

Conan® Lite 1.00mm Board to Board Connector

Product Presentation

Amphenol Information Communications
and Commercial Products

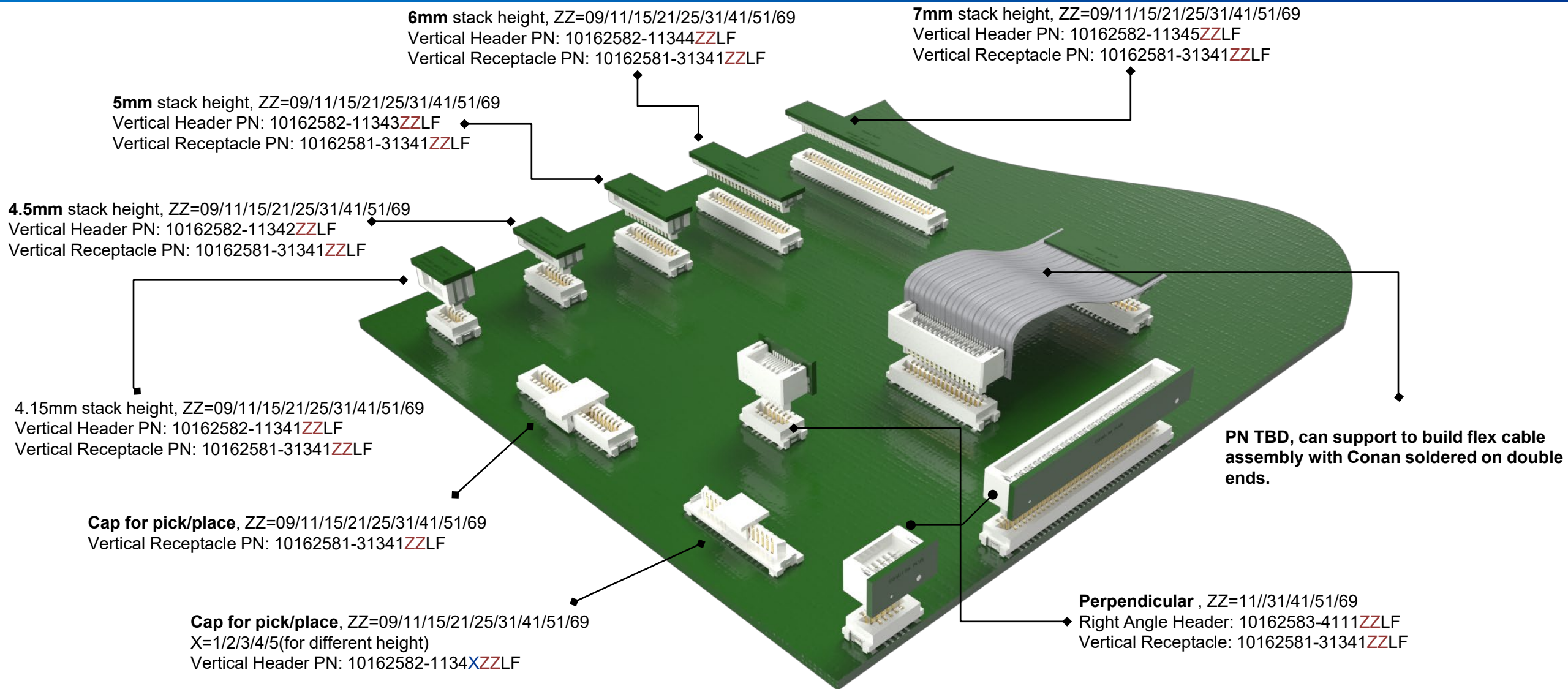
 **FCi Basics**

Amphenol ICC

- Conan® Lite 1.00mm board to board connectors provide a **mechanically secure, high density** electrical interface between parallel or perpendicular printed circuit boards or flexible printed circuits.
- Conan® Lite provide vertical and right-angle, offered in 9-69 positions and 4.15-7mm mating heights, making it suitable for a wide range of applications.
- Conan® Lite is an **economical version** that uses **Gold Flash** plating that can meet up to 30 mating cycles while extending the mechanical advantage of the standard Conan®.
- Conan® Lite out-performs competitors because of superior mating characteristics that include **“click” audible feedback** and high mated retention with **zipper un-mating**
- Conan® Lite provides reliability and reduced business risk with a **lead-in and polarized housing** to assist proper alignment during blind mating
- Conan® 1.00mm solution is especially ideal for Industrial Electronics applications and Harsh Environments.

Conan® Lite 1.00mm Connector

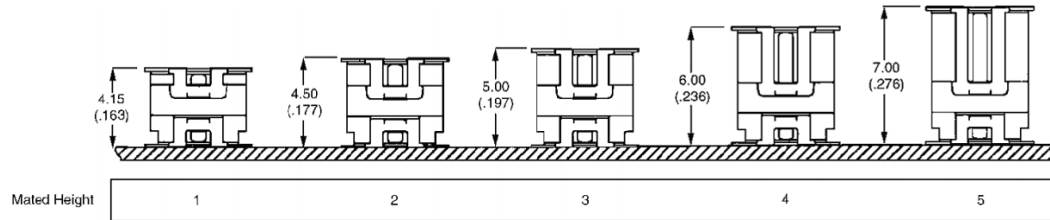
Product Overview



Conan® Lite 1.00mm Connector

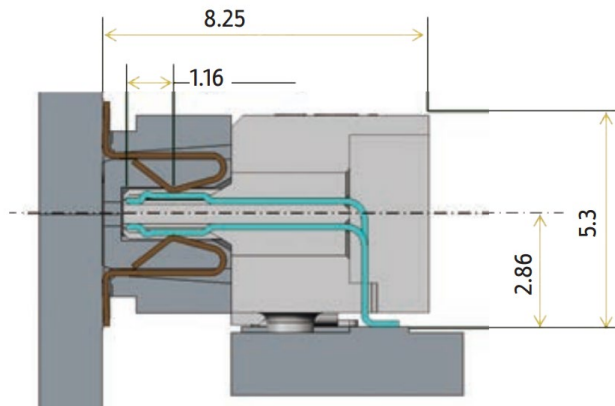
