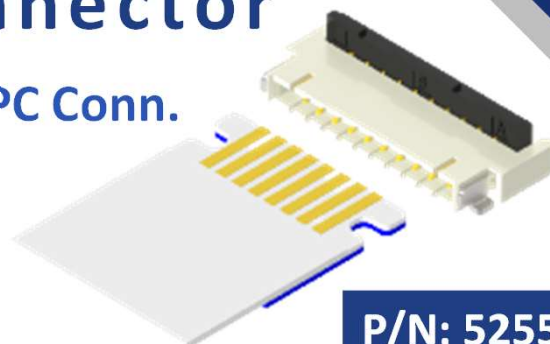


## High Speed & Low Profile Easy-on FFC/FPC Connector

0.5mm Pitch Easy-on Back Flip FFC/FPC Conn.

SMT, R/A, D/C, Lock Type

**Product Height: 0.78mm**



**P/N: 52552**

### Overview

ACES's low profile FFC/FPC connector with Easy-on & back-flip actuator provides stable electrical and mechanical contact for notebook, tablet PC and other applications that require low profile and improved workability. 52552 series has a high data transmission rate which pass Thunderbolt 3, USB4, and USB3.2 Gen 2 specification.

Series	52552
Contact Pitch (mm)	0.5
Height (mm)	<b>0.78±0.05</b>
Depth (mm)Actuator Close	3.50
Contact Length (mm)	0.70
FPC Insertion Depth(mm)	1.30
Current Rating	0.5A/pin
Contact Point	Top/Bottom
Retention Force/Per pin(gf)	20
FFC/FPC thickness	<b>0.30±0.03</b>
Performance (Reference only)	<b>Thunderbolt 3 (20Gbps)</b> <b>USB 4 Gen3 (20Gbps)</b> <b>USB3.2 Gen2</b>

### Applications

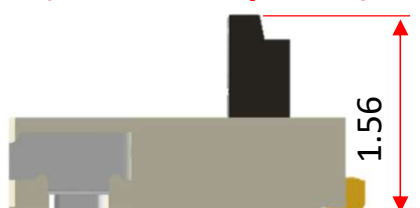
- Notebook
- Tablet PC
- Drone
- Robot
- Smart Home/Home Appliance
- Security Camera
- VR



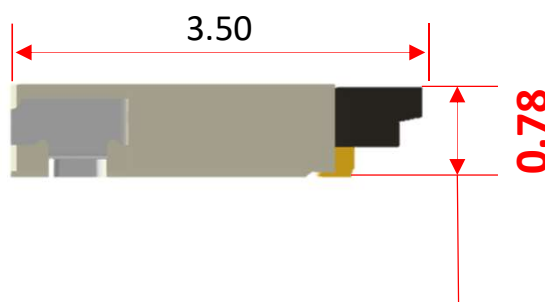
## Features & Benefits

- **Extreme Low-profile connector with 0.78mm height**  
Realizing the industry's lowest height of 0.78mm.

(Actuator Opened)



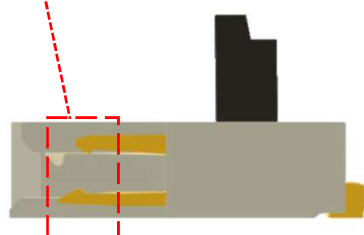
(Actuator Closed)



- **Dual Contact Terminal**

Increase connector withdrawal force & reliability

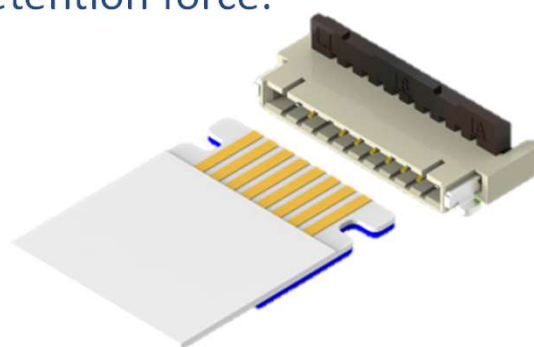
Dual contact terminal



- **Lock Design with High Retention Force: 8pin → 6N**  
Lock pin design provides high FPC retention force.



