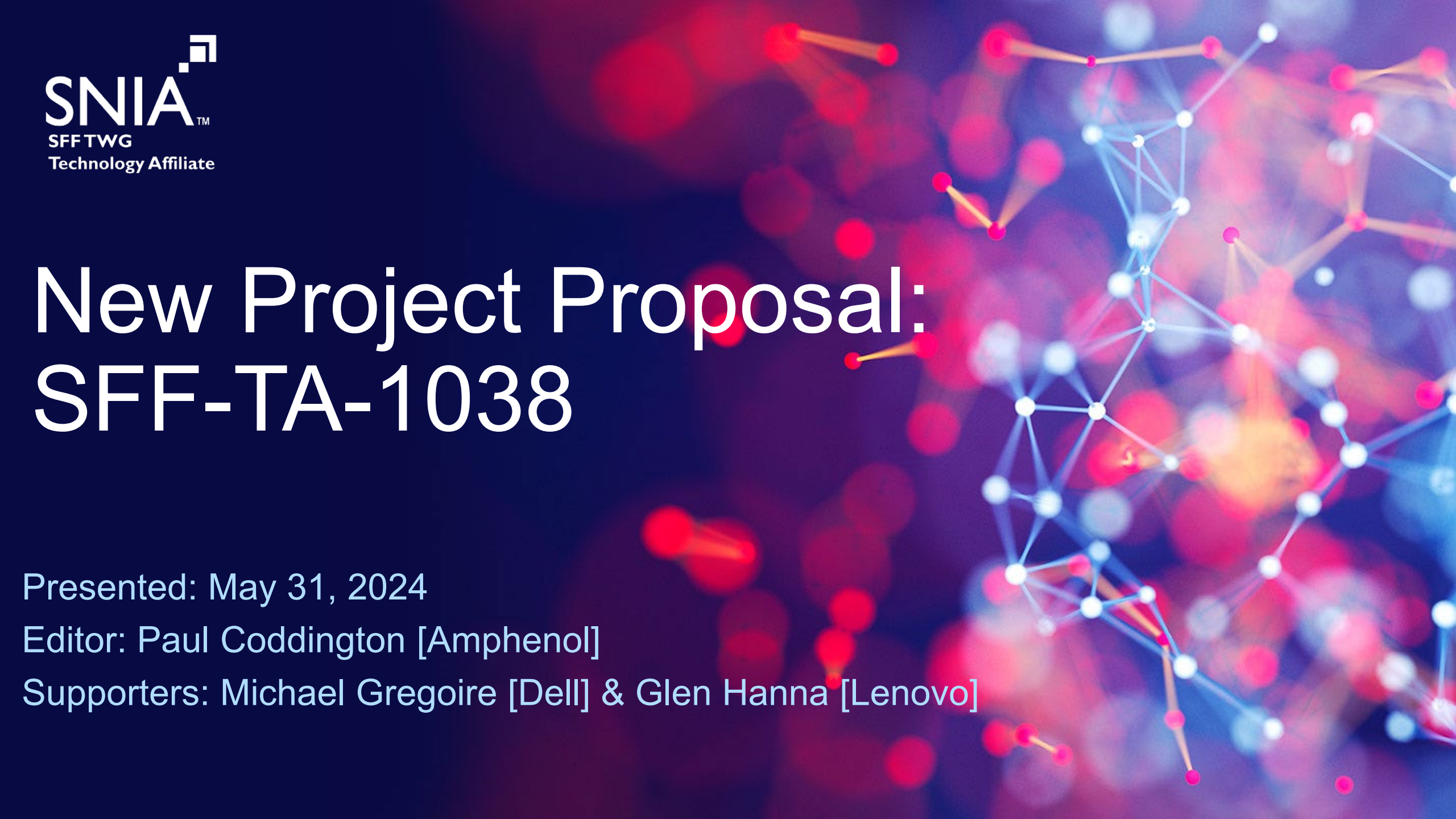
SNIA
SFF TWG
Technology Affiliate

New Project Proposal: SFF-TA-1038

Presented: May 31, 2024

Editor: Paul Coddington [Amphenol]

