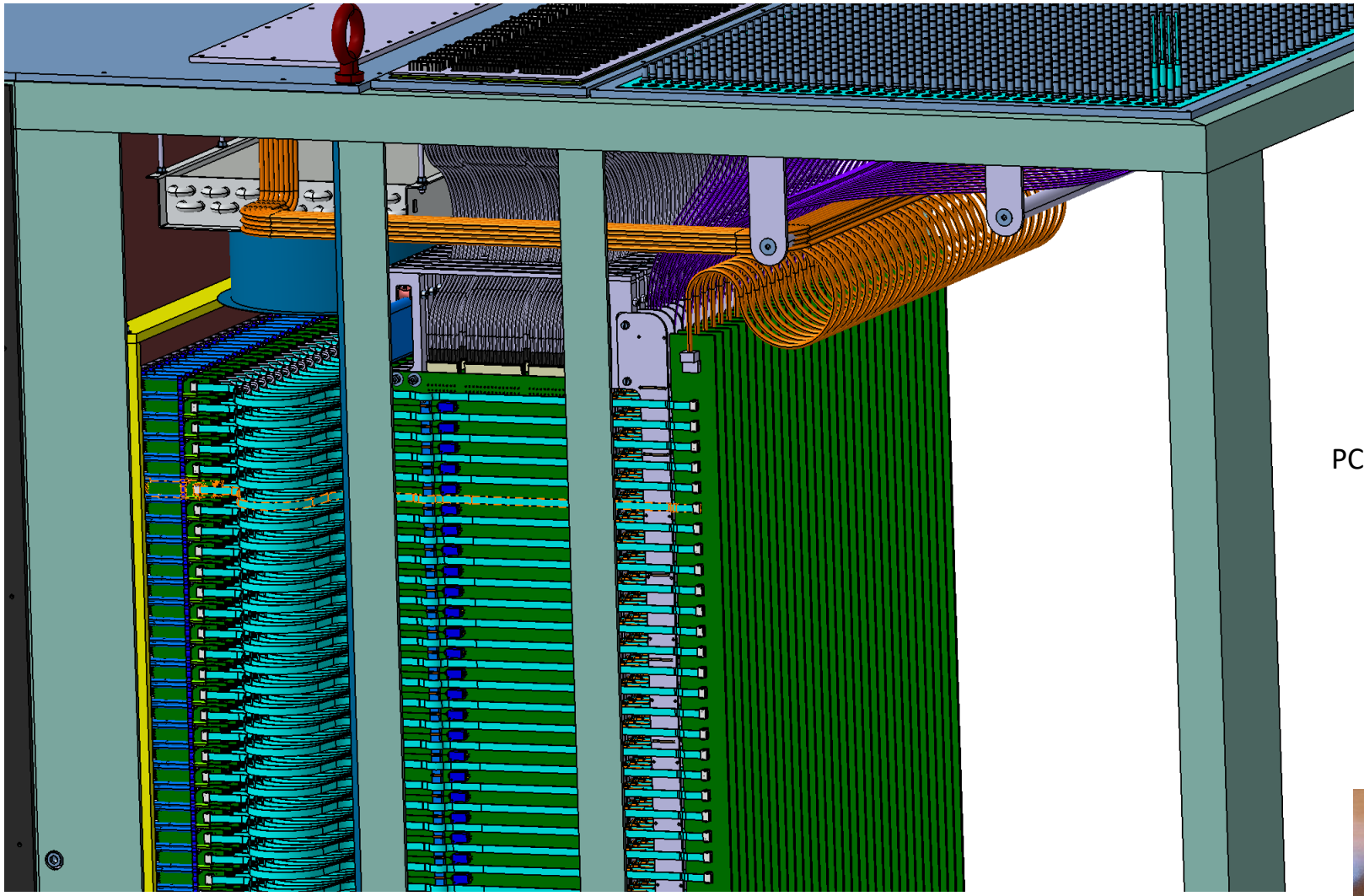
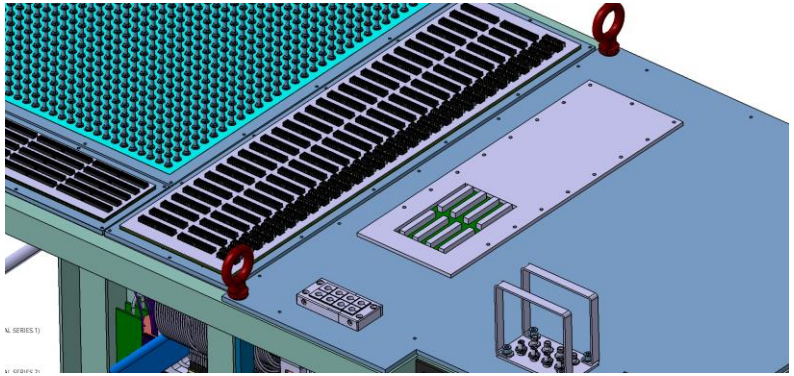
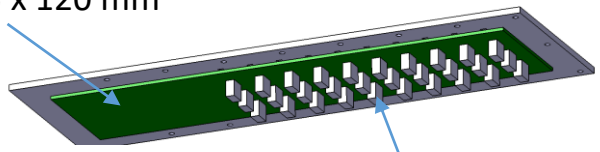
Low Voltage cables

