SNIA
SFF TWG
Technology Affiliate

New Project Proposal: SFF-TA-1016

Originally Presented: October 27, 2023

Updated Scope Presented: December 01, 2023

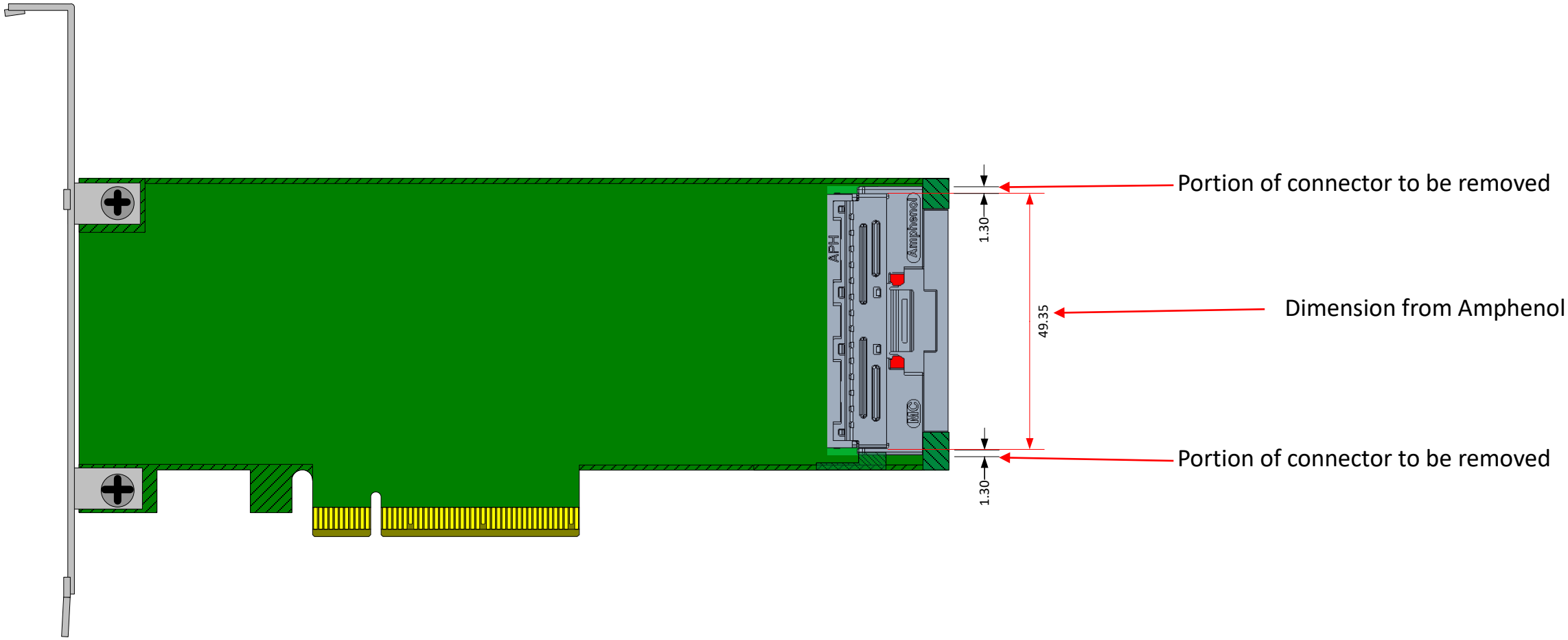
Editor: Paul Coddington [Amphenol]

Supporters: Jason Stuhlsatz [Broadcom], Michael Gregoire [Dell], Glen Hanna [Lenovo], & Calbert Lo [Supermicro]

New Project Proposal: SFF-TA-1016, updates to Rev 1.1

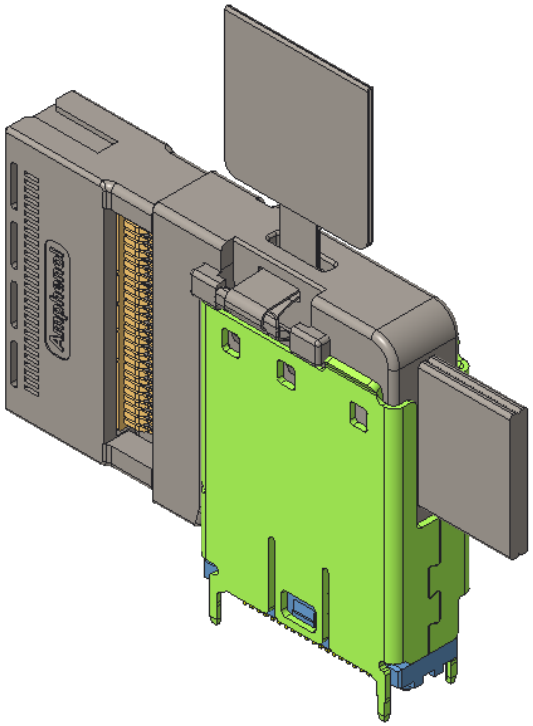
- Due to changes in PCIe add-in card keep out zones, two 74 contact x8 right angle connectors with mating no anti-skew side flange straight plugs will no longer fit along the short edge of a low-profile PCIe card. Alternatively, a 148 contact x16 right angle connector will still fit. However, the mating plugs with the anti-skew side flanges will violate the new keep out zones. So, a new no anti-skew side flange version of the plugs is needed.
  - Add a no flange version of the 148 contact plugs, just like was done previously for the 74 contact version plugs.
  - Since we are adding a no anti-skew side flange version for yet another size plug, we might as well add a no anti-skew side flange version to all the remaining sizes in order to possibly prevent the need for future revisions of this specification. So, we will add a no anti-skew side flange version for the 38 contact plugs and 124 contact plugs as well, in case they are ever required.
- Also, adding an EDSFF solution to the current configurations.
  - Add E1 1C plug & mating vertical receptacle connector
  - Add E3 1C plug, E3 2C plug, & mating vertical receptacle connector
- Editor: Paul Coddington
- Supporters:
  1. Amphenol
  2. Broadcom
  3. Dell
  4. Lenovo
  5. Supermicro