Supporters: Michael Gregoire [Dell] & Glen Hanna [Lenovo]



New Project Proposal: Document Number Needed

New assigned Document Number will be SFF-TA-1038

- **To Provide next generation cable and connector form factor solution to meet higher speed, higher density, and low profile. Supporting near the chip solution with extreme space limitation with low profile form factor.**

Features:

- **Enhancing Flexibility in System Design**
  - *Usually, system mechanical structure is limited due to the expansion mechanism that relies on conventional connectors and sockets on the PCBA. Introducing this solution enhances the flexibility for the system with a breakthrough in low profile designs by using the high density and natural characteristics of the cable solution.*
  - *The Dual Exit design helps customers better organize cables and maintain a certain height when multiple connectors are placed at the same time.*
- **Improved Performance in Signal Integrity**
  - *Conventional PCB routings reaches Signal Integrity performance limitations in higher speed applications. With this next generation solution, it provides perfect replacement to transmit high speed signal yet remains digital signal to its original analog protocol.*

- Editor: Paul Coddington
- Supporters:
  1. Amphenol
  2. Dell
  3. Lenovo

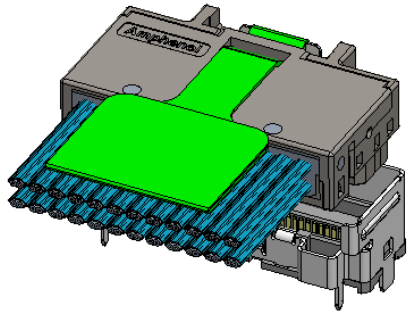
Specification:

Form Factor:				
Pitch	0.6mm			
Cable Plug Type	Straight	Reverse Straight	Right Angle	Reverse Right Angle
Board Connector Type	Vertical			
Position	X8(74P)			
Cable Gauge Supported	29-34 AWG			
Electrical Specification:				
Targeted Speed	PCIe Gen6 and beyond (also compatible with previous generations)			
Impedance	85Ω			
Lanes Supported	Max. 24 Lanes			
Max. Current Supported	0.5A per pin			

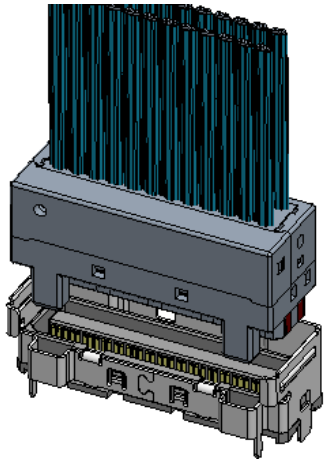
Applications:

Swift STD Application

Mating **RA** cable

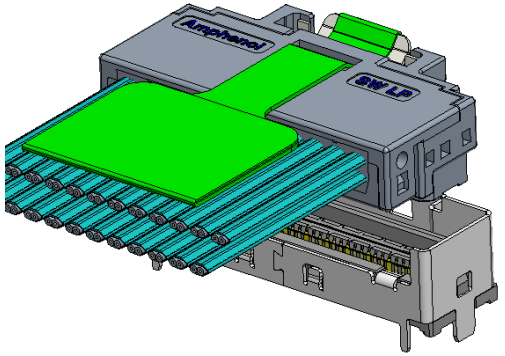


Mating **STR** cable

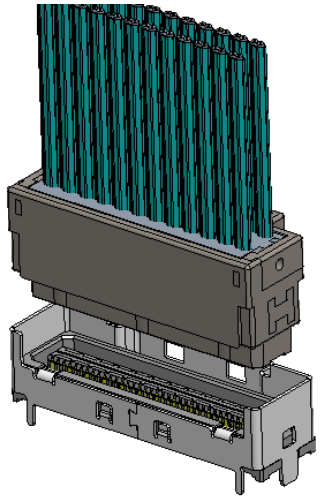


Swift LP Application

Mating **RA** cable

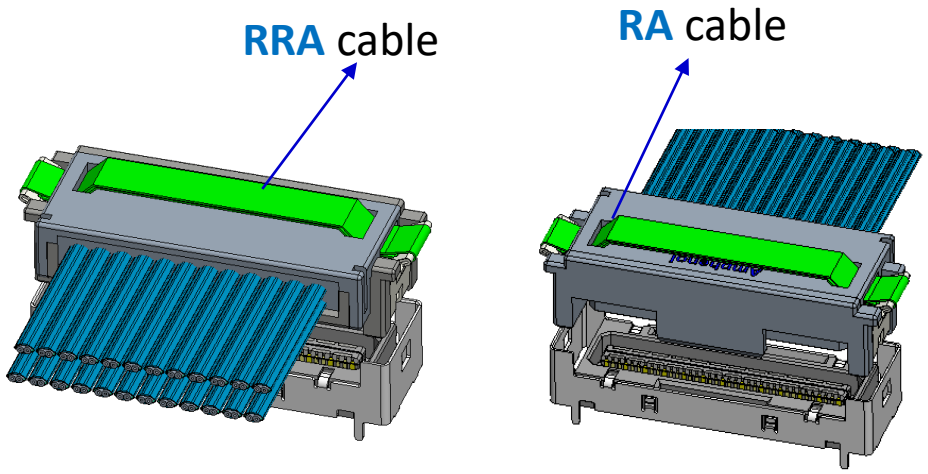


Mating **STR** cable



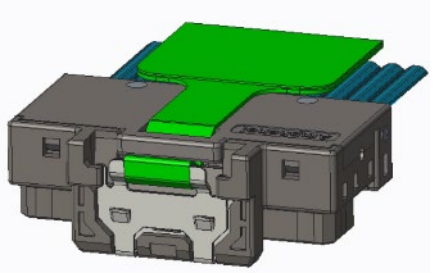
Swift LP DE Application

Mating **RA/RRA** cable

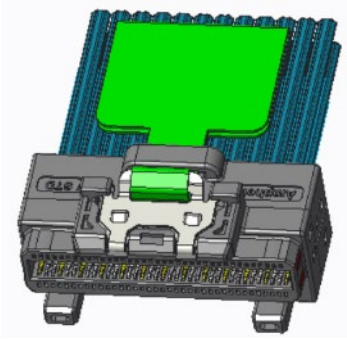


Plug Connector:

Swift standard series

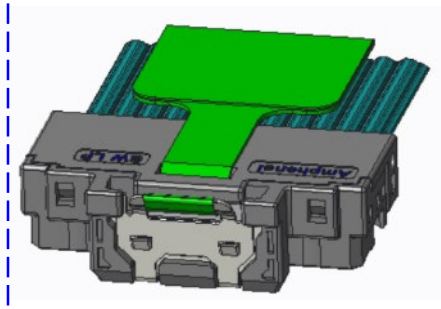


Swift **RA** Plug

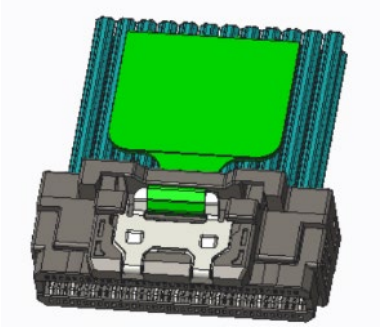


Swift **STR** Plug

Swift LP series

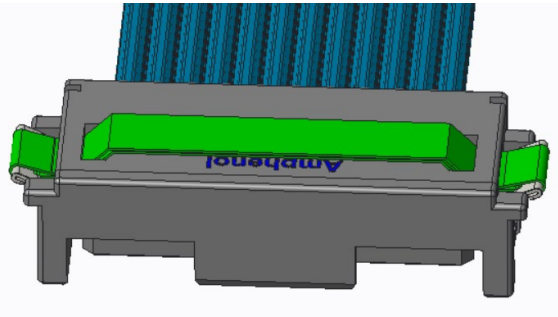


Swift LP **RA** Plug

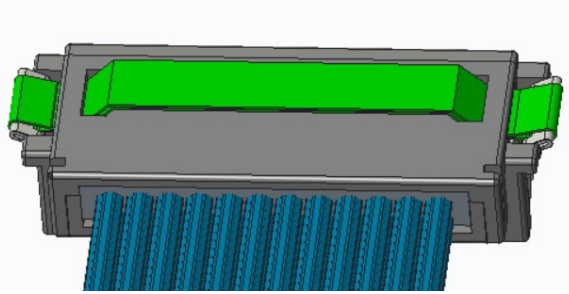


Swift LP **STR** Plug

Swift LP DE series



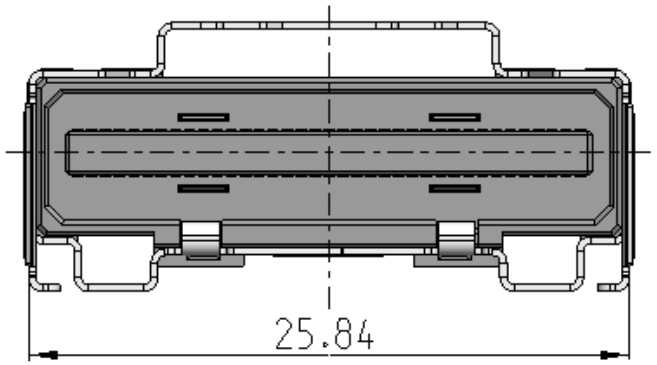
Swift LP DE **RA** Plug

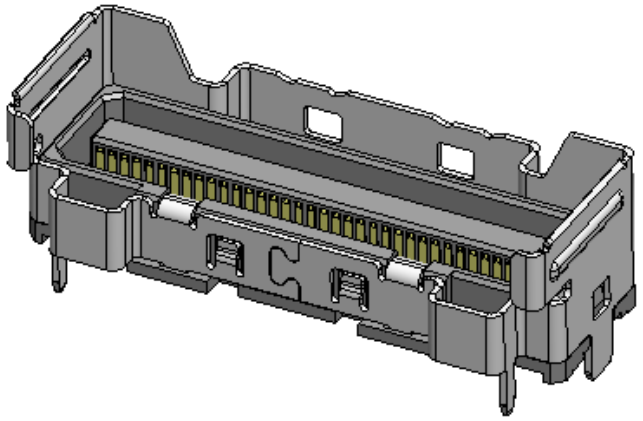


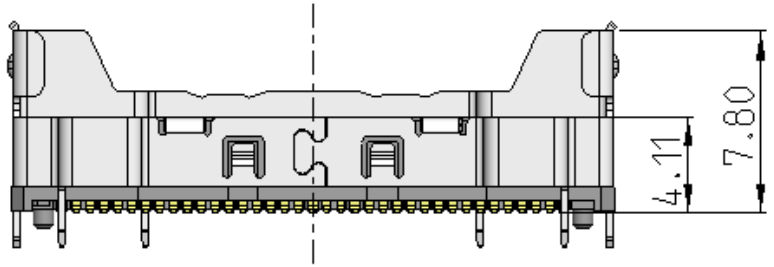
Swift LP DE **Reverse RA** Plug

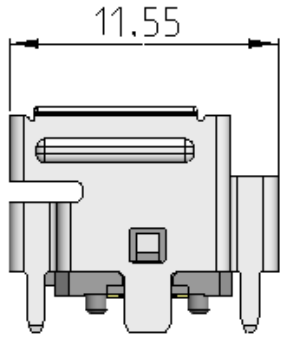
Board Connector :

