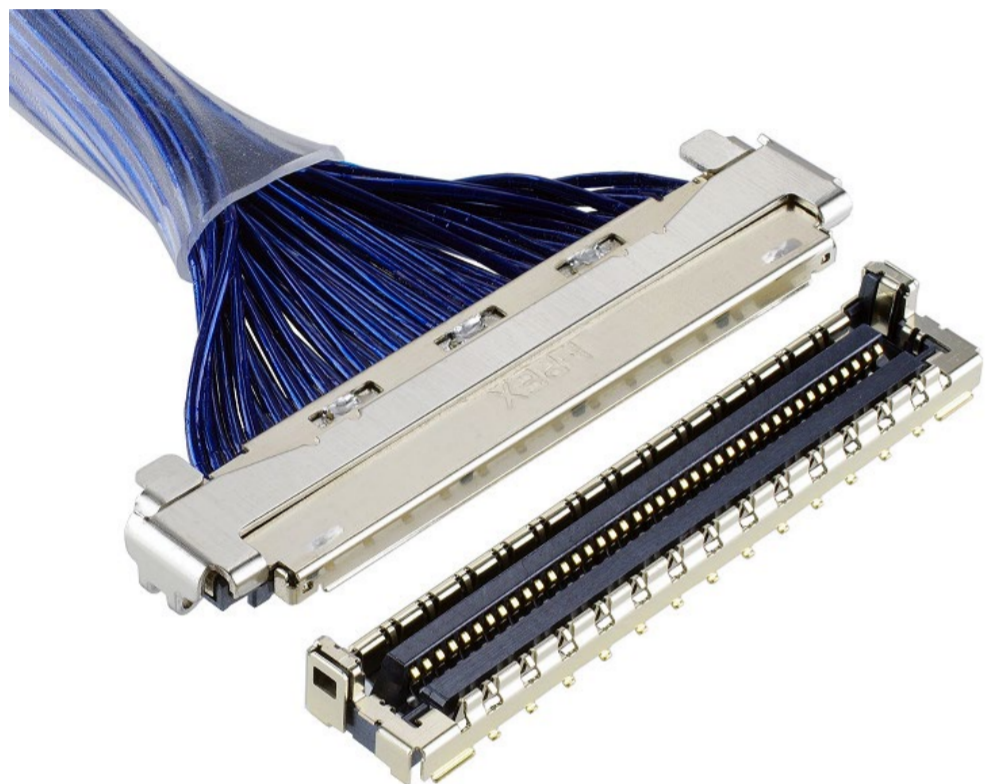


CABLINE[®]-UM

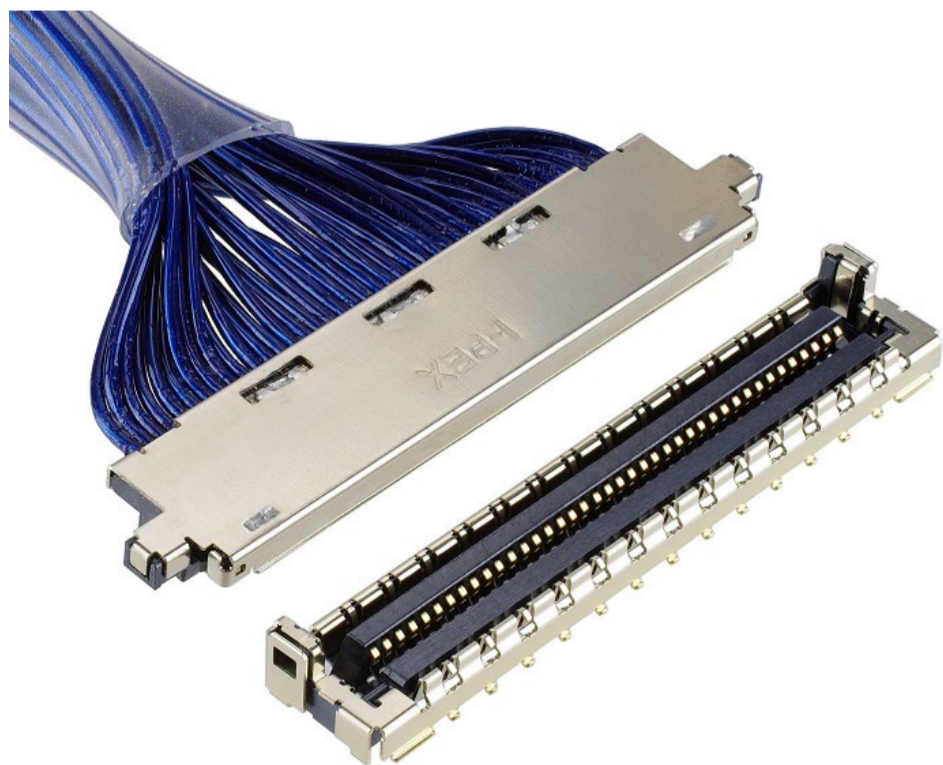
0.4 mm pitch, Right Angle Vertical Mating Type
Full Shield Micro-Coax Connector with Mechanical Lock Option

CABLINE[®]-UM : Product summary

0.4 mm pitch, Right Angle Vertical mating type.
High speed micro-coax connector with Full Shielding and Mechanical Lock option.



CABLINE-UM (with Locking cover)

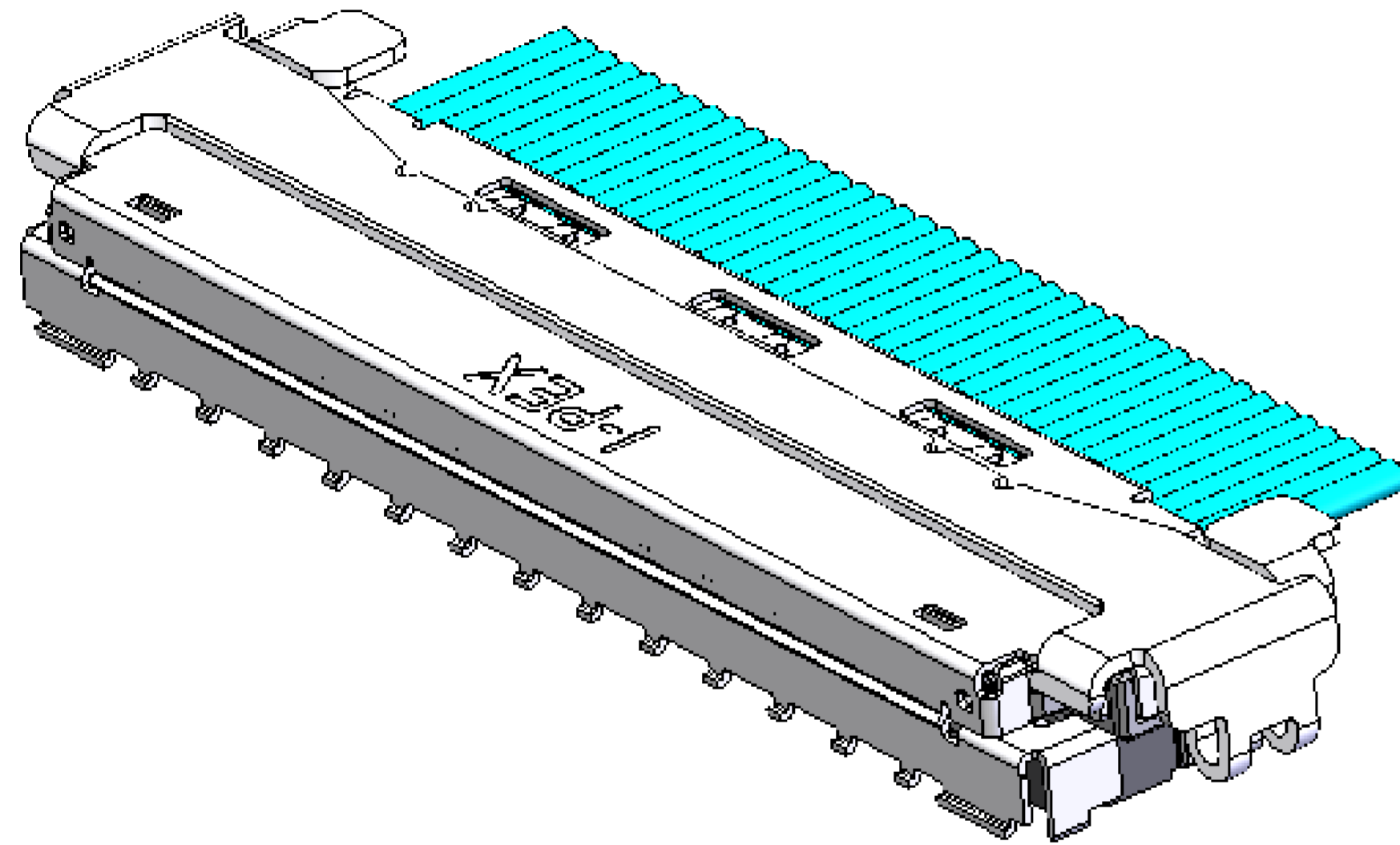


CABLINE-UM (without Locking cover)

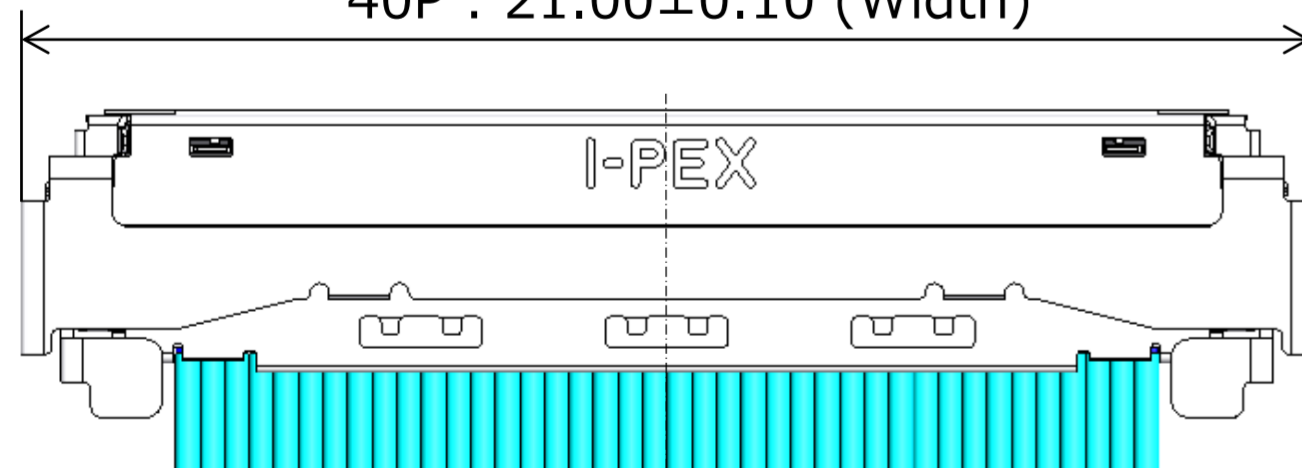
■ Name	CABLINE [®] -UM
■ Pitch	0.4 mm
■ Pin count range	10 – 60 pin
■ Target pin count	30, 40
■ Mating type	Right Angle Vertical mating type
■ Mated Height	2.20 +/- 0.15 mm (including locking cover)
■ Depth	5.0 mm (including locking cover)
■ Width formula	5.0 + (0.4 * ?p) mm (including locking cover)
■ Wire	Micro-Coax 45Ω AWG #38 or smaller wire Micro-Coax 50Ω AWG #40 or smaller wire Twincoax AWG# 40 Discrete AWG# 34 or smaller wire