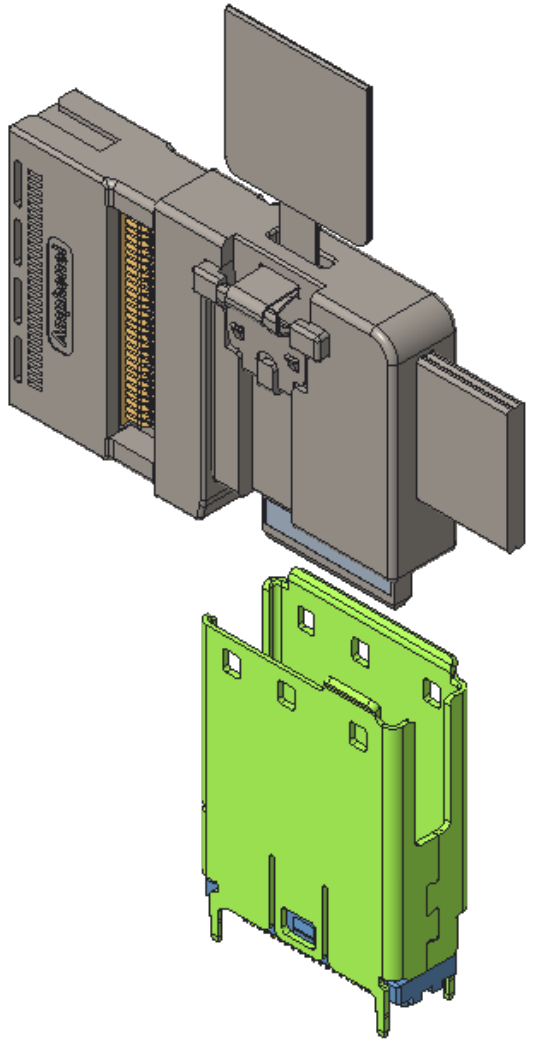
Sample changes to be made to the current 148 contact version plugs



New Hybrid EDSFF Application:

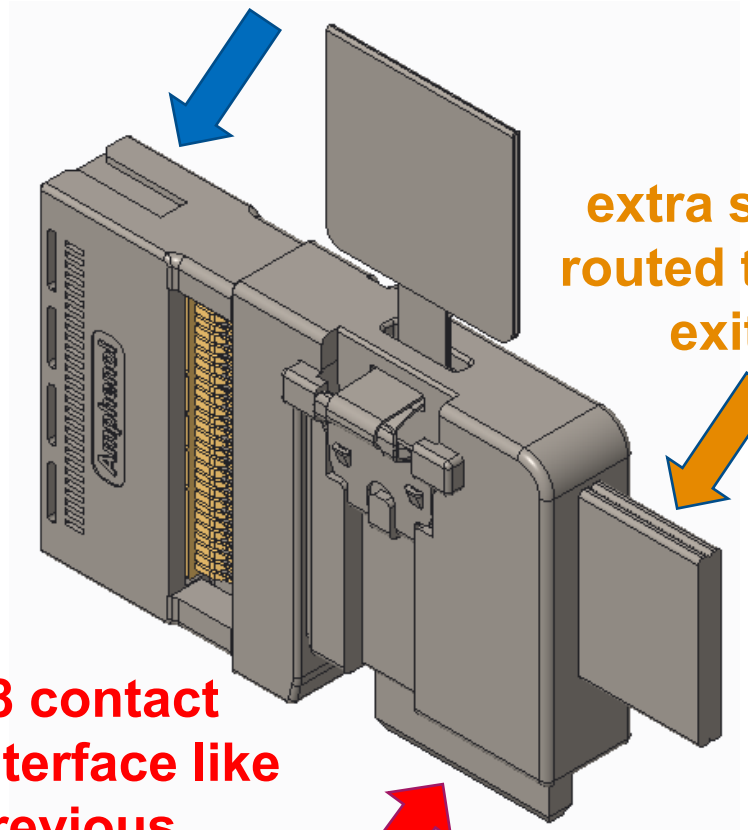
E1 1C plug





Plug Connector:
E1 1C plug

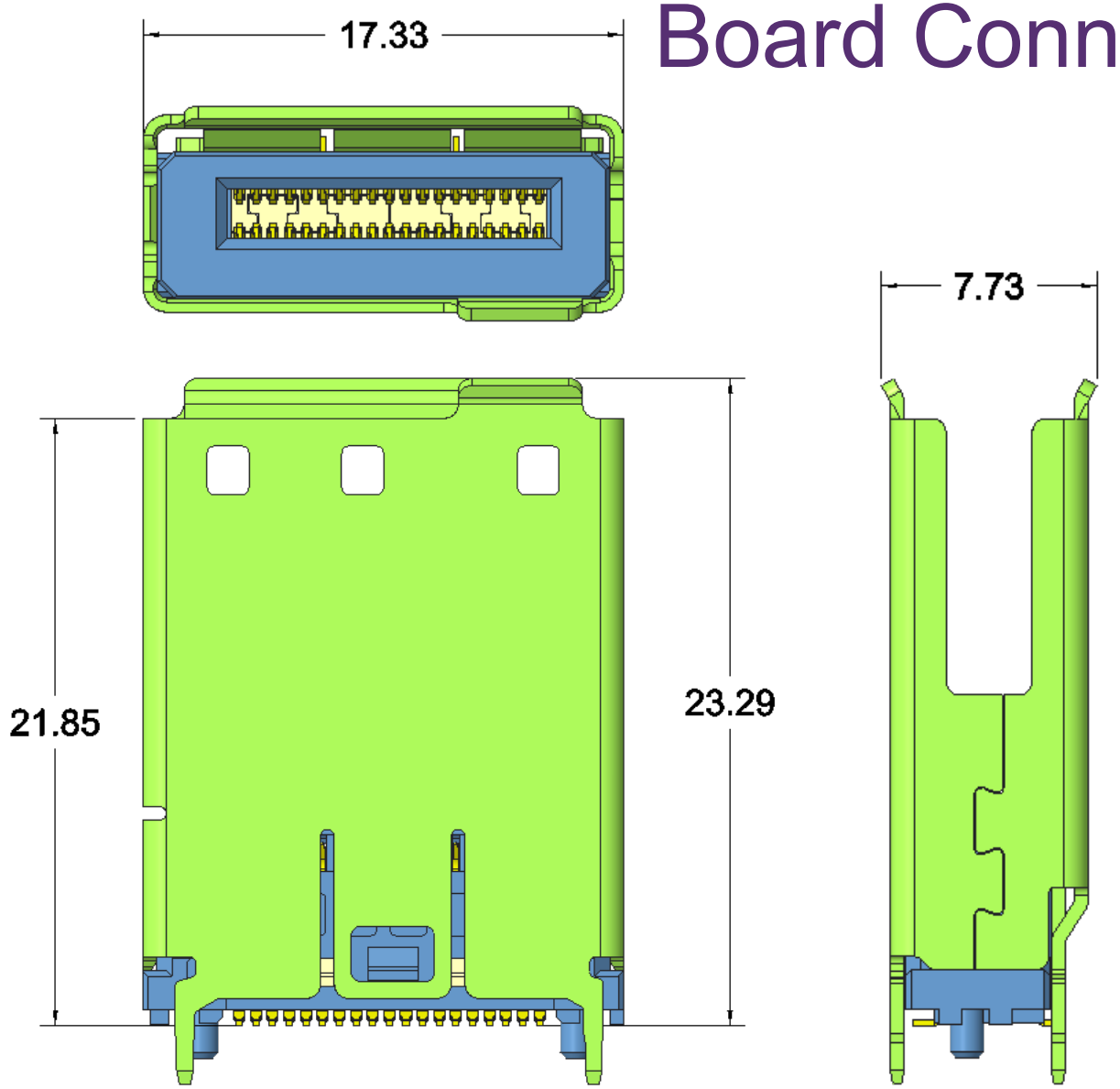
side exit to an EDSFF receptacle



extra signals routed to side exit cable

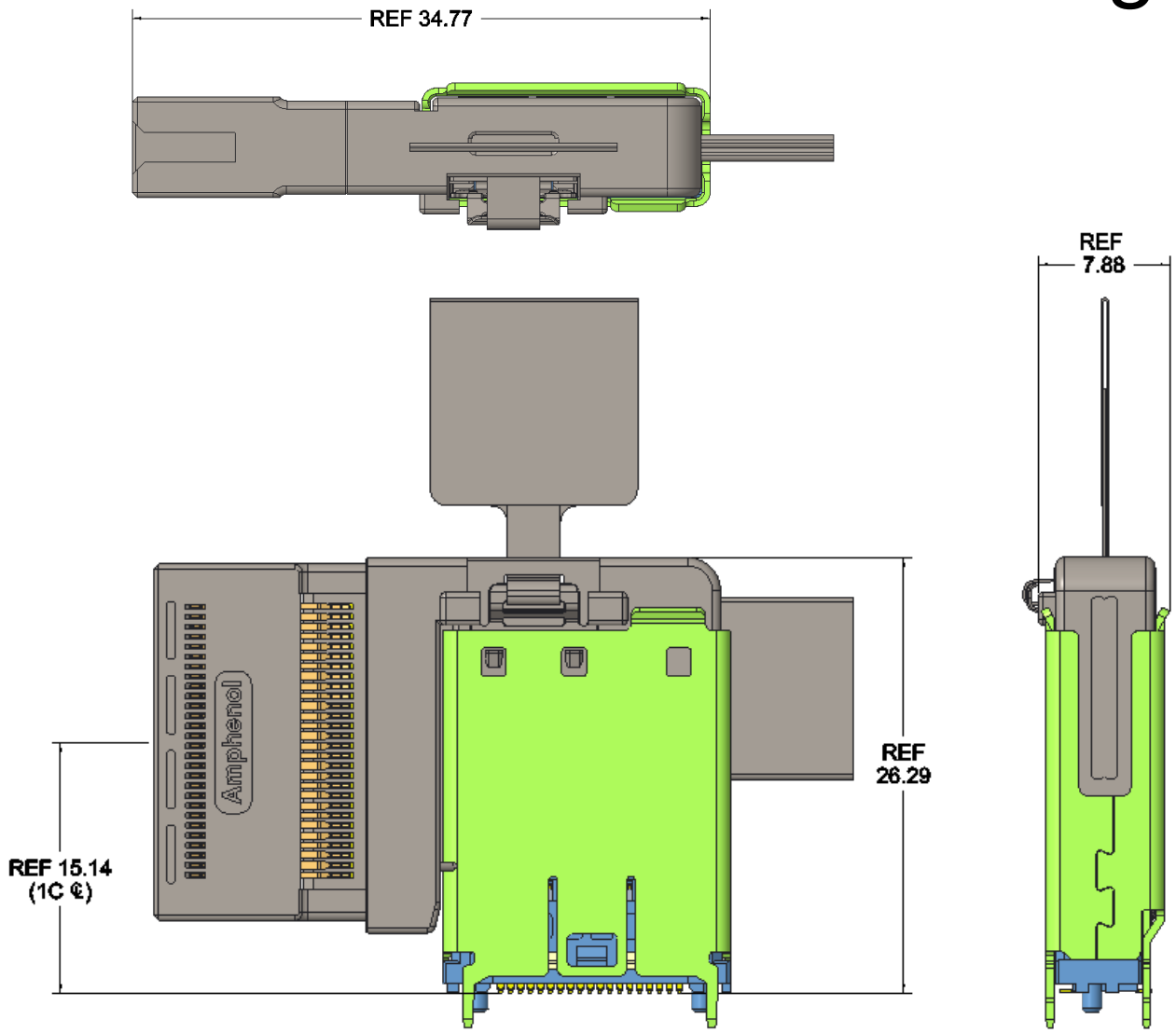
38 contact interface like previous SFF-TA-1016