Swift STD



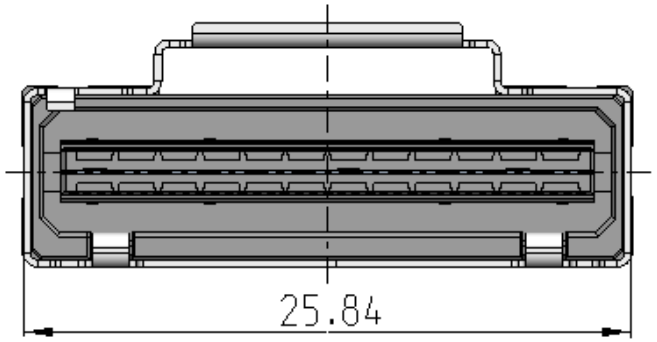


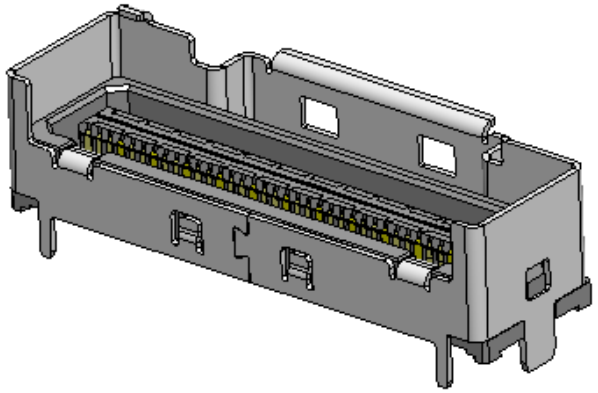


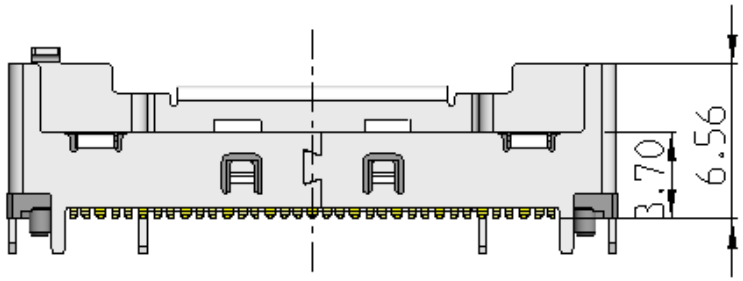


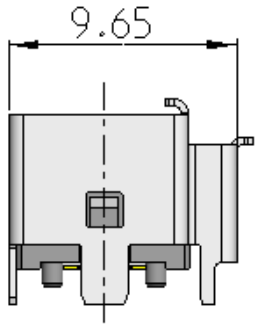
Board Connector :

