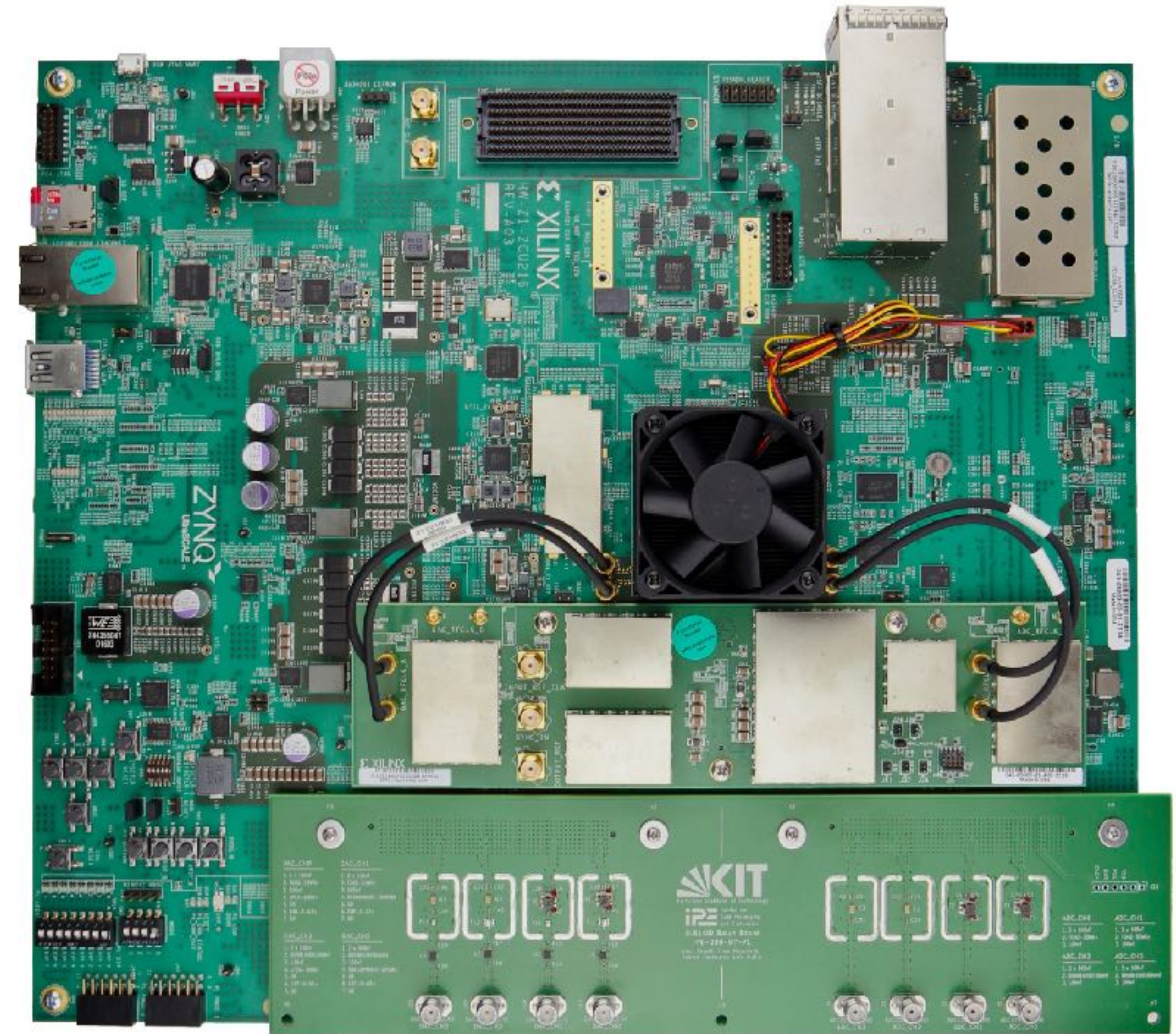


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