Board Connector :

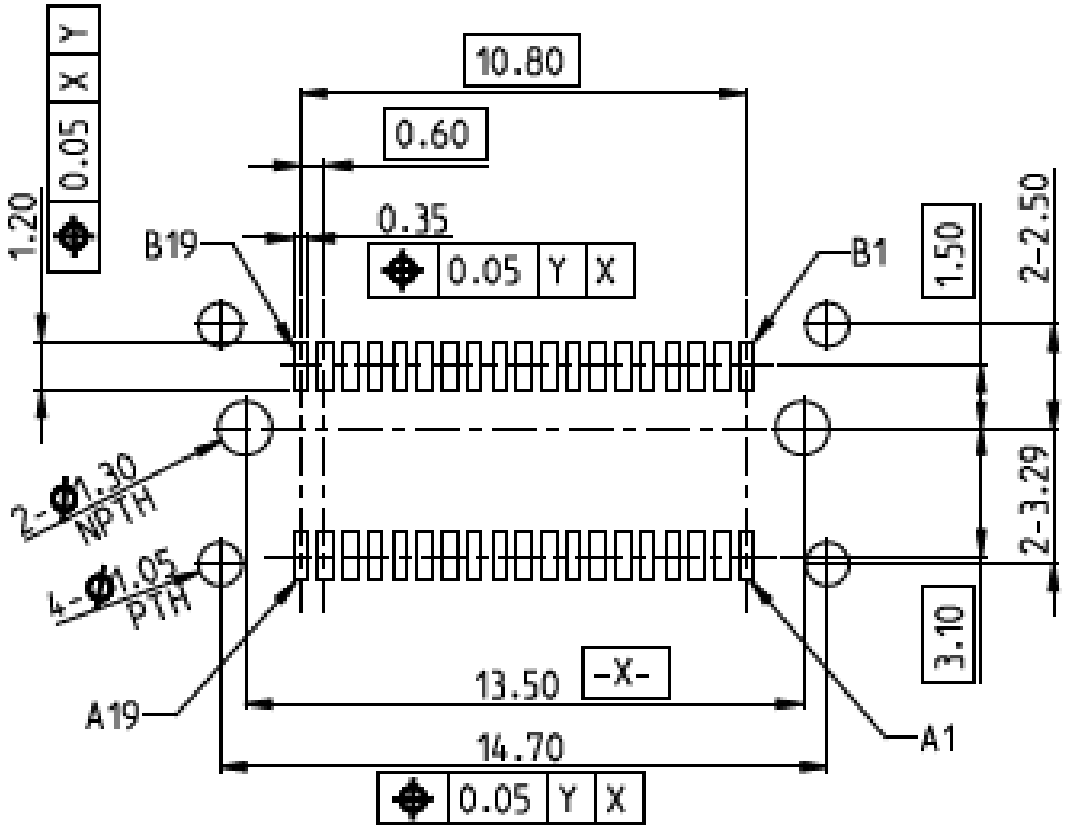


Mating Dimensions:

Mating with E1 1C plug



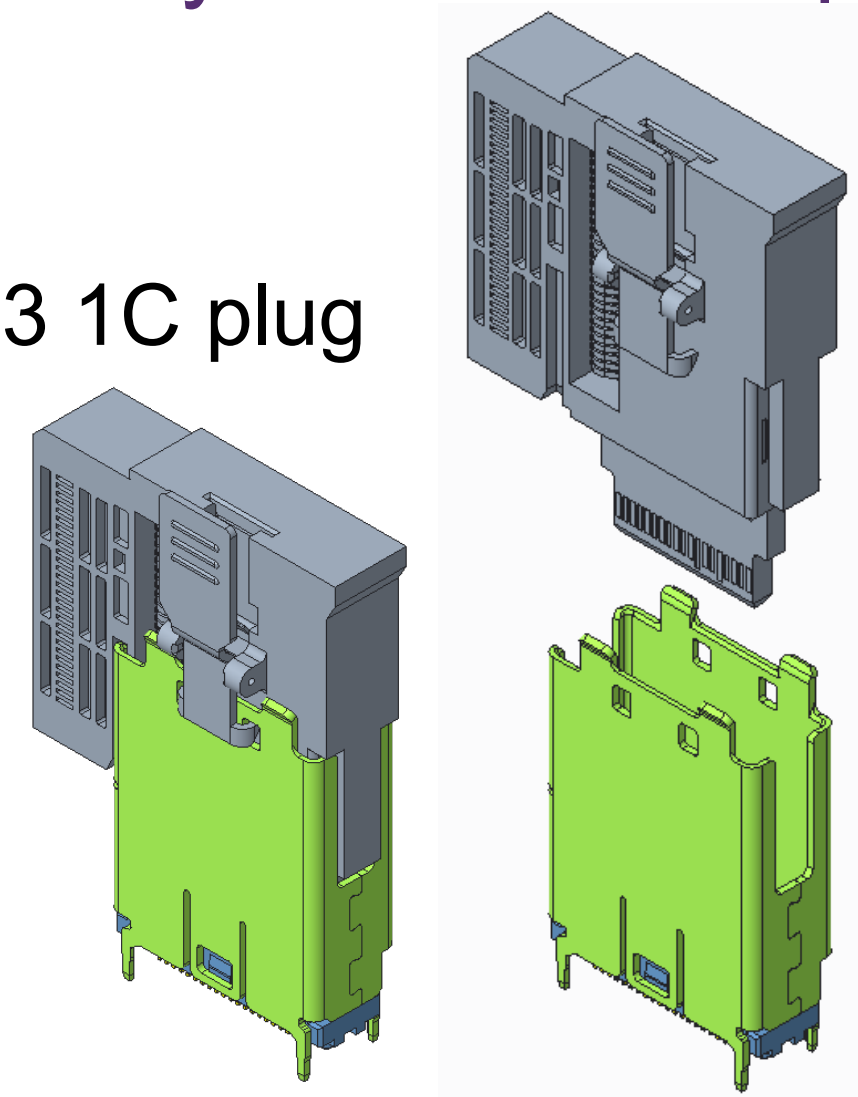
Board Connector Footprint:



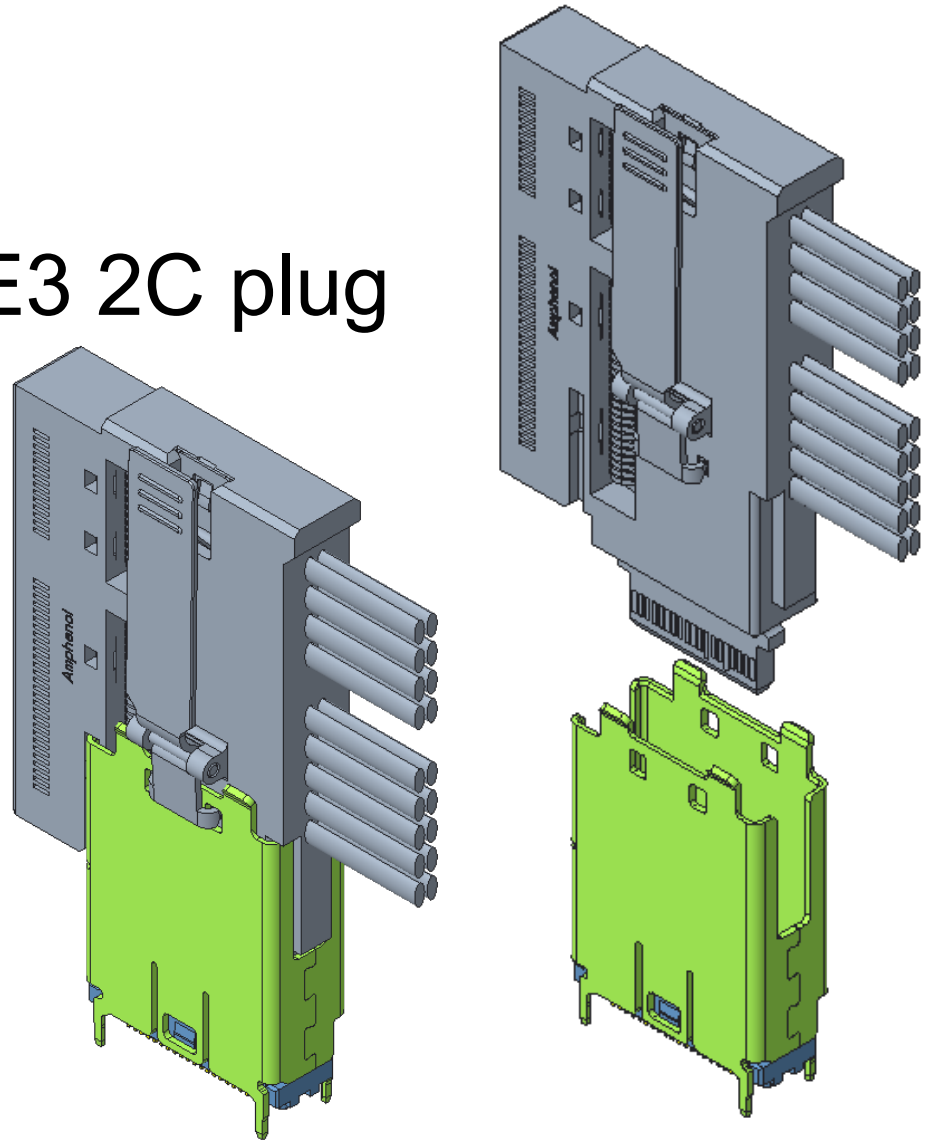
RECOMMENDED PCB LAYOUT
(GENERAL TOLERANCES :+/-0.05)

New Hybrid EDSFF Applications:

E3 1C plug



E3 2C plug

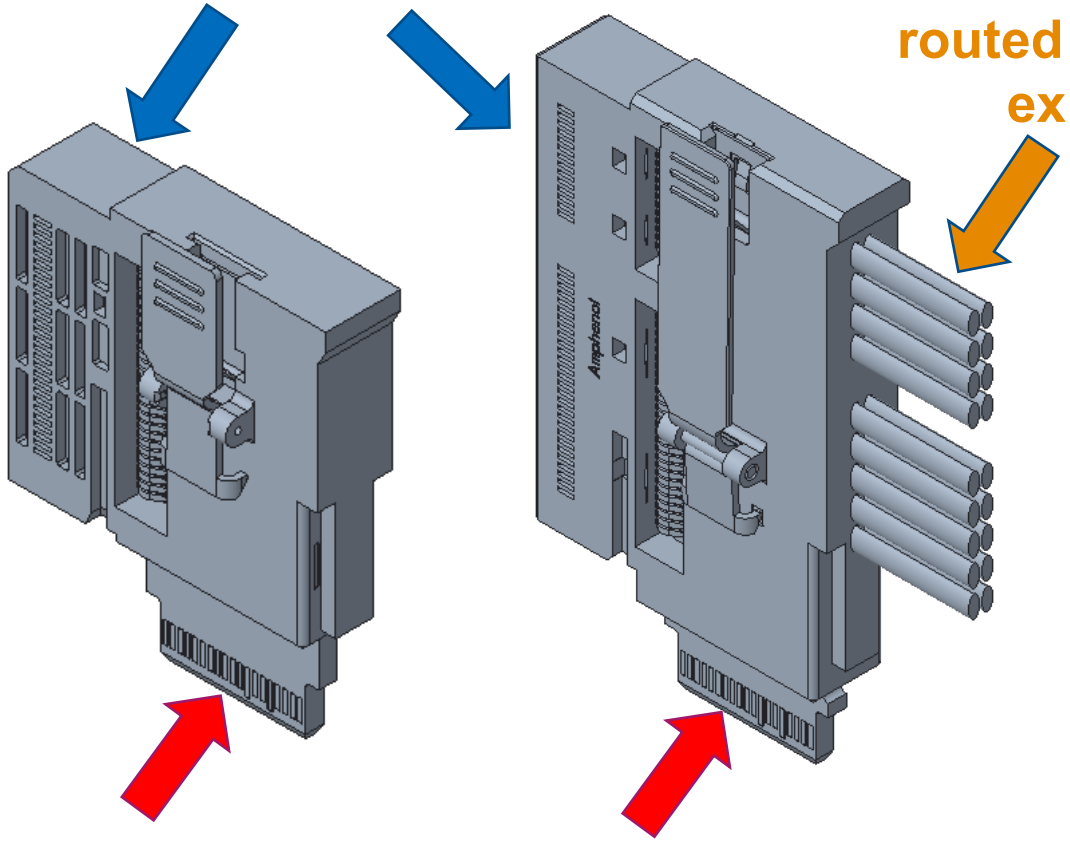


Plug Connector:

E3 1C plug E3 2C plug

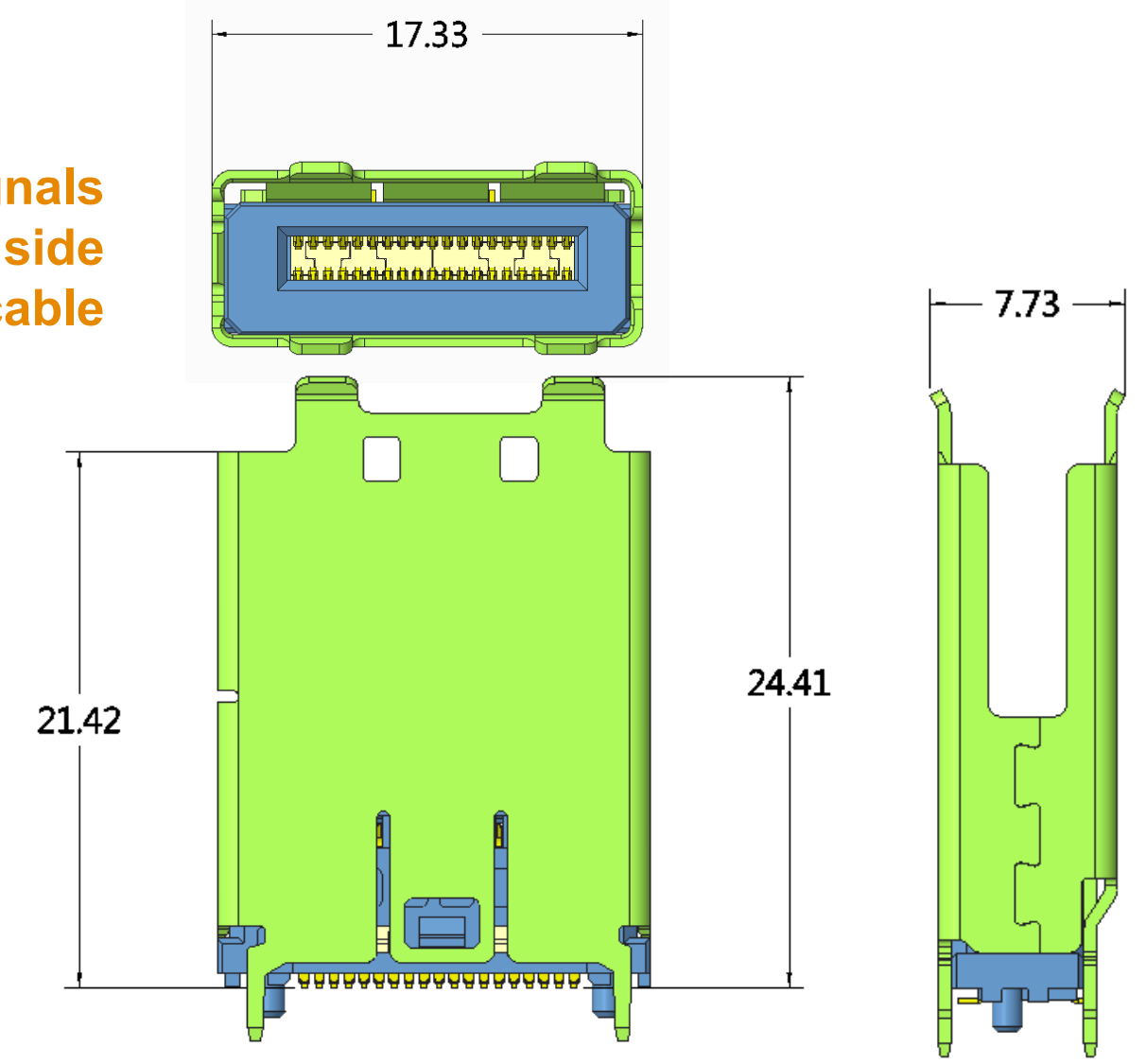
side exit to an EDSFF receptacle

extra signals routed to side exit cable



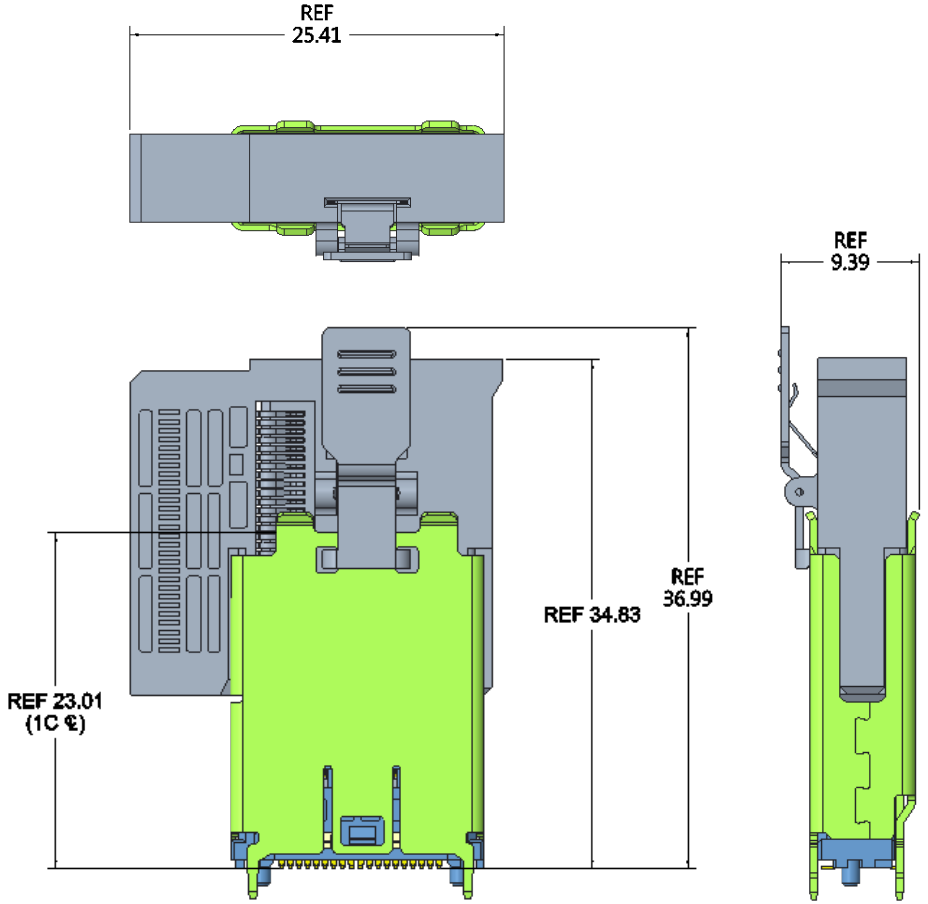
38 contact interface like previous SFF-TA-1016

Board Connector :