CABLINE[®]-UM with/without lock cover design difference

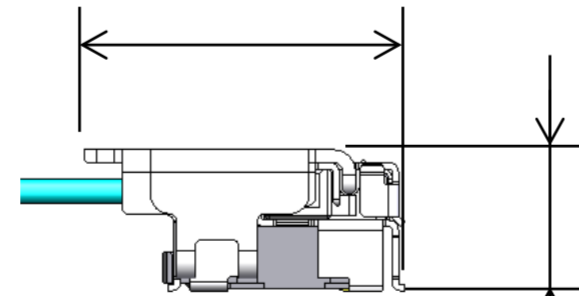
CABLINE-UM with locking cover



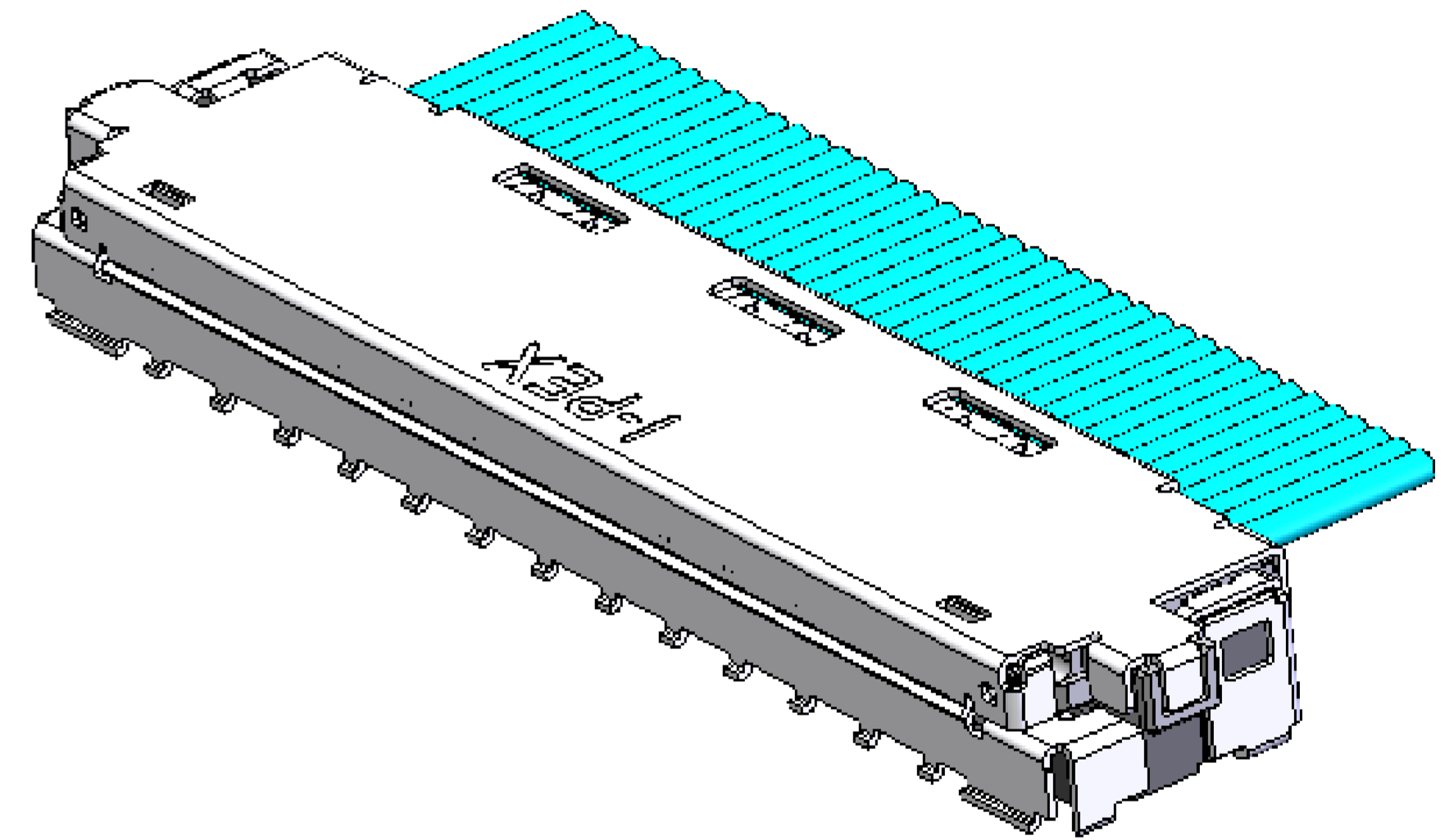
30P : 17.00±0.10 (Width)
40P : 21.00±0.10 (Width)



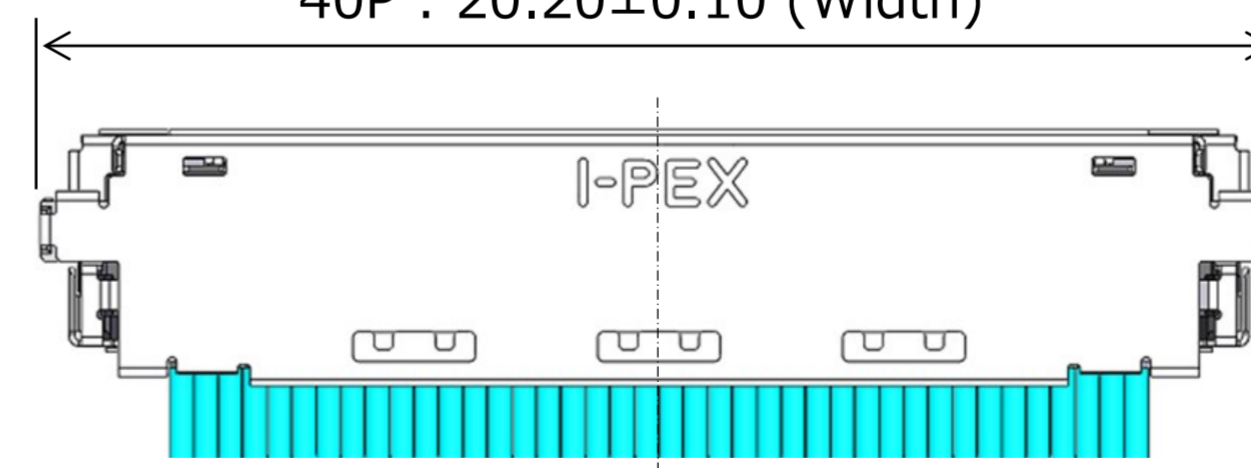
5.00 (Total Depth)
2.20±0.15 (Height)



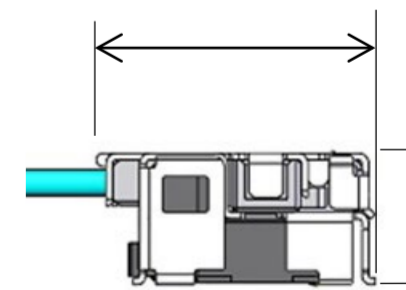
CABLINE-UM without locking cover



30P : 16.20±0.10 (Width)
40P : 20.20±0.10 (Width)



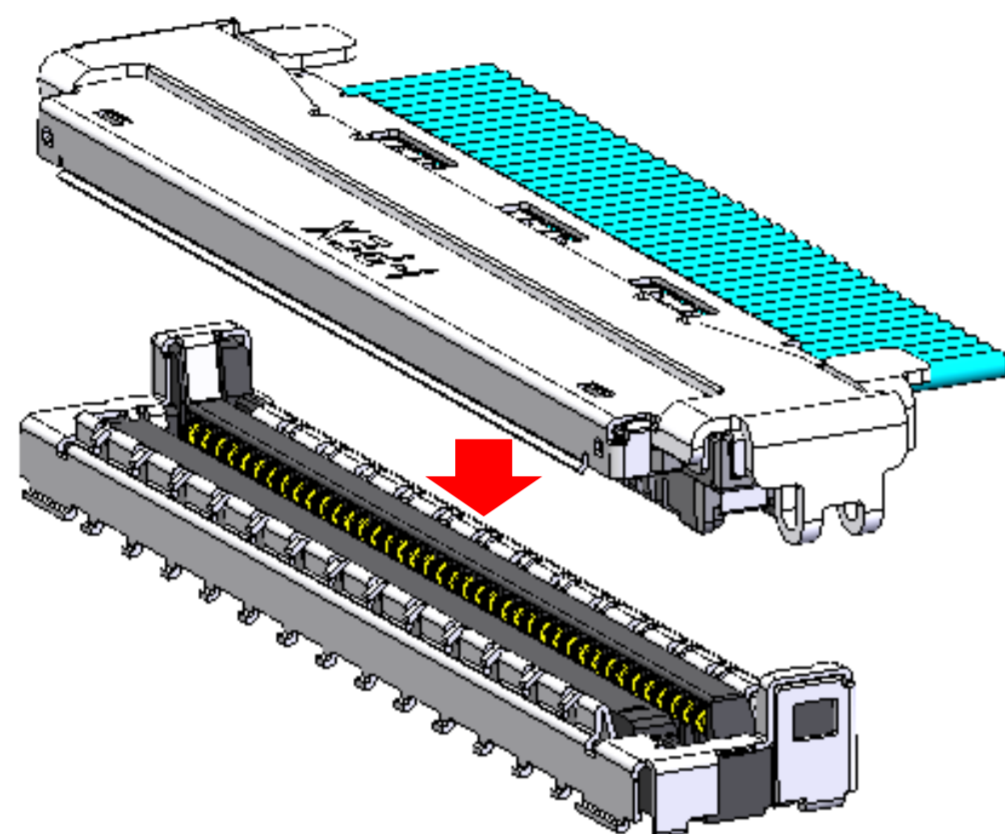
4.26 (Total Depth)
2.00±0.15 (Height)



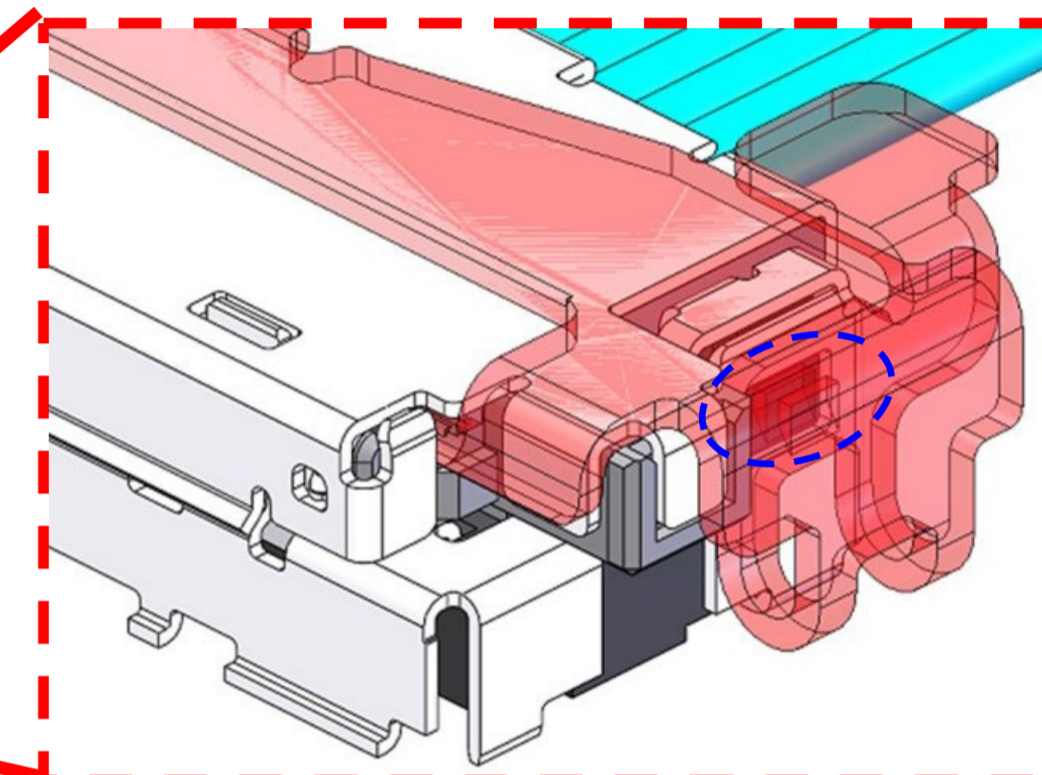
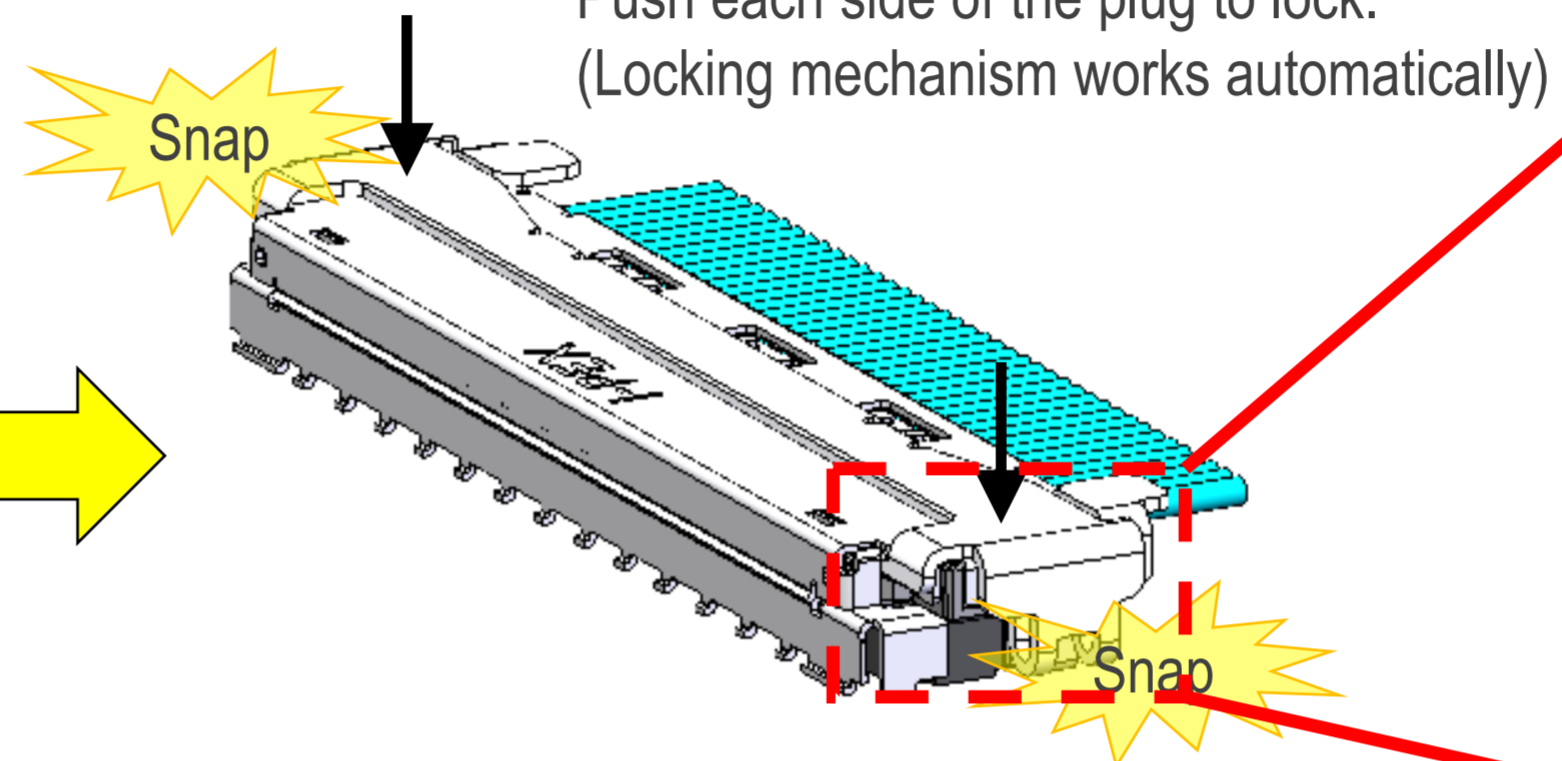
Mechanical lock function