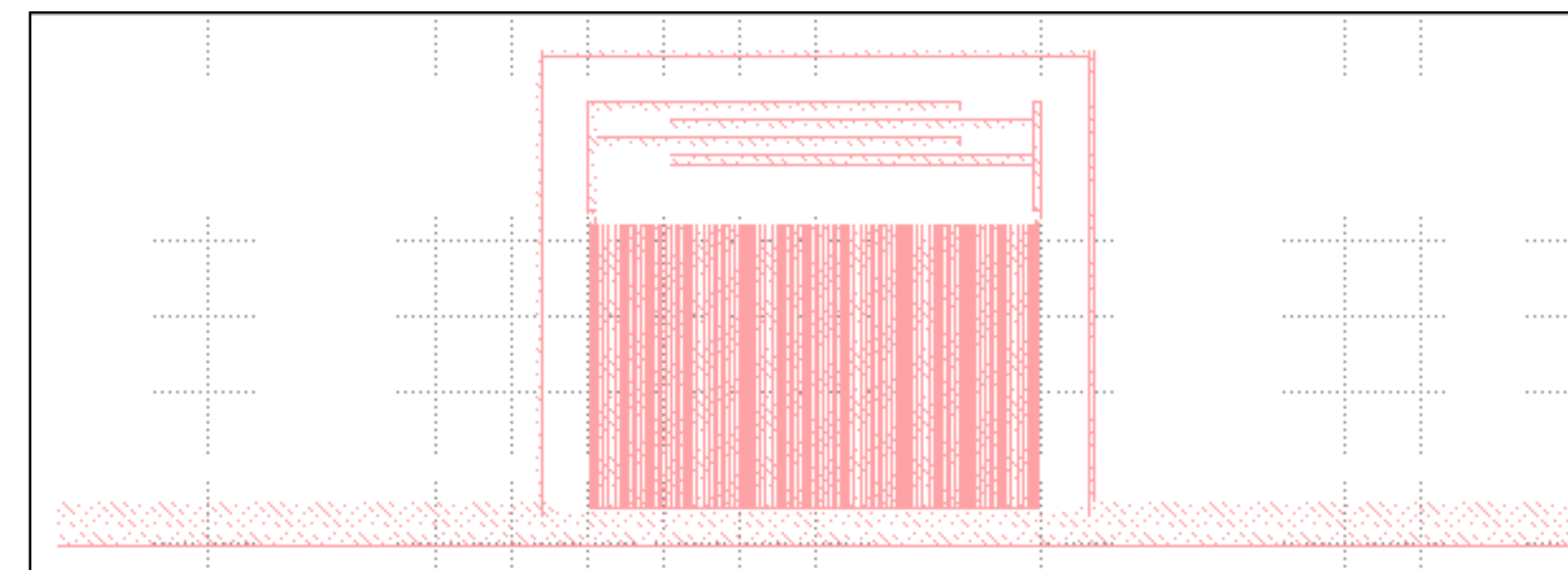
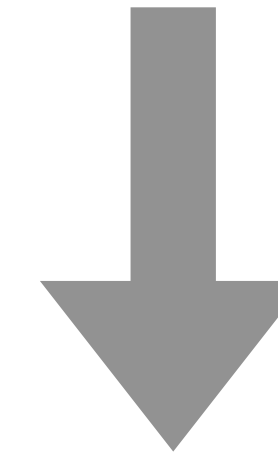
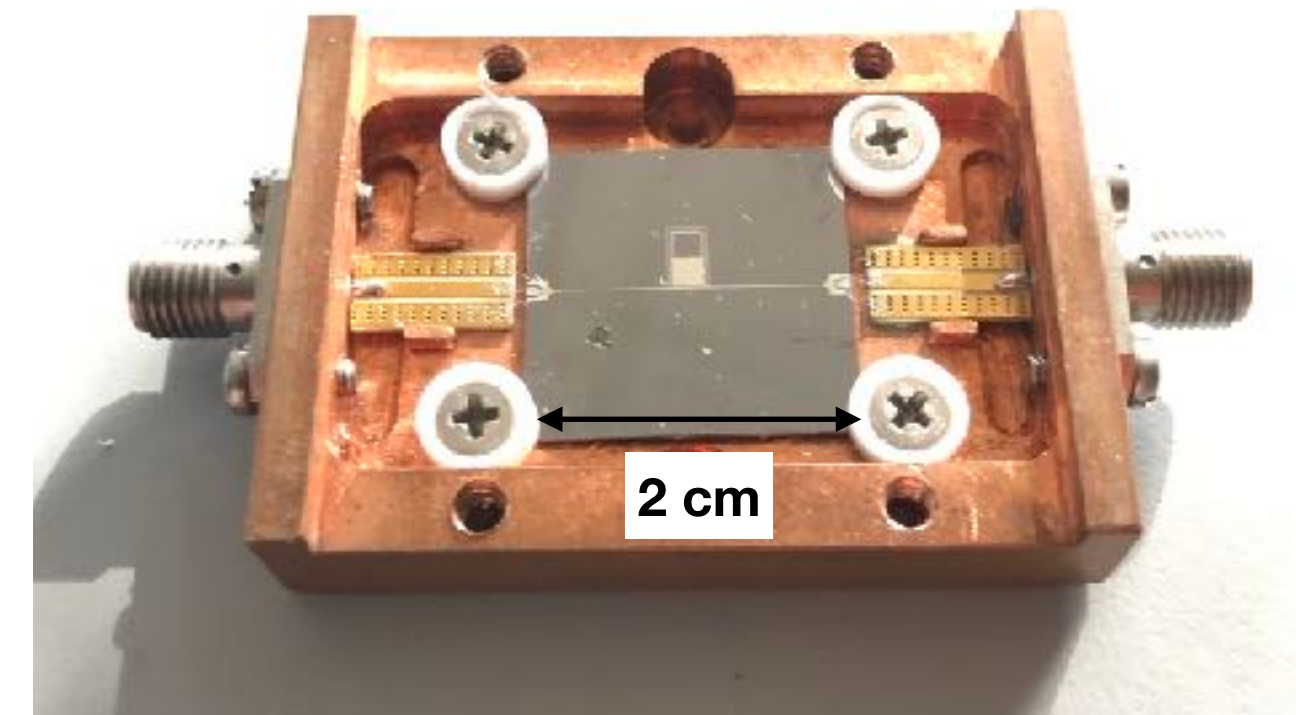