SWIFT LP



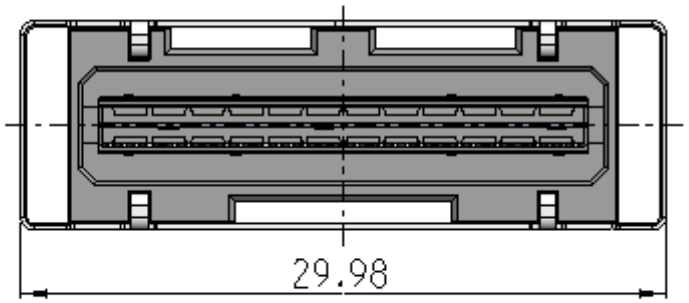


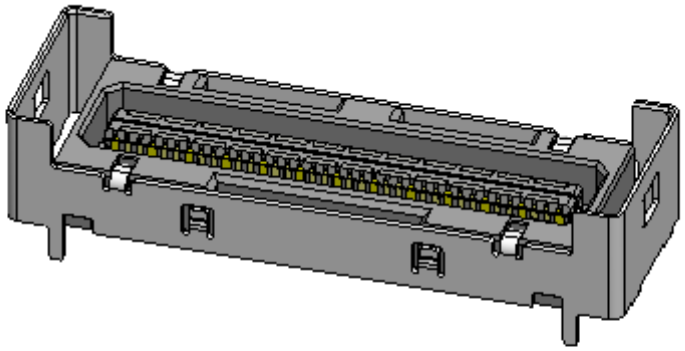


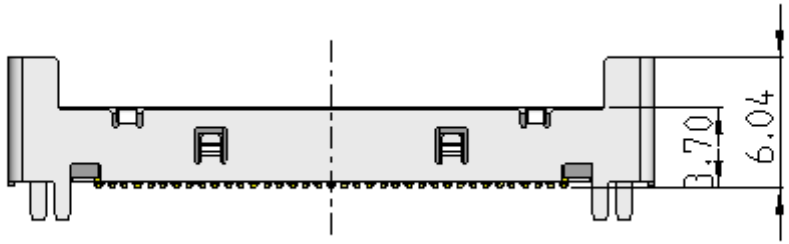


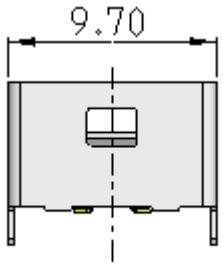
Board Connector :

SWIFT LP DE





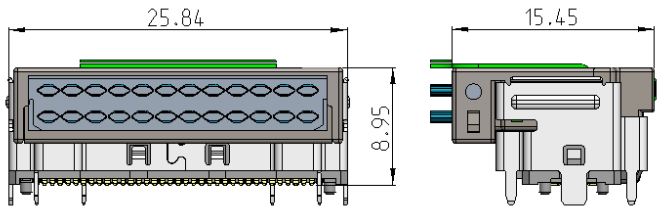




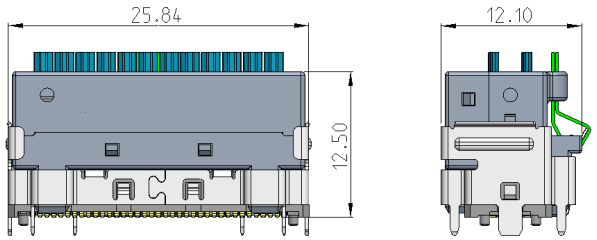
Mating Dimensions:

Swift STD

Mating with **RA** cable

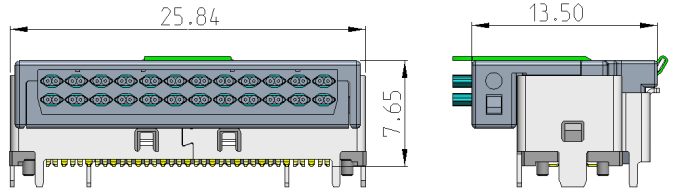


Mating with **STR** cable



SWIFT LP

Mating with **RA** cable



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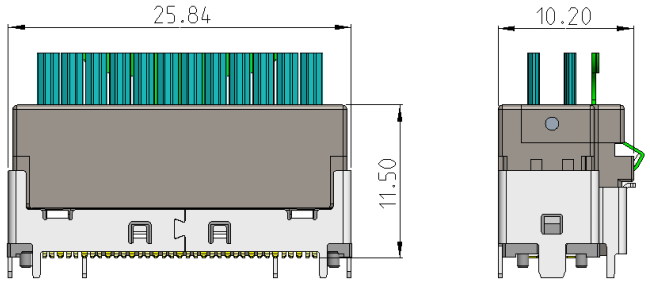
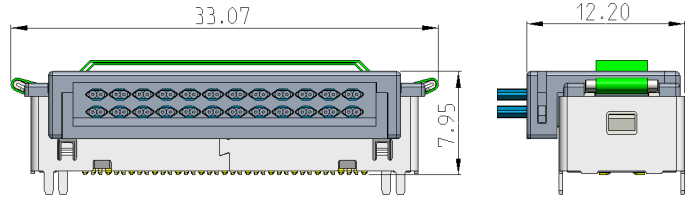
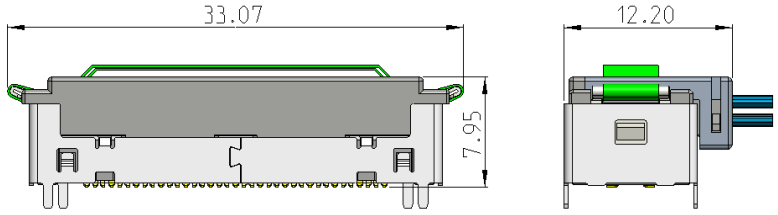