Mating process

<Step 1>

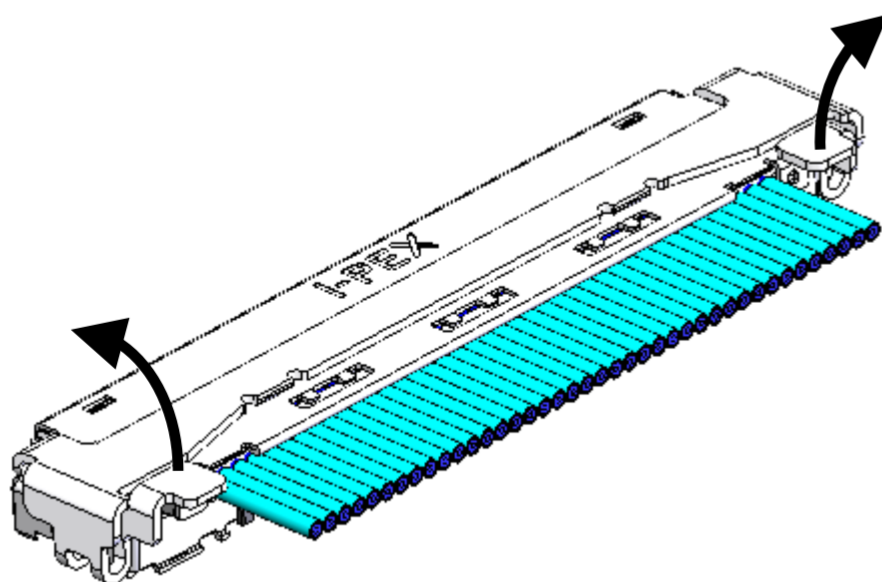


<Step 2>



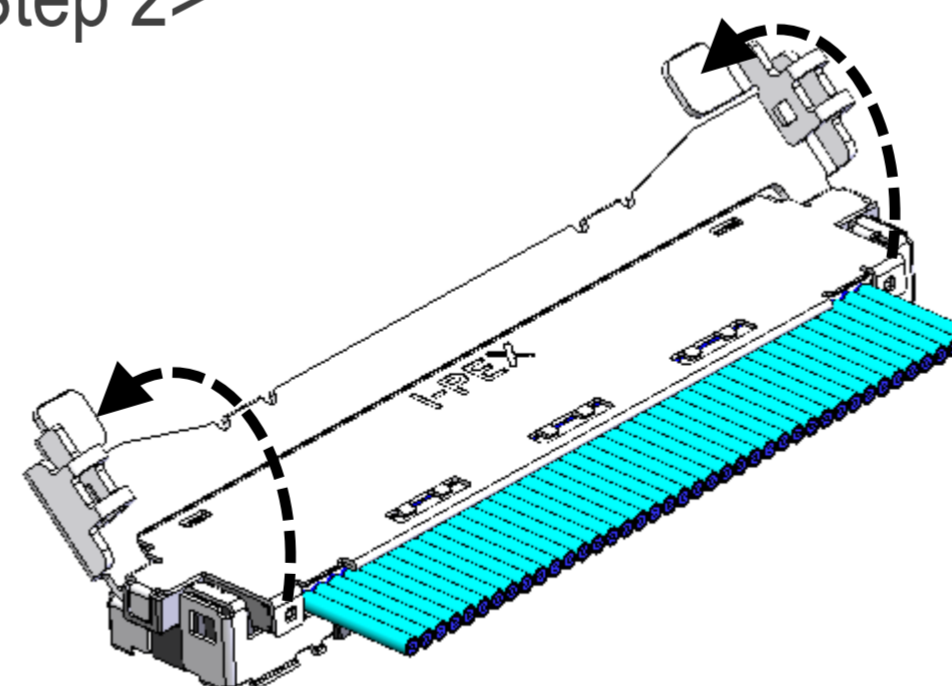
Unmating process

<Step 1>



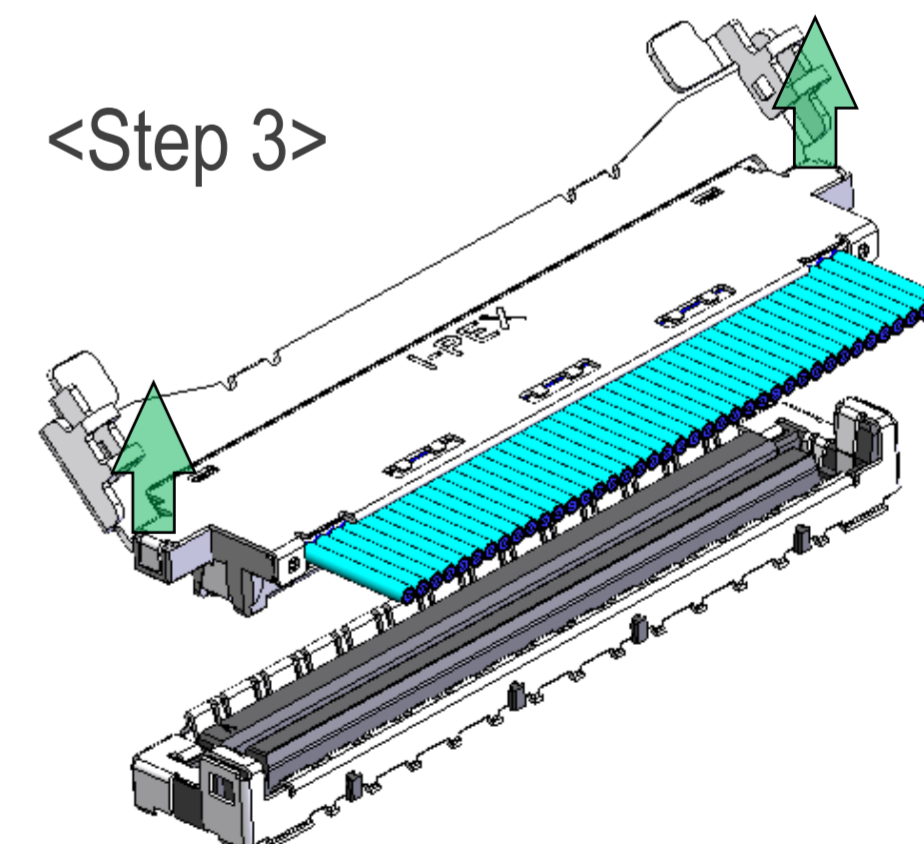
Pull up the hook upwards one by one to release the lock cover.