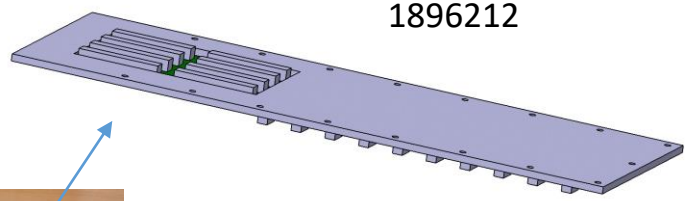




PCB : 465 x 120 mm

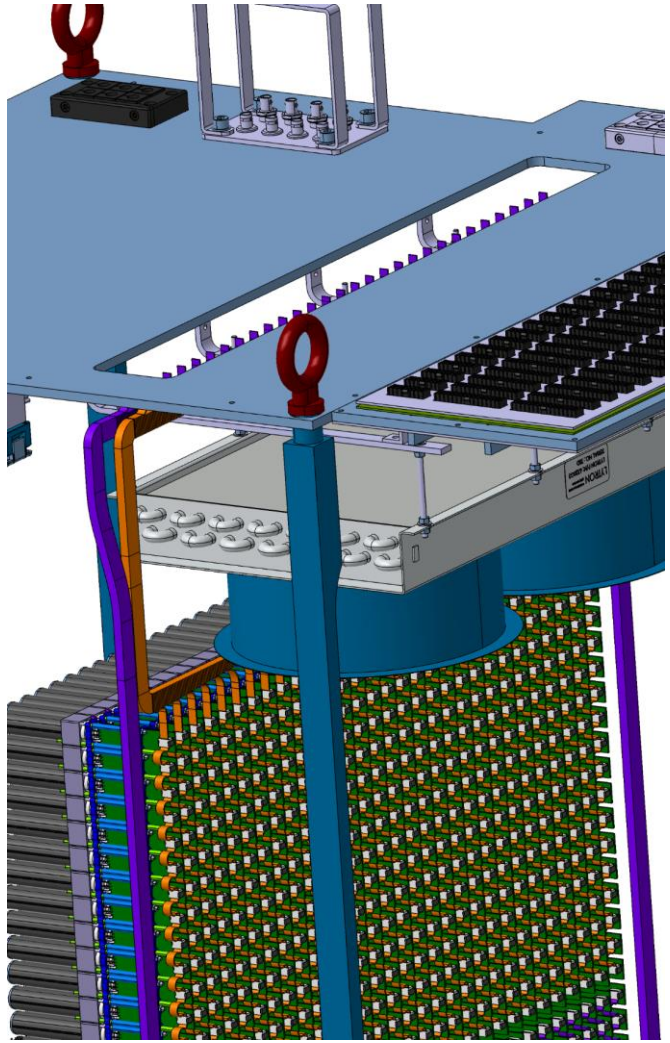


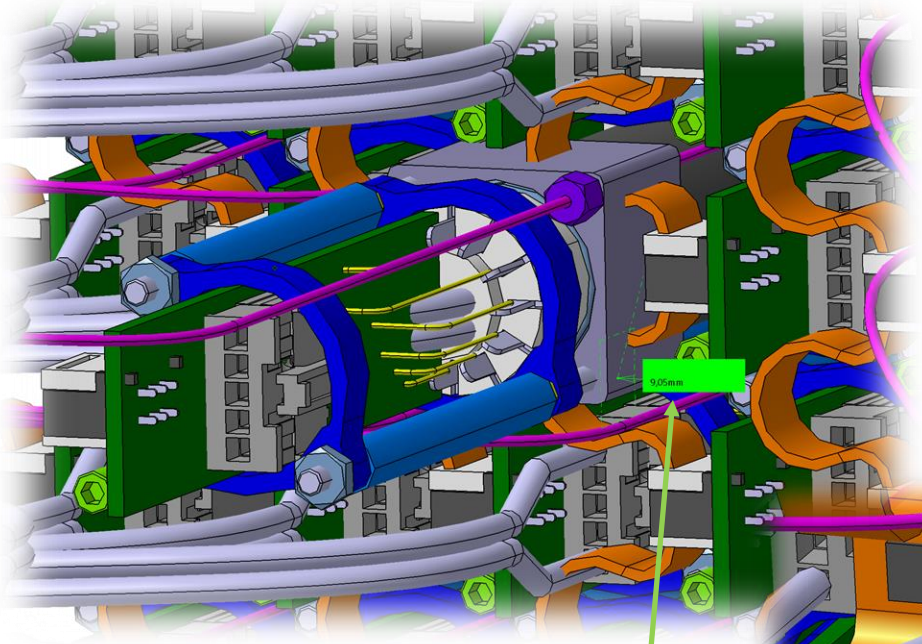
30 connectors Molex 1896212

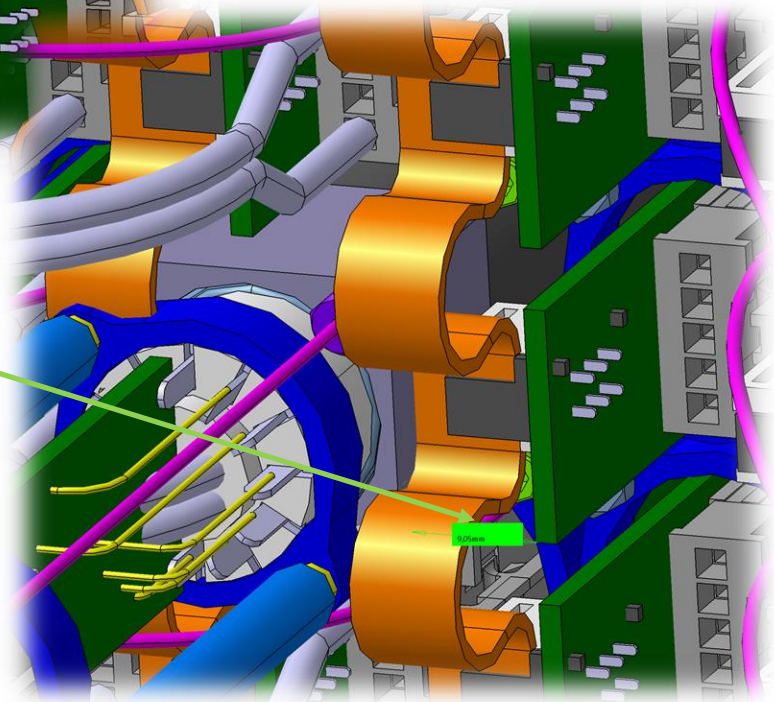


8 connectors 18 pins

Vertical chaining with flat cable option







9mm

Bogdan's suggestions for small connectors

Option 1:

2-87499-7

Enlarge

Images are for reference only
See Product Specifications

Mouser #:	571-2-87499-7
Mfr. #:	2-87499-7
Mfr.:	TE Connectivity
Customer #:	Customer #
Description:	Headers & Wire Housings 15 MODIV HSG SR MRKD
Datasheet:	2-87499-7 Datasheet (PDF)
ECAD Model:	3D Model

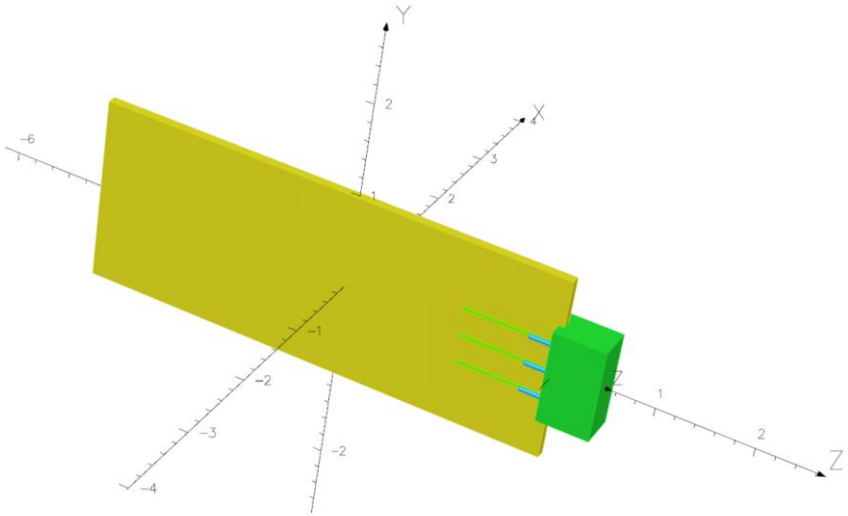
Download the free Library Loader to convert this file for your ECAD Tool. Learn more about ECAD Model.

More Information	Learn more about TE Connectivity 2-87499-7

Compare Product

Add To Project | Add Notes

Option 2:



Fernando’s recommendation

---------- Forwarded message ---------
From: **Fernando Barbosa** <barbosa@jlab.org>
Date: Wed, Aug 18, 2021 at 10:50 PM
Subject: RE: Info
To: Carlos Munoz Camacho <munoz@jlab.org>
Cc: Fernando Barbosa <barbosa@jlab.org>

Hello Carlos,

Sorry about the delay in my response.

For 4 cm of 24 AWG cable between adjacent dividers (about 3.4 Ohm), the total possible number of chained dividers is 8. This is limited by the power supply margins, which we need to keep low for minimum power dissipation. Without this limitation, but still with 24 AWG cable, the excellent power supply rejection ratio of the amplifier would allow doubling the number of dividers while keeping the effect to less than 1% linearity.

I recommend keeping the single cable per divider as you already have a good solution.

Please let me know what connector solution (connector part number and location) you have selected so I can proceed to the final design with the 20 mm longer PCB.

Best regards,
Fernando

Proposed connector position in modified voltage divider