Applicable FFC/FPC shape  
With notches

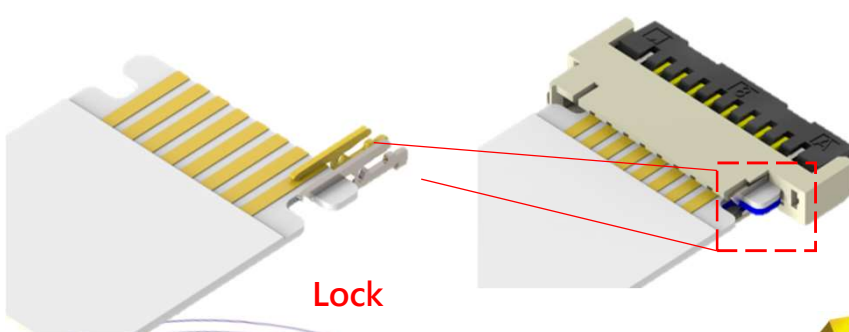


Designed to mate  
0.3mm thickness FFC/FPC

### High Retention Force

Estimated FPC  
Retention Force  
(With Lock)

**8pin → 6N**

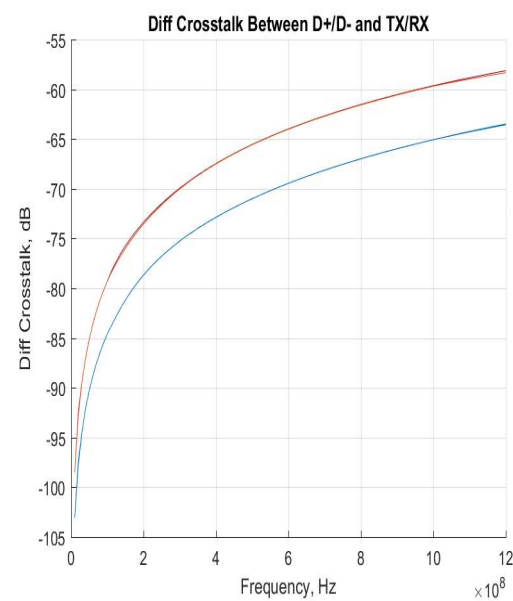