<Step 2>



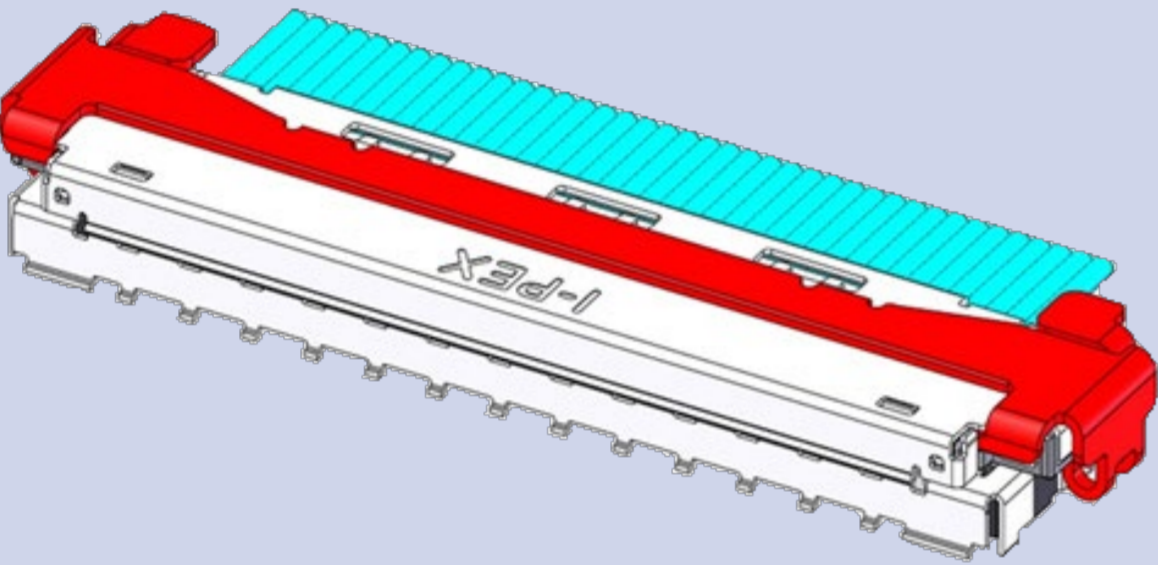
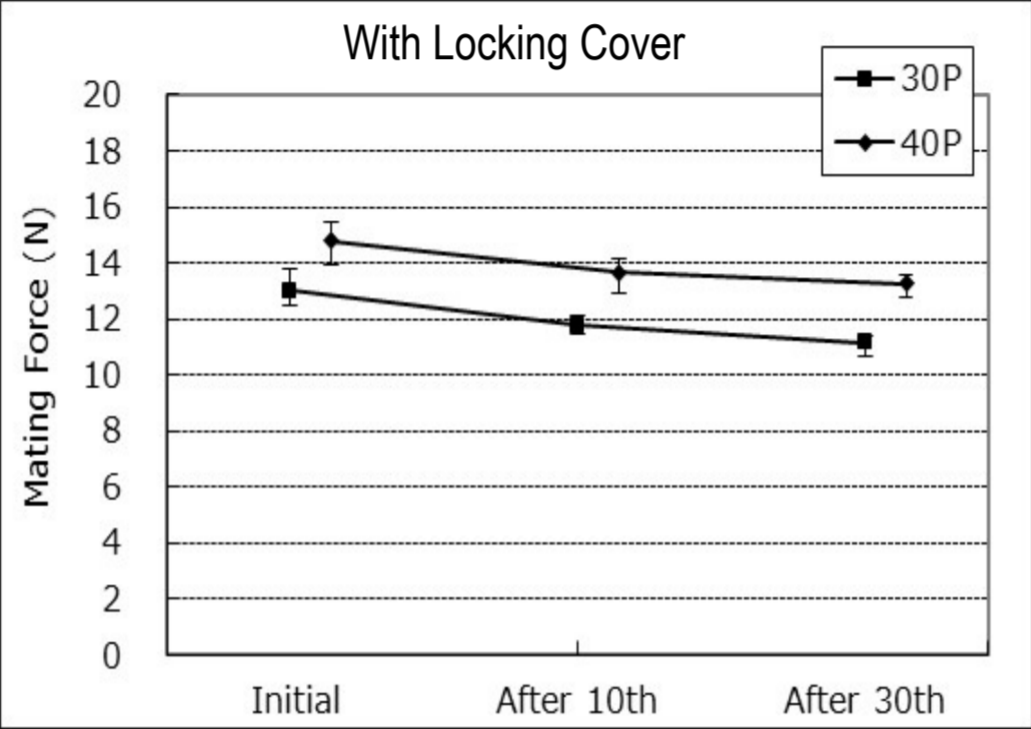
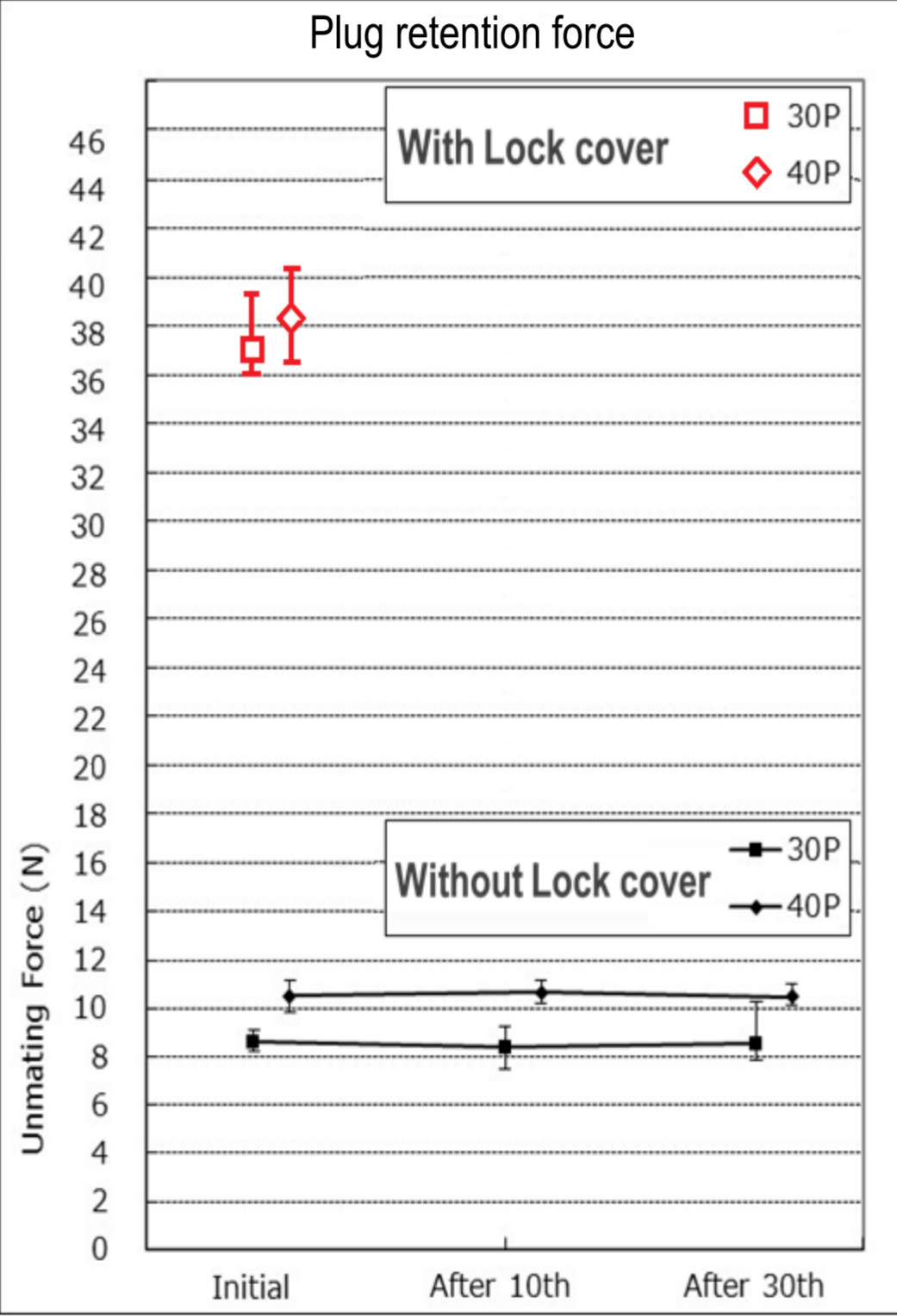
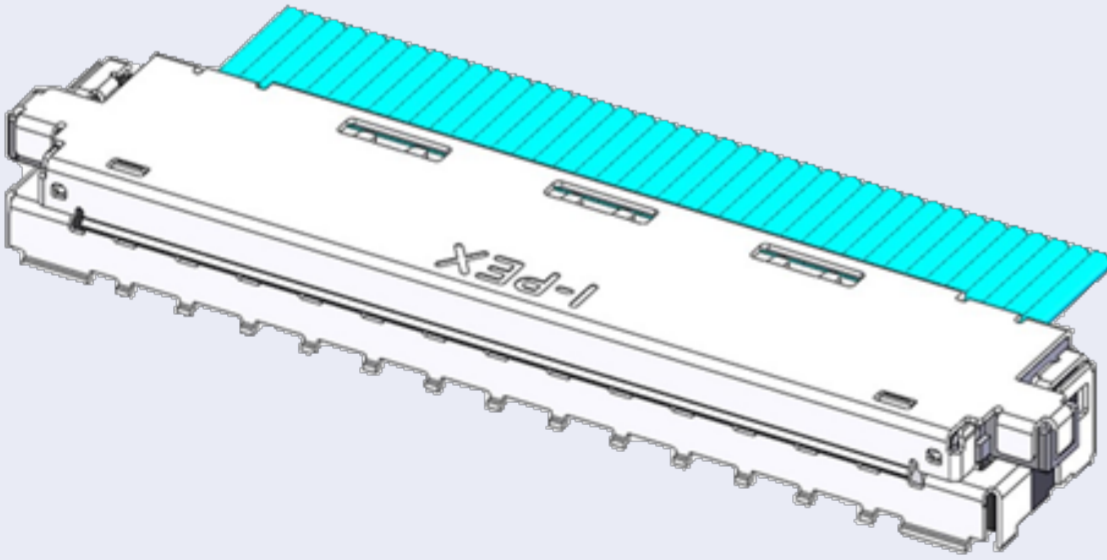
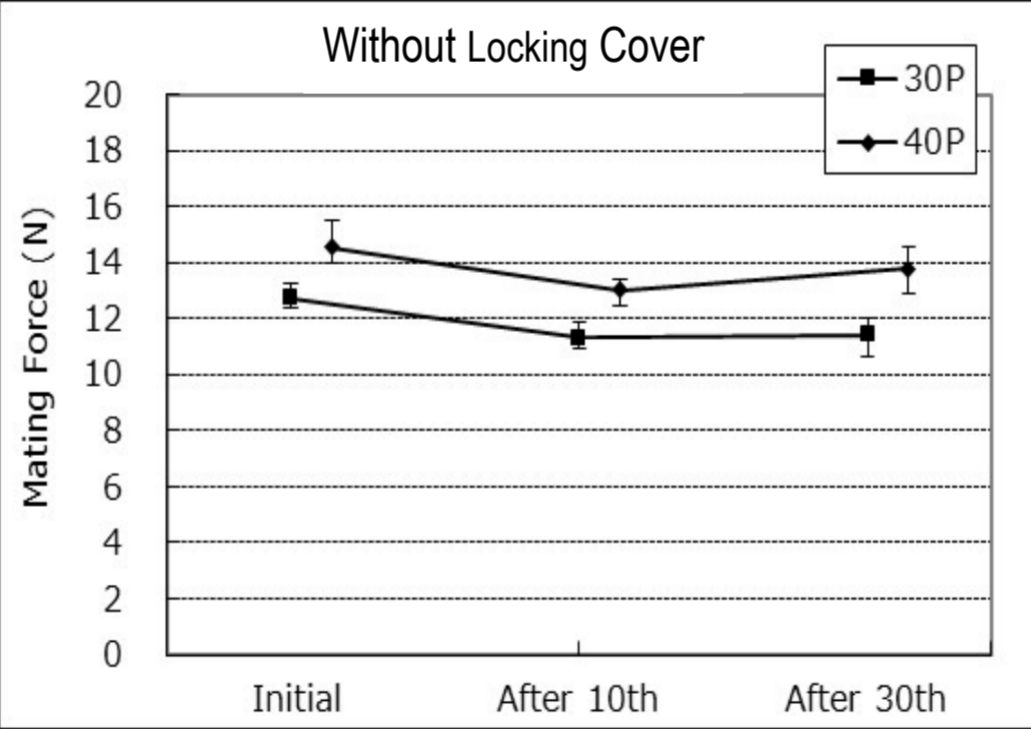
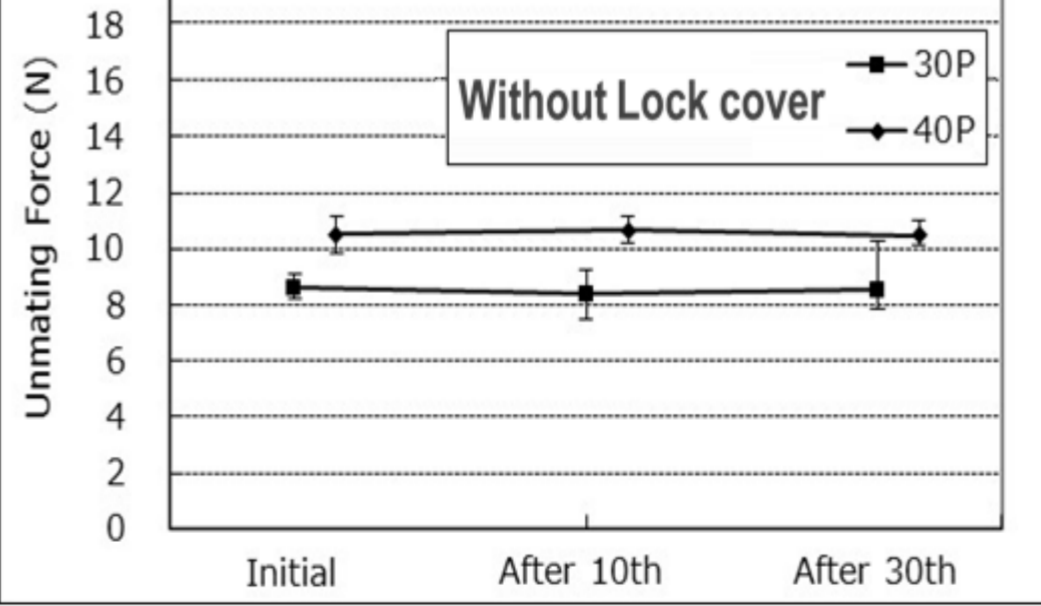
Open the lock cover.