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5

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Veto demonstrator

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Idea:

- Minimal veto system that can be integrated into the demonstrator

Design:

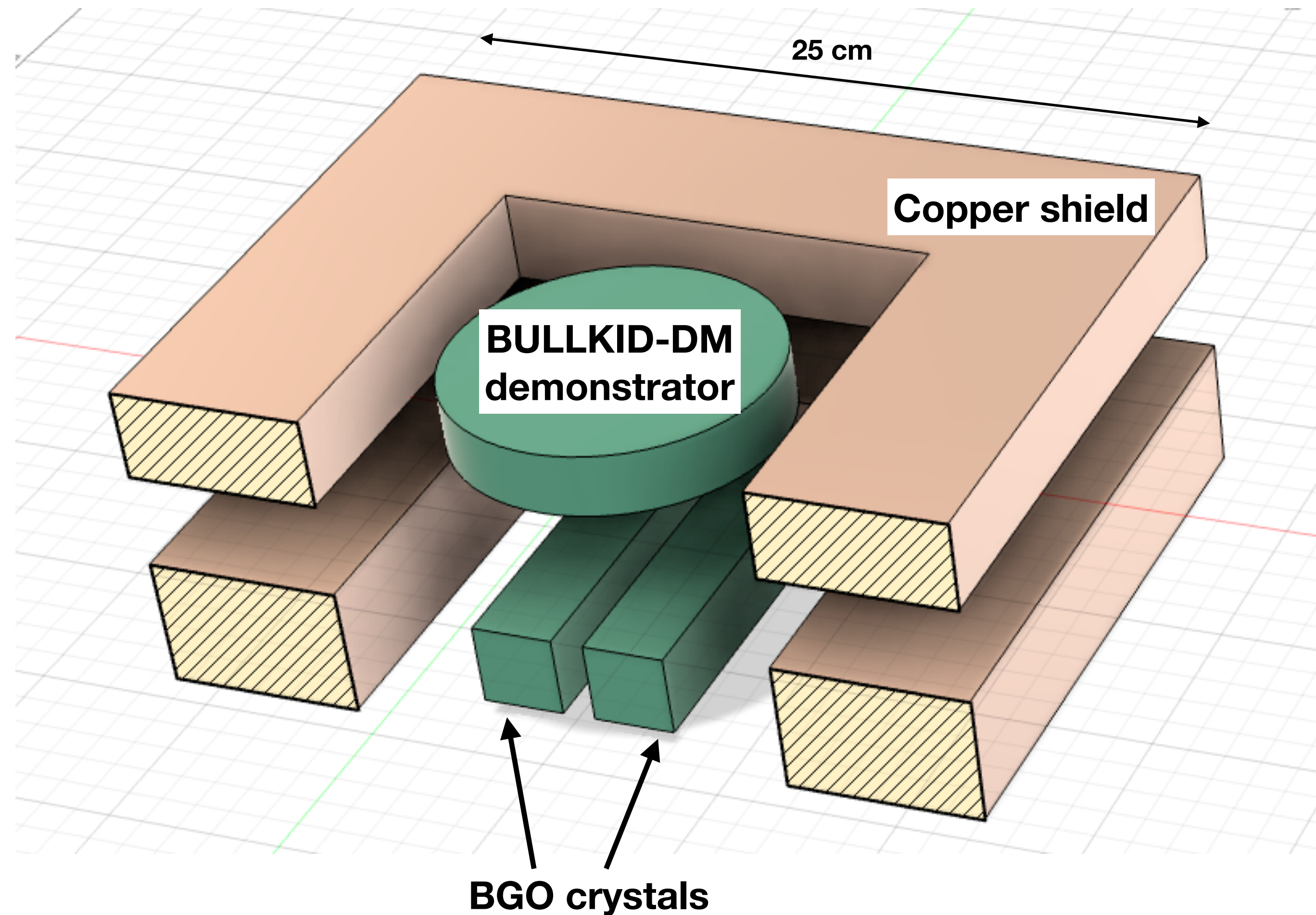
- Brainstorming phase:
 - 2 BGO crystals (2.5x2.5x10) cm³

Crystals procurement

- Quotation: ~1200 USD each
- Order to be completed soon.

To do:

- Ultimate design
- Test the system in Pisa
- Asses BGO activity



Thank You

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