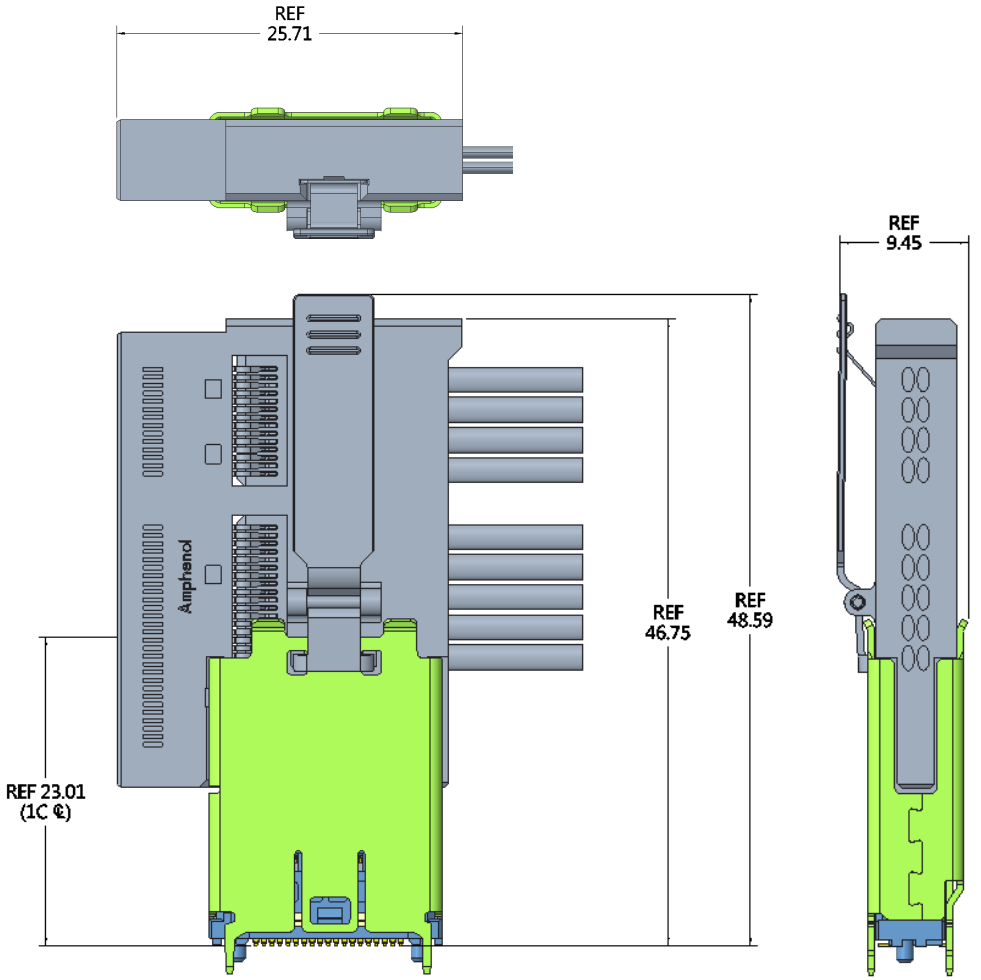


Mating Dimensions:

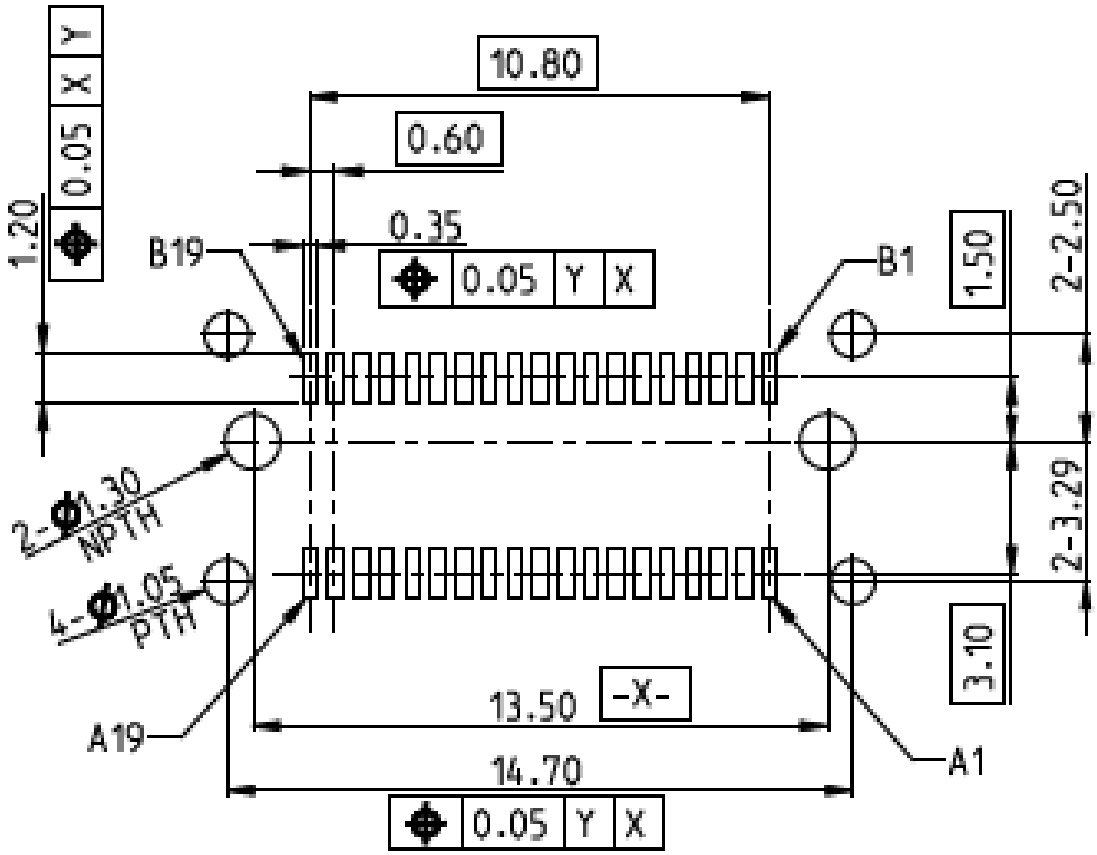
Mating with E3 1C plug



Mating with E3 2C plug



Board Connector Footprint:



RECOMMENDED PCB LAYOUT
(GENERAL TOLERANCES :+/-0.05)

Updated New Project Proposal: SFF-TA-1016, updates to Rev 1.1

- IP Declaration:
  - NOTE: The document will undergo a new IP disclosure period once published as a new Rev 1.2 per the SNIA SFF Process Guide
- Optional: General timeline for project completion (estimates only)
  - Initial Project Start Approval: October 27, 2023
  - DRAFT Revision 1.1.1 by November 6, 2023
  - Review Ballot end by December 7, 2023
  - Expand scope of the project proposal: December 1, 2023
  - DRAFT Revision 1.1.2 by December 4, 2023
  - End current Review Ballot, Restart with the new DRAFT, & new Review Ballot to end by January 3, 2024?
  - Comment Resolution & updated revision estimated by January 12, 2024
  - Approval Ballot end estimated by February 14, 2024
  - Comment Resolution & final Published revision estimated by February 23, 2024
  - IP Declaration completed estimated by April 23, 2024?