<Step 3>



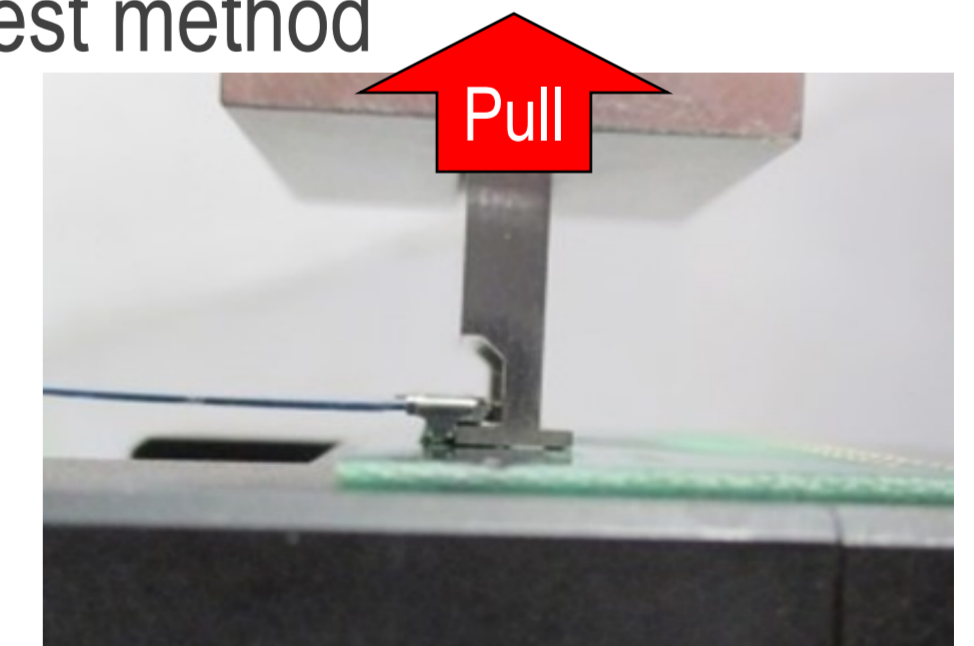
Unmate the plug from receptacle by pulling the each end.

With/Without Mechanical Lock comparison

Type	Product image	Mating force	Plug retention force
With Locking Cover			
Without Locking Cover			

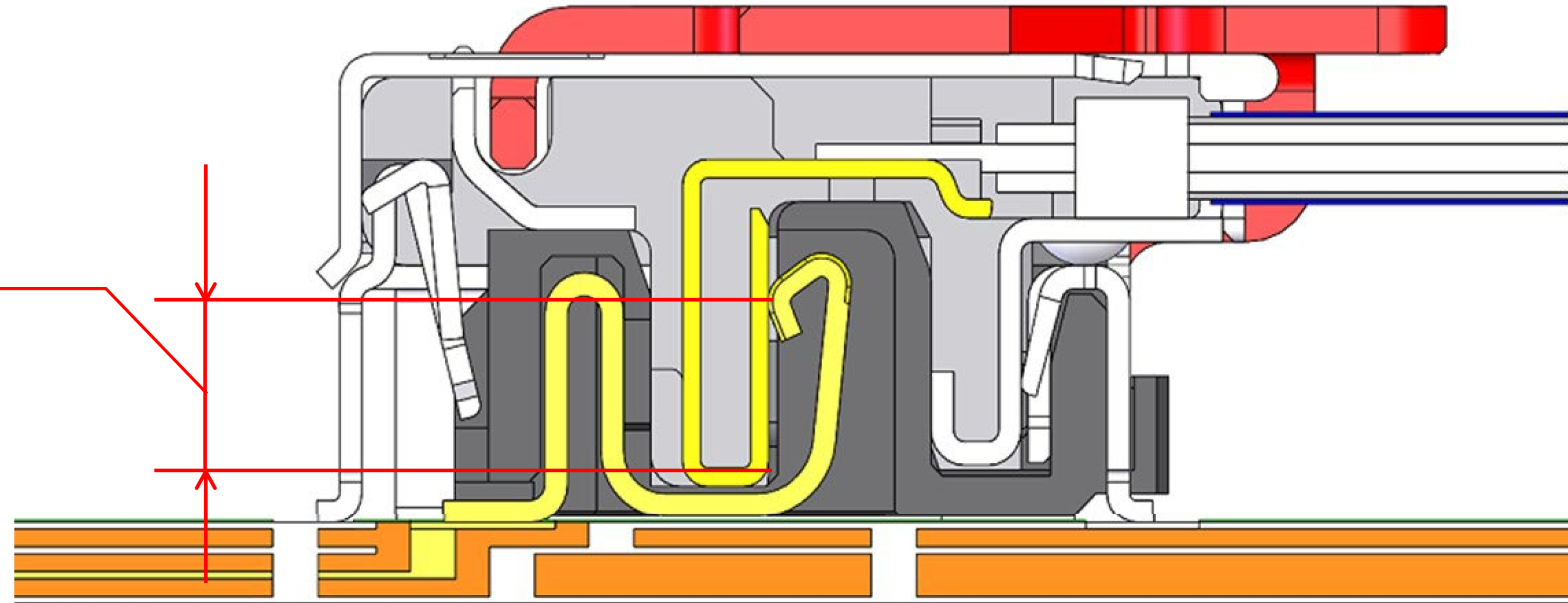
Plug retention force:
About 4 times increase
 with locking cover.

Test method

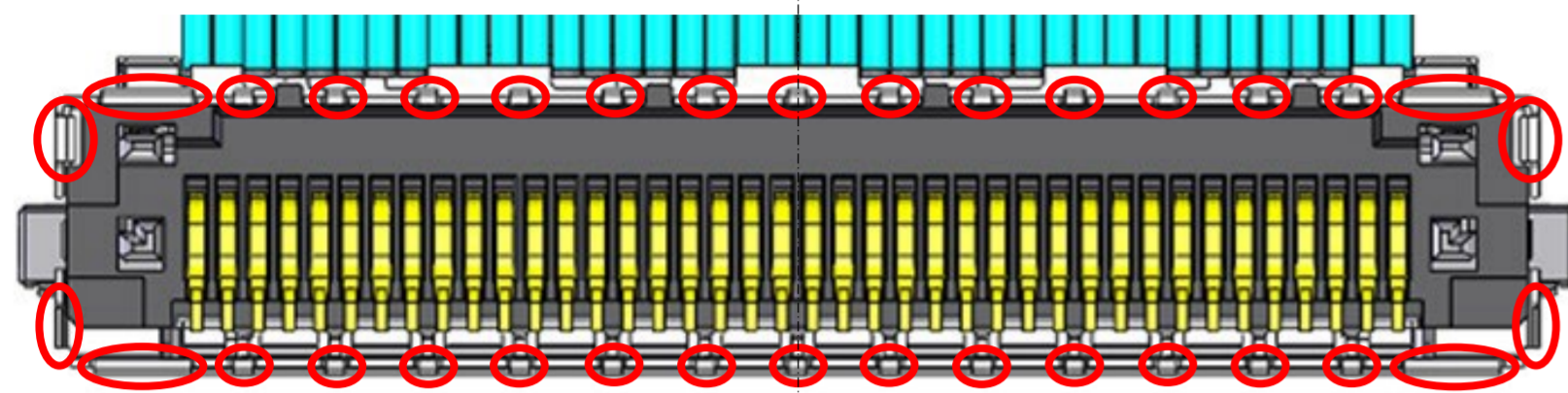


High contact reliability

Wiping length : 0.65 mm Min.