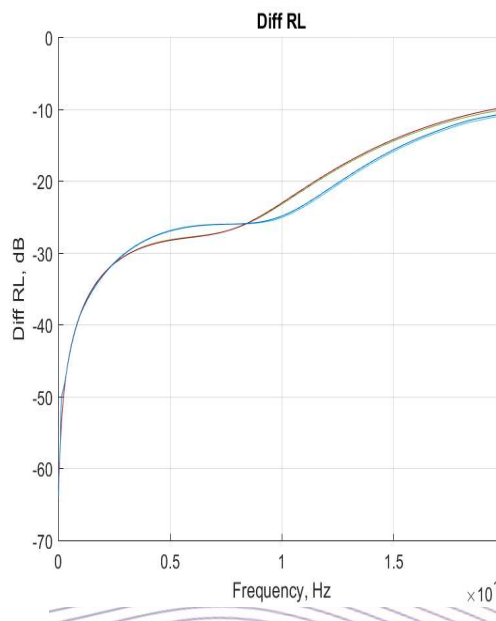
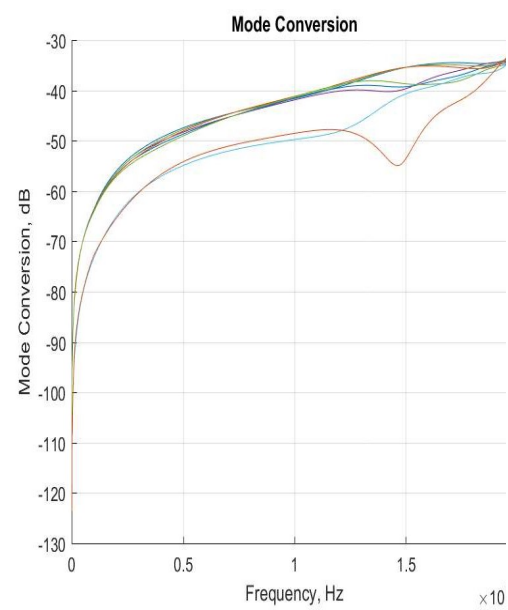
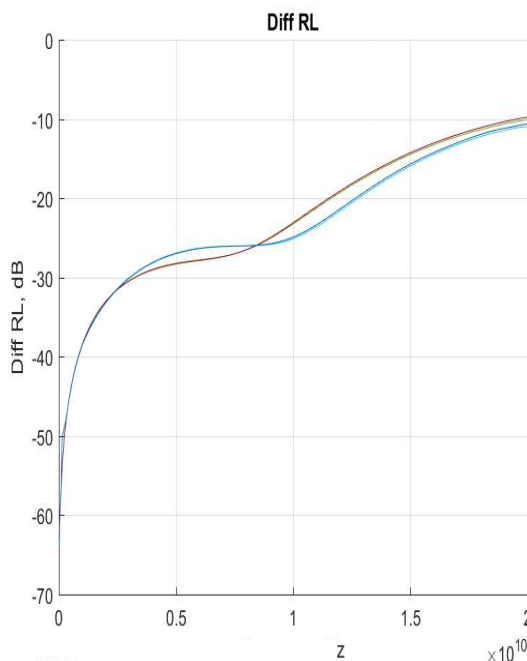
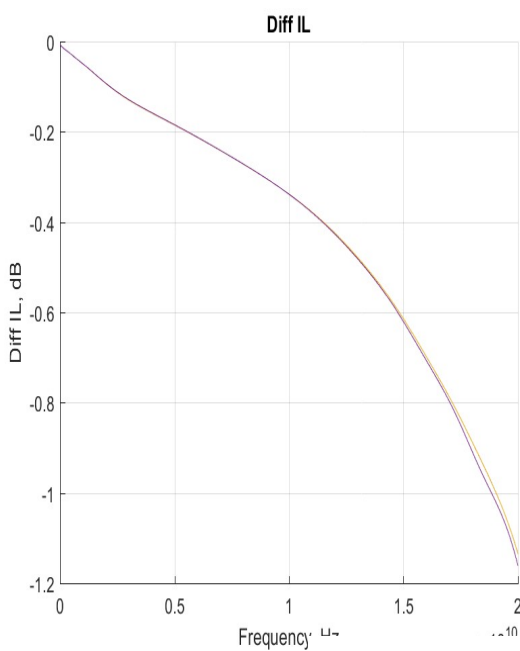
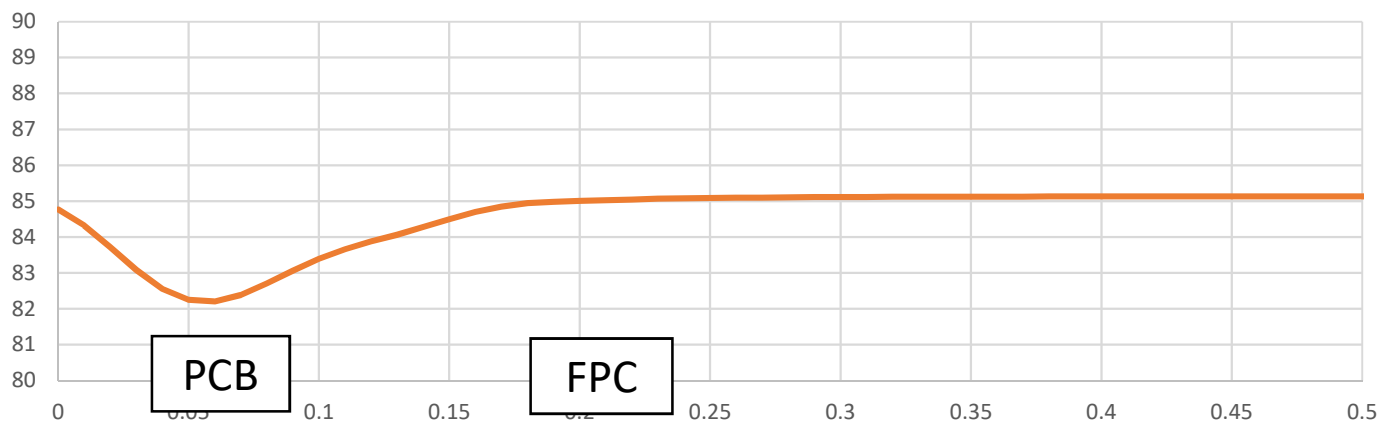