SWIFT LP DE

Mating with **RA** cable

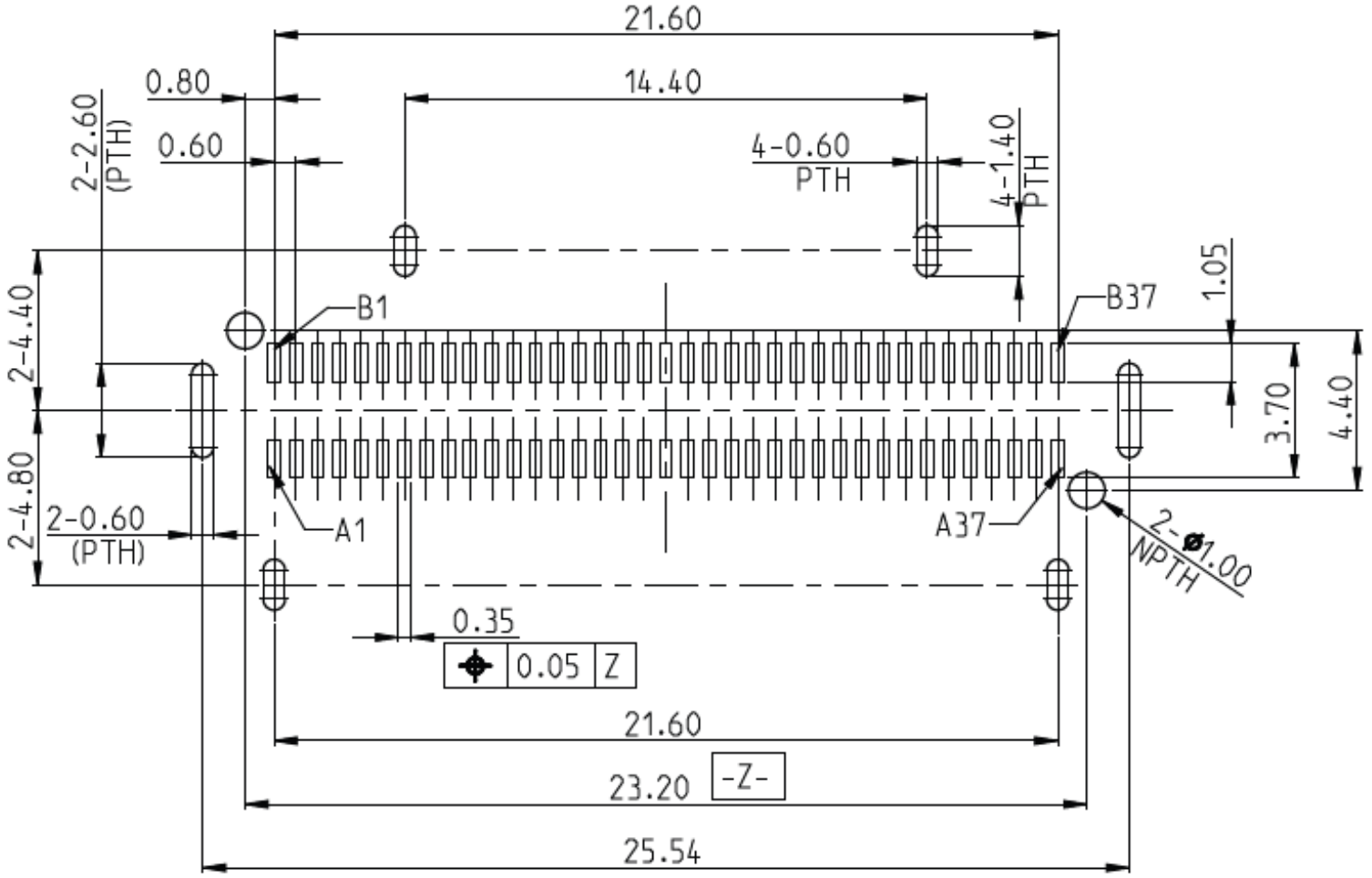


Mating with **RRA** cable



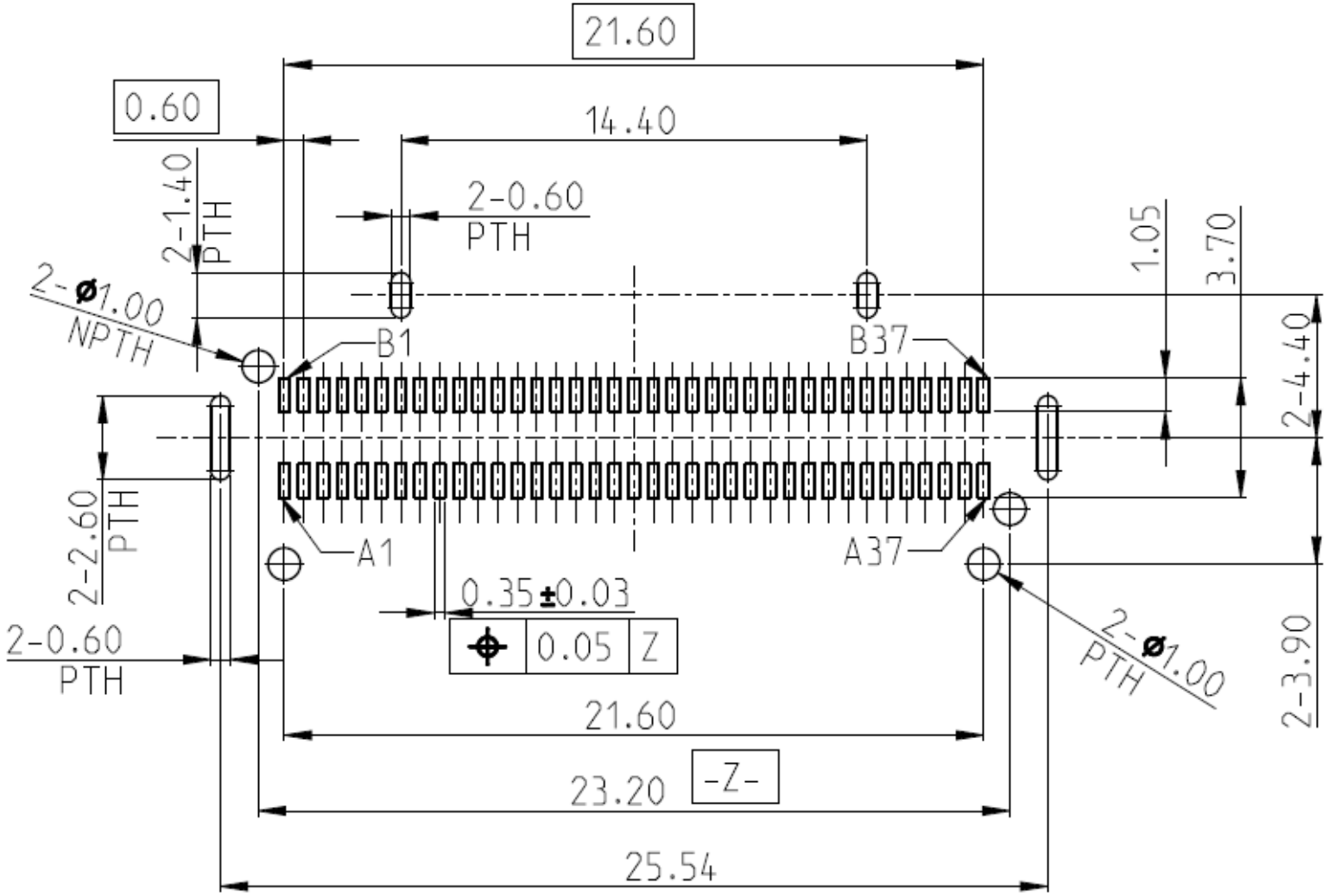
Board Connector Footprint:

SWIFT STD



Board Connector Footprint:

SWIFT LP



Board Connector Footprint:

SWIFT LP DE