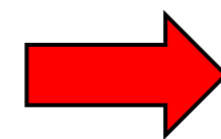
Ground structure



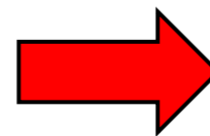
CABLINE-UM 40p

Ground path

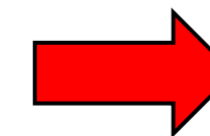
Wire shield
to
Ground bar



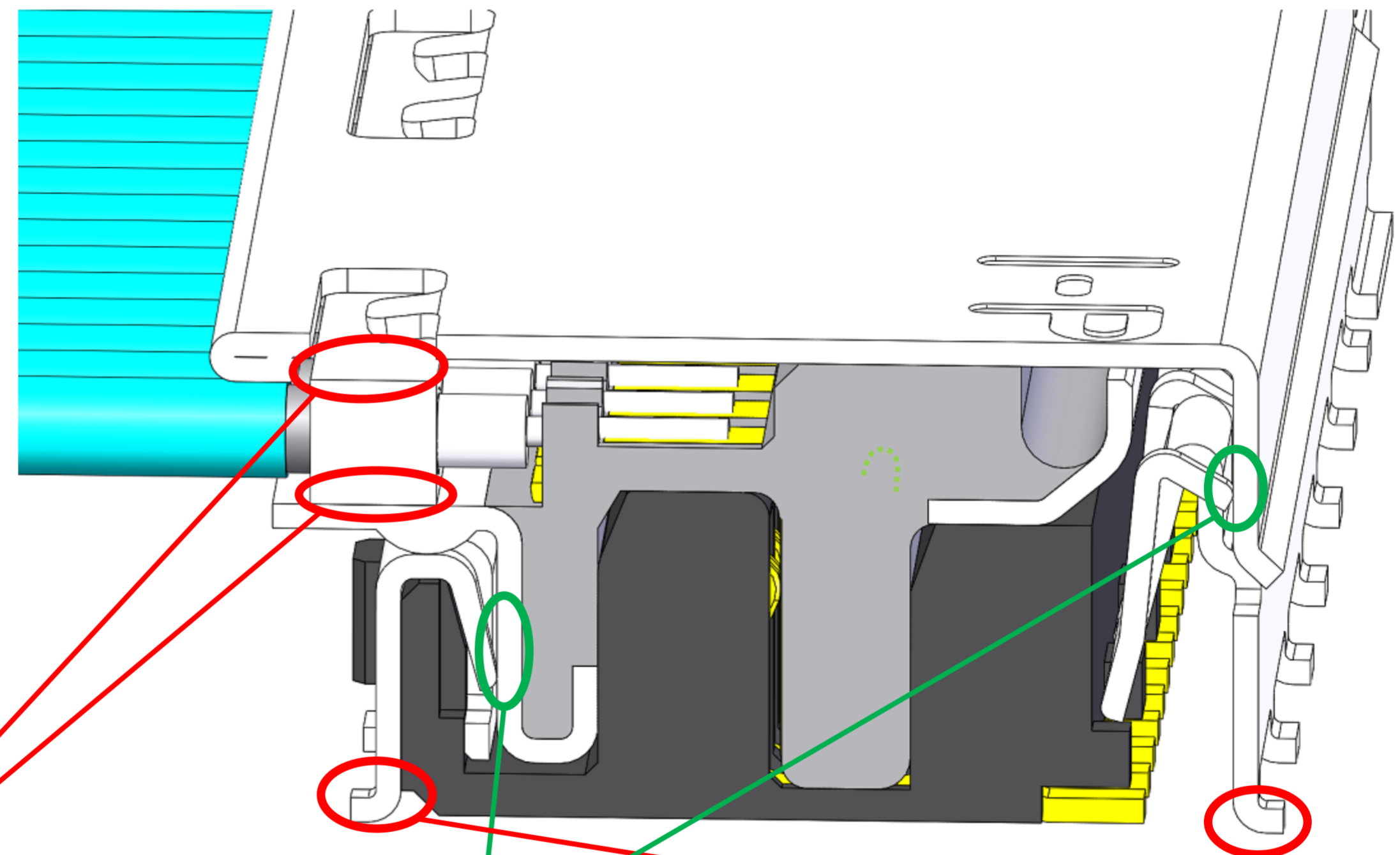
Ground bar
to
Plug shell



Plug shell
to
Receptacle shell



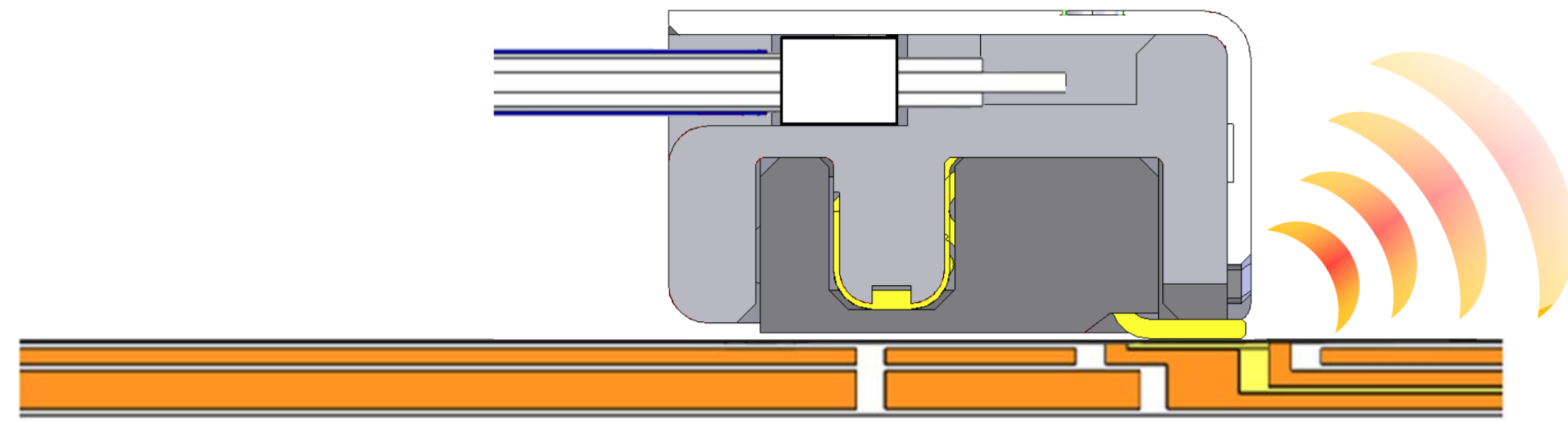
Receptacle shell
to
PCB



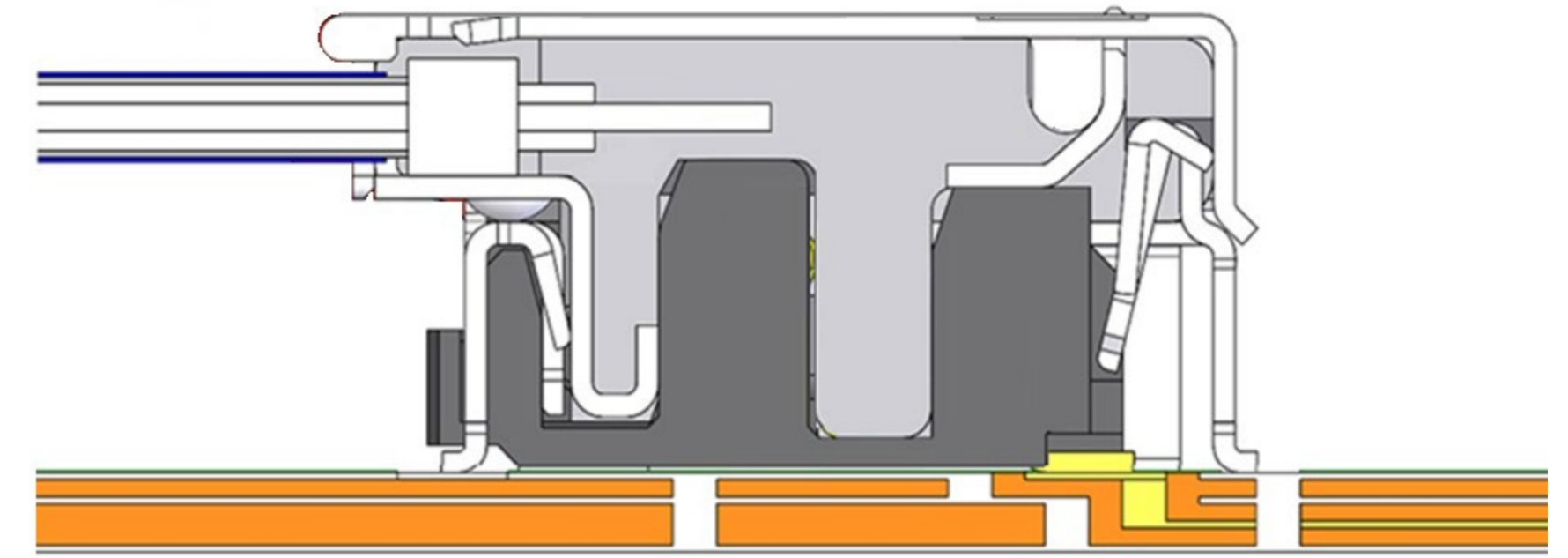
- Soldered contacts
- Mechanical contacts

Full EMI shielding

Prevent EMI leakage from contact tails

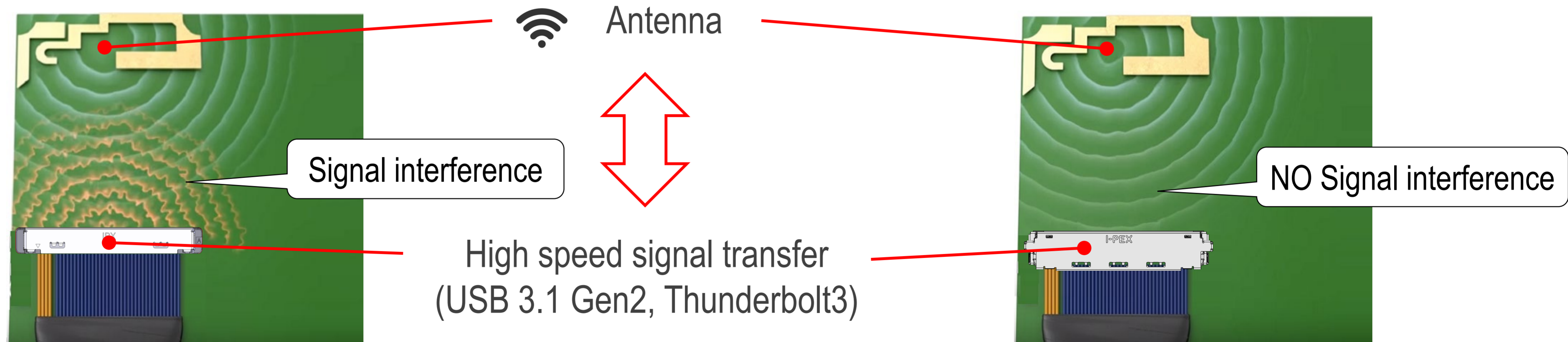


CABLINE-SS



CABLINE-UM
(Full shielded connector)

Example

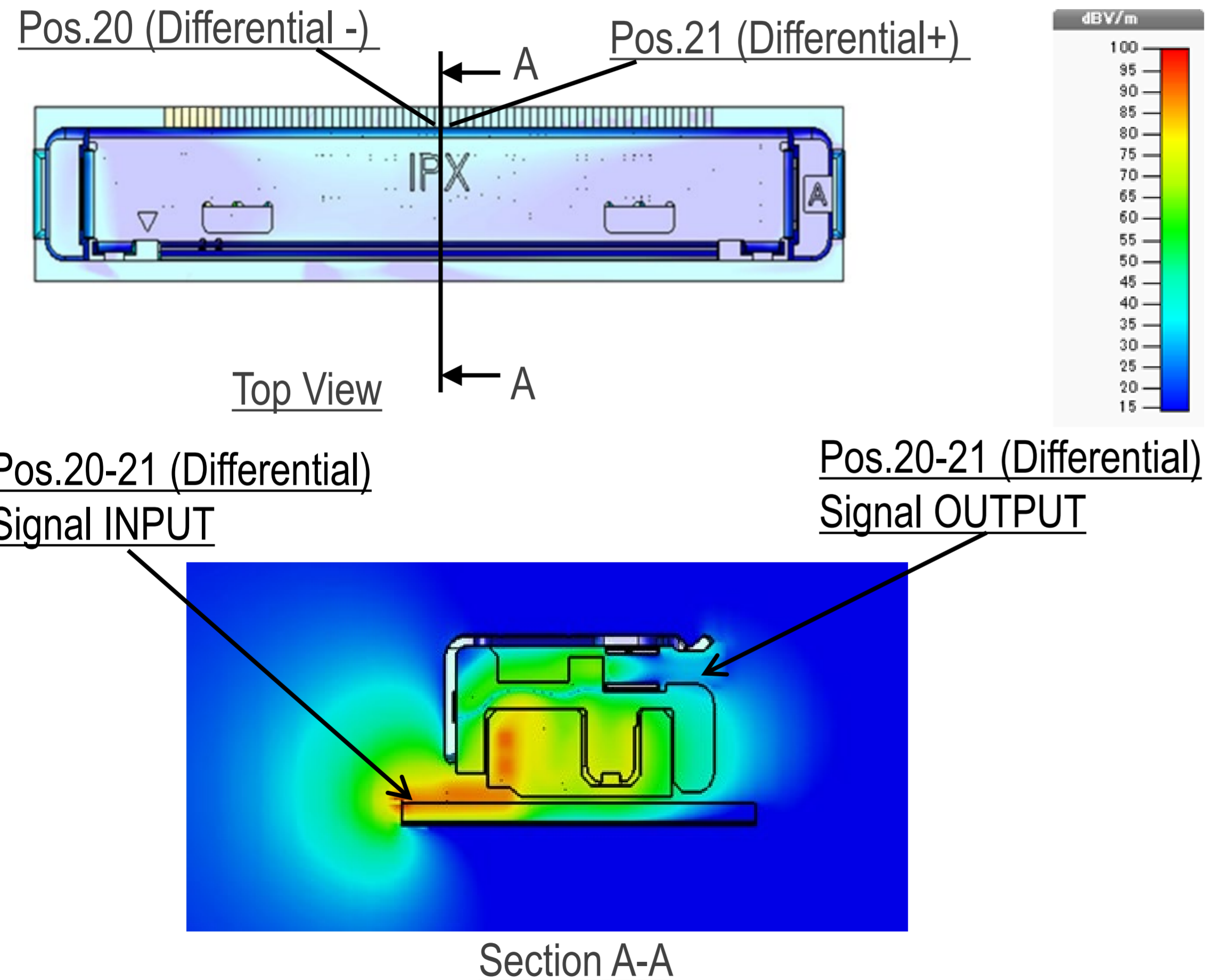


Comparison image between CABLINE-SS & CABLINE-UM

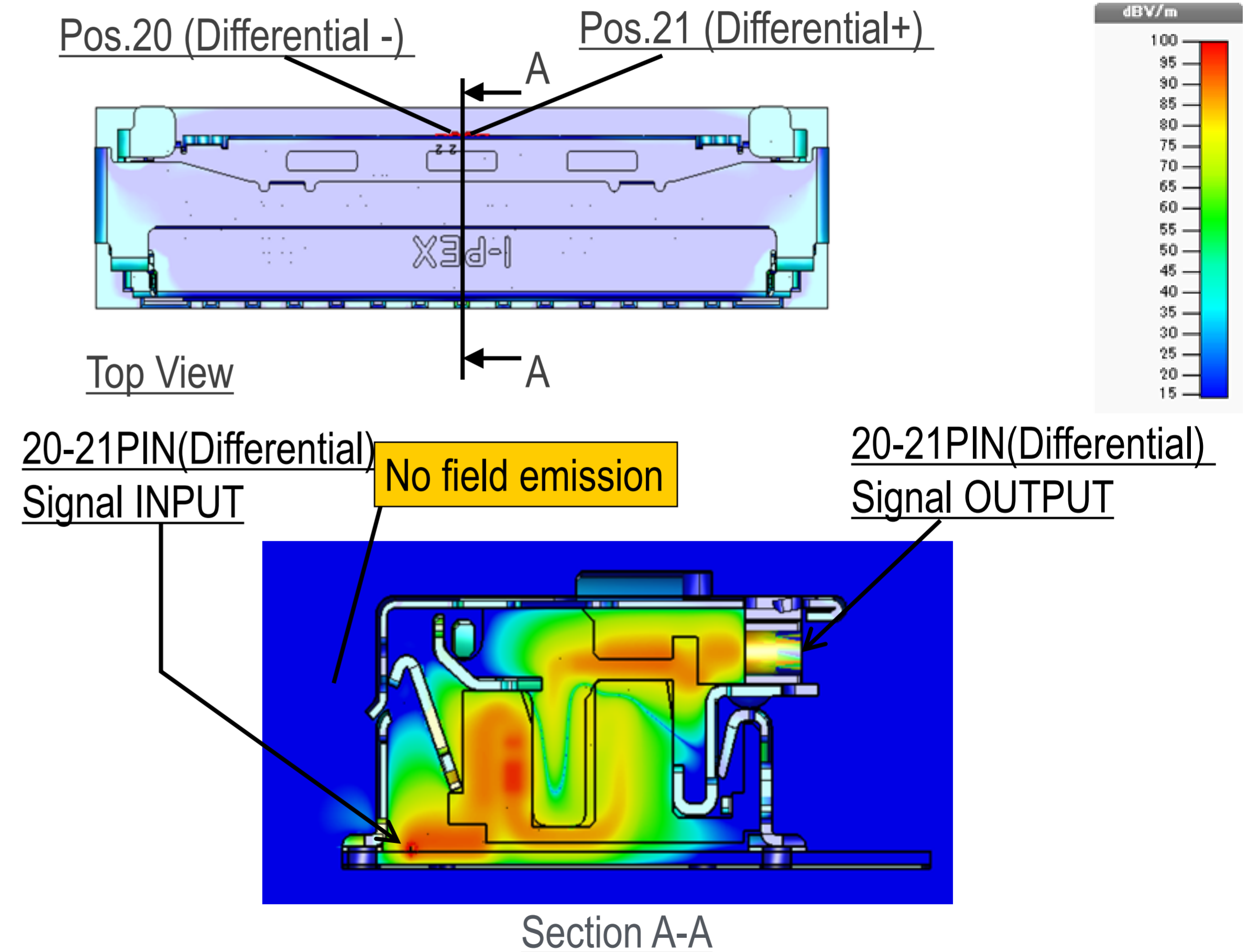
EMI simulation of CABLINE-SS & CABLINE-UM