## High Speed Performance

**USB4 (20Gbps)**

Impedance (40ps@20~80%)

— TDD22



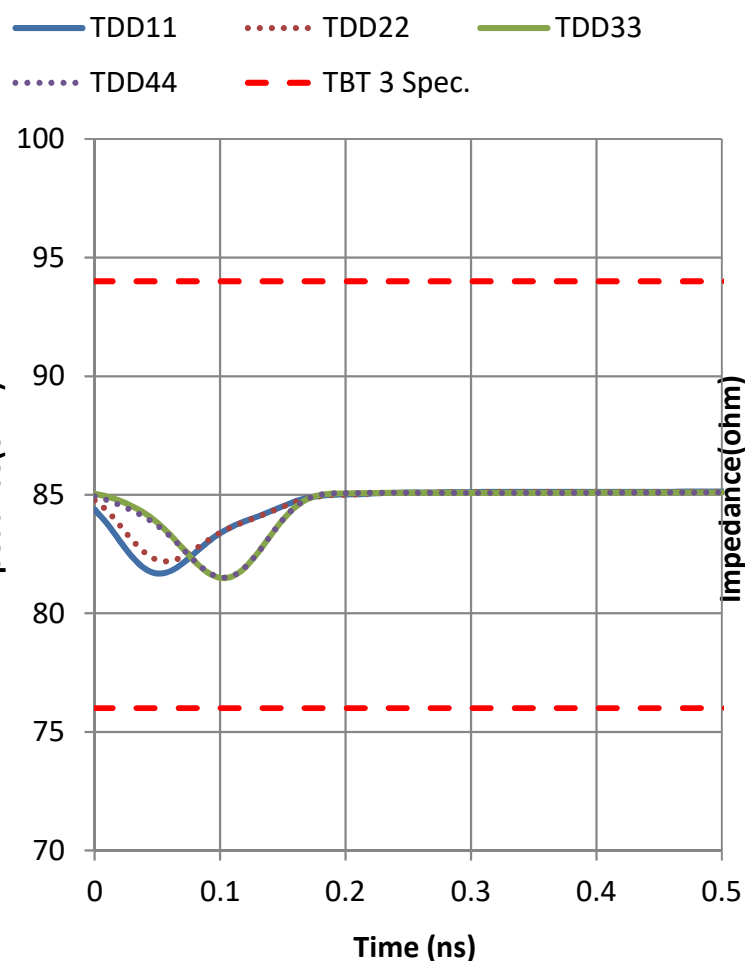
## ■ Supports High-Speed Transmissions

- ✓ Thunderbolt 3 (20Gbps)
- ✓ USB4 Gen 3 (20Gbps)

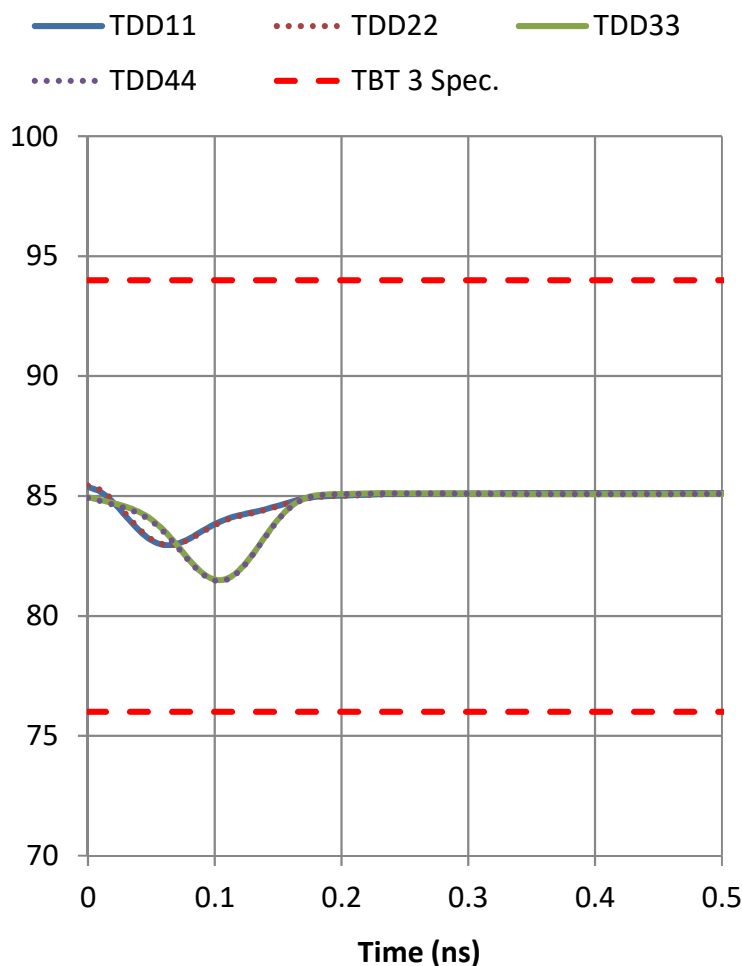
### Thunderbolt 3 (20Gbps)

Impedance (40ps@20~80%)

#### Upper Contact



#### Lower Contact



## Drawing & Specification:

### PM Contact Window

Tim Wu #1715, Tim.wu@acesconn.com

### RD Contact Window

James Wang #2743, jameslen@acesconn.com