EMI Simulation (10GHz)

CABLINE-SS



CABLINE-UM



CABLINE-UM Receptacle types (-01 & -02)

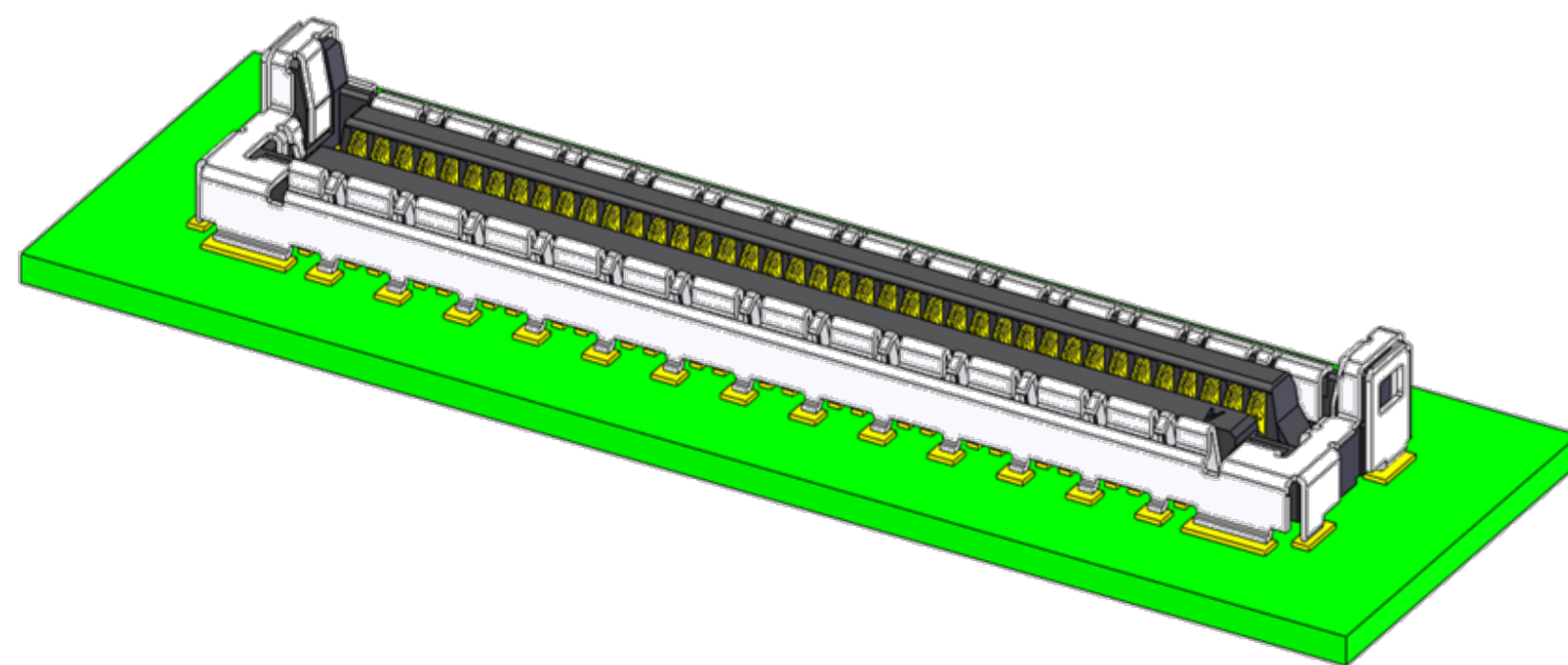
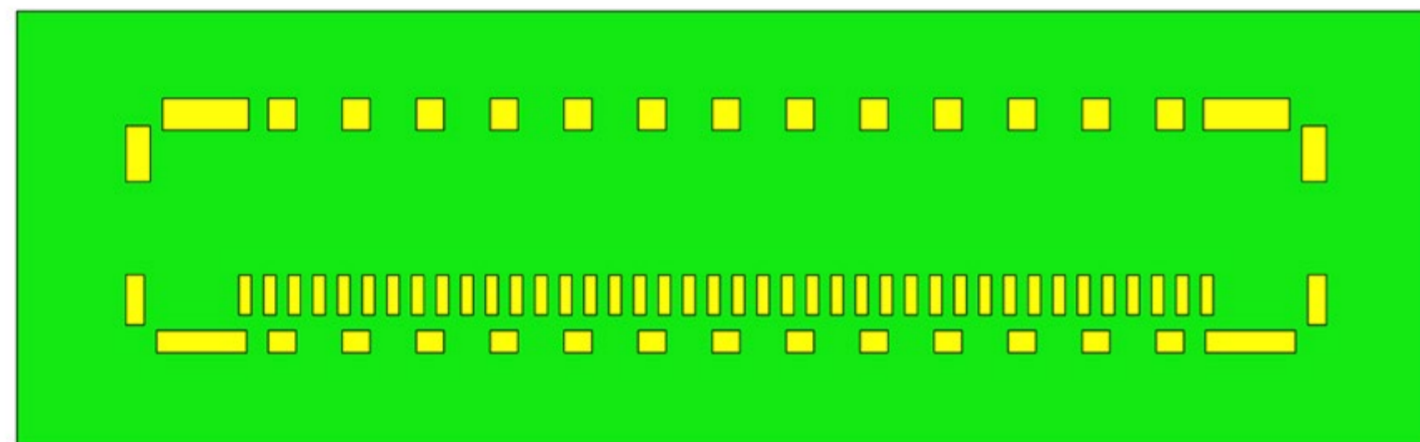
P/N : 20879-0**E-0#

1 : NARROW GROUND PIN TYPE
2 : WIDER GROUND PIN TYPE

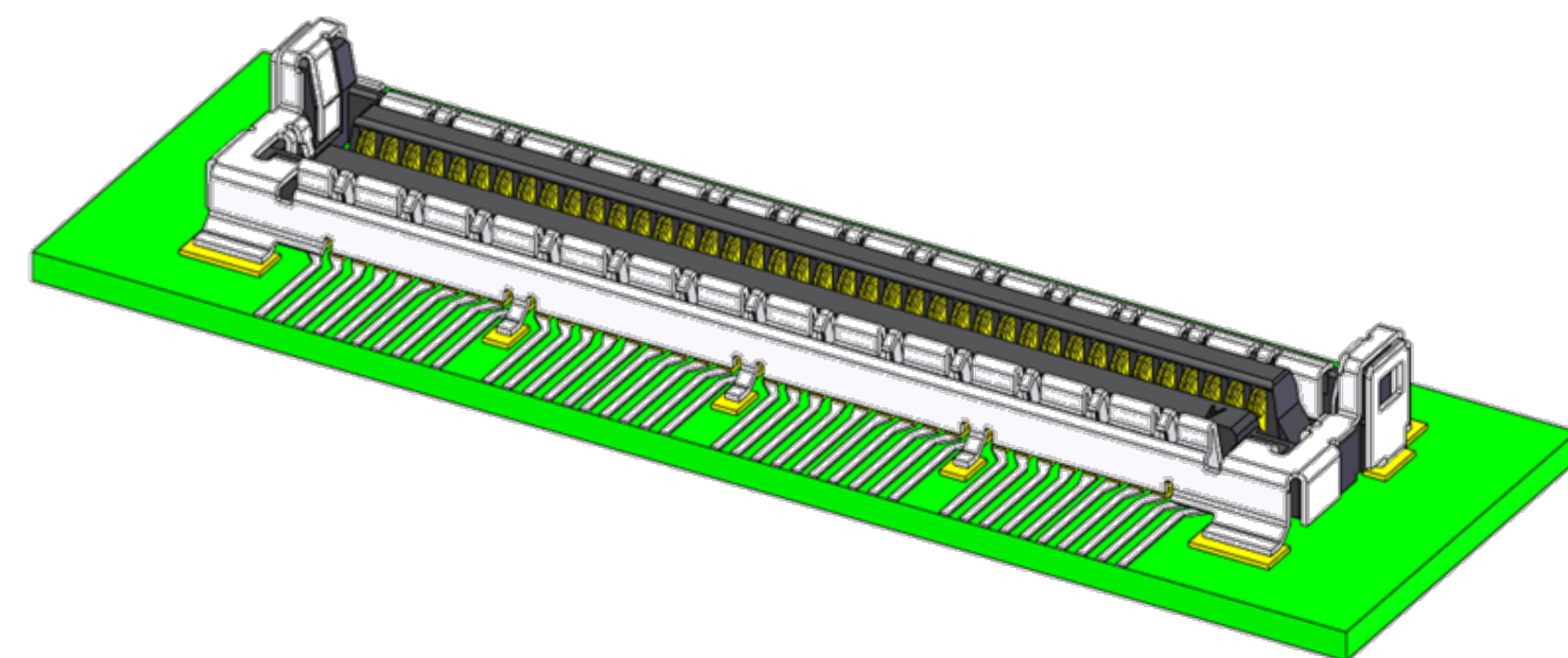
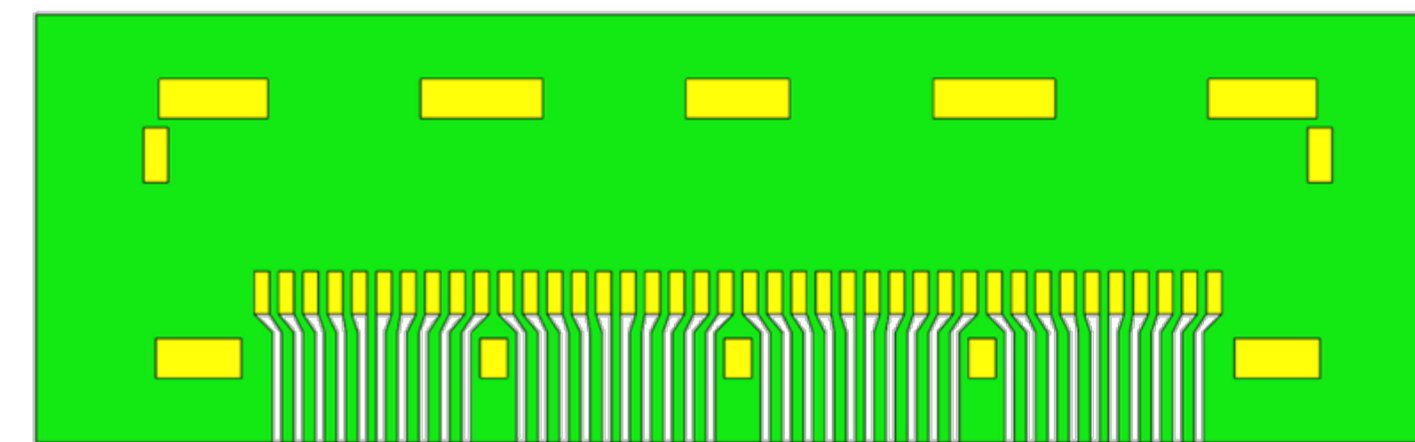
Multiple ground contacts on the PCB may limit the signal trace design on the PCB.

CABLINE-UM receptacle has a wider ground pin type (-02), allowing for flexible signal trace design on PCB surface.

-01 type (Good EMI shielding performance)



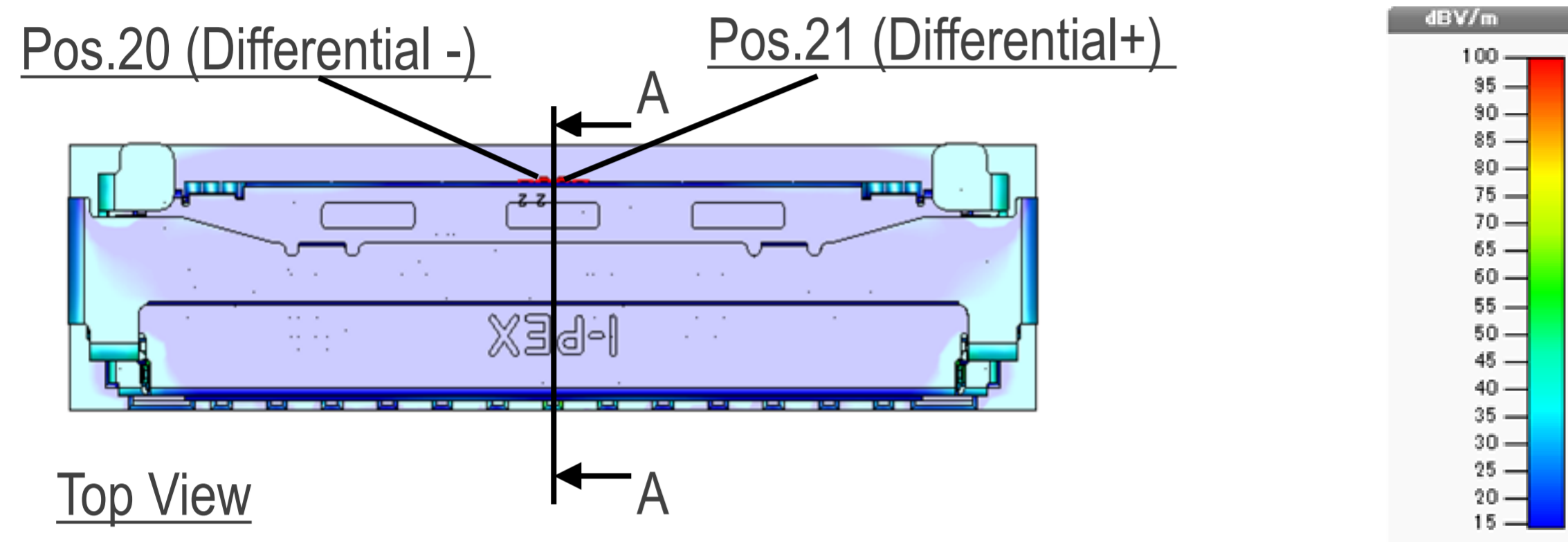
-02 type (Good for PCB surface signal trace design)



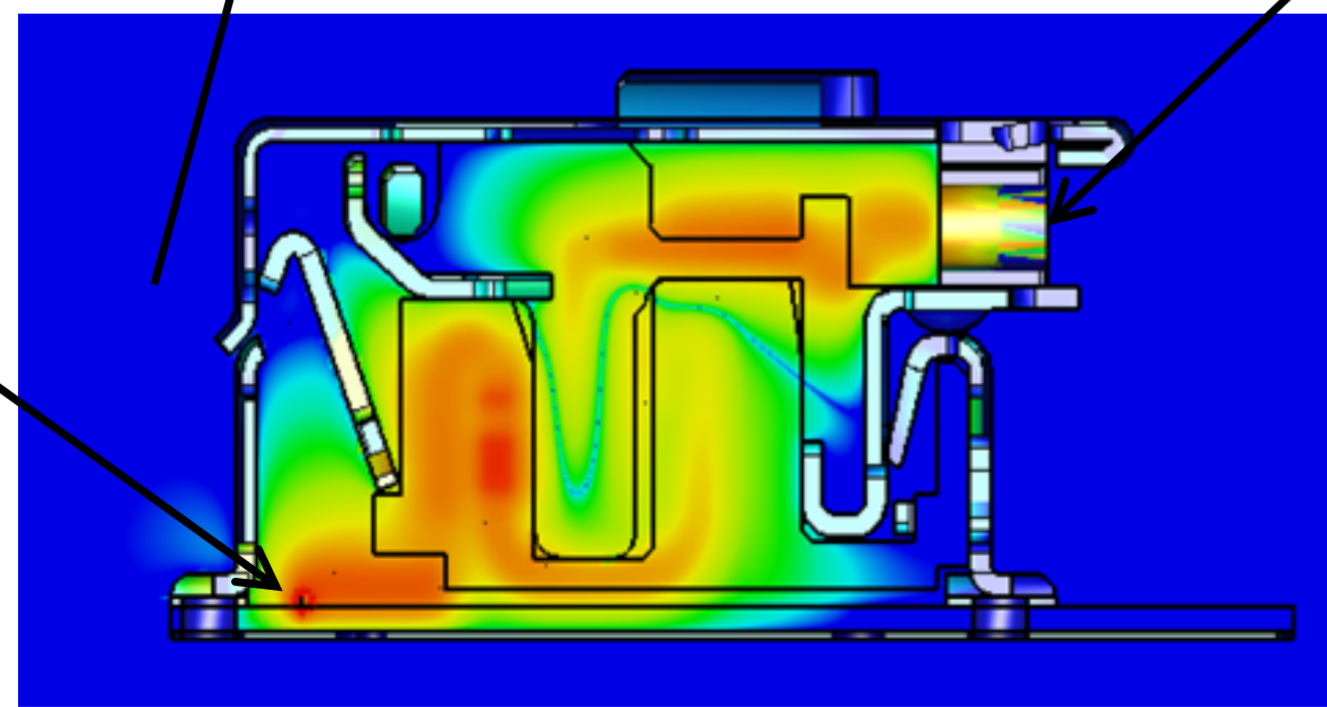
EMI simulation of CABLINE-UM Receptacle types

EMI Simulation (10GHz)

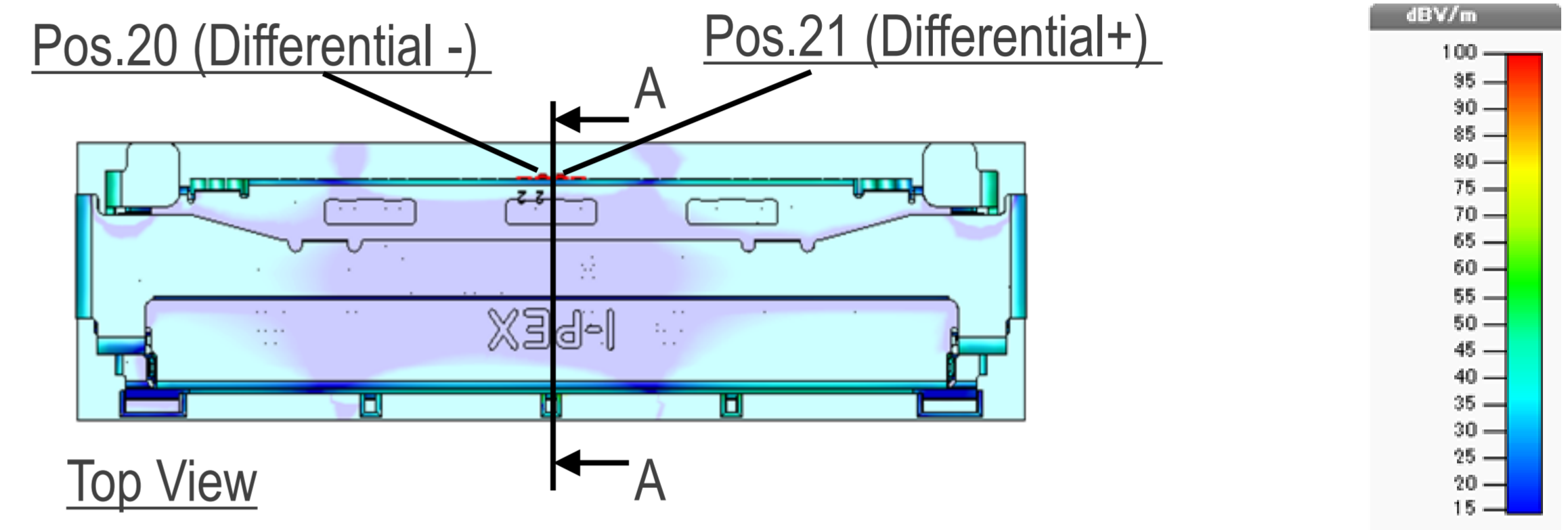
-01 type (Good EMI shielding performance)



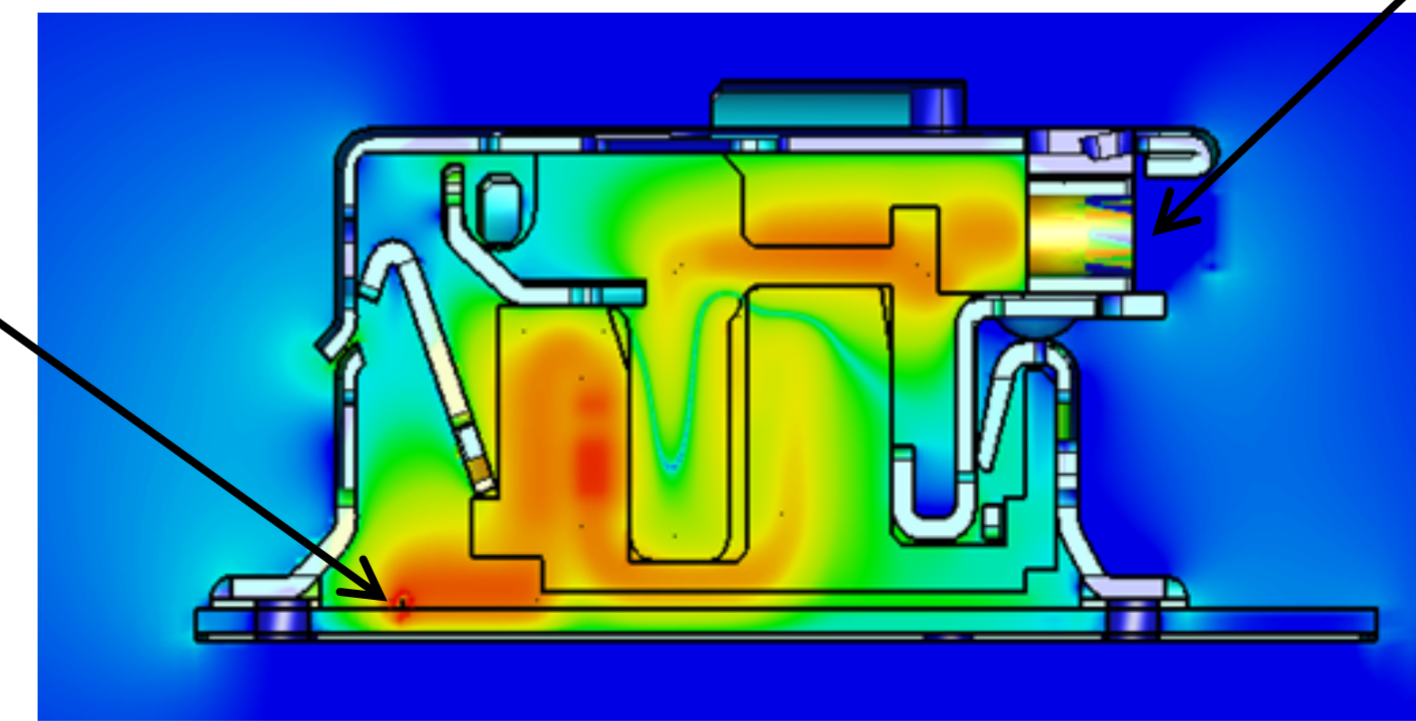
20-21PIN(Differential) Signal INPUT No field emission 20-21PIN(Differential) Signal OUTPUT



-02 type (Good for PCB surface signal trace design)



20-21PIN(Differential) Signal INPUT 20-21PIN(Differential) Signal OUTPUT





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