Product Overview

Parallel



- Have vertical header and vertical receptacle to support parallel board to board solutions.
- Stack height(board distance) arrange: 4.15mm/4.5mm/5mm/6mm/7mm.
- Position range: 9/11/15/21/25/31/41/51/69

Perpendicular



- Have right angle header and vertical receptacle to support perpendicular board to board solutions.
- Position range: 11/31/41/51/69

Conan® Lite 1.00mm Connector

Product Specifications

Specifications

- 9 to 69 positions
- Stack height: 4.15mm to 7mm
- PCB Termination: SMT
- Audible click sound when mating in place
- Signal speed: up to 8Gb/s(PCIe Gen3)
- Perpendicular and Parallel solution

Materials

- Housing: high temperature plastic
- Terminal: Copper Alloy
- Plating: Gold flash

Electrical Performances

- Insulation Resistance: 1000M Ω min.
- Current Rating: 1.0A continuous(all contacts powered)
- Contact Resistance: 30m Ω max.
- Withstanding Voltage: 500V AC RMS 60Hz

Shock and Vibration

Mechanical shock

- 35G, 10ms, half sine, 10times/axis

Vibration

- 5-1000Hz, 1.81G.rms,8hours/axis

Mechanical Performance

- Durability: 30 mating cycles
- Mating Force: 125 g per contact max.
- Un-mating Force: 35g per contact min.
- Contact retention to housing: 1.10N min.
- Retention Force (connector to PCB): 44N (10lbf) min.

Environmental

- Operating Temperature: -55°C to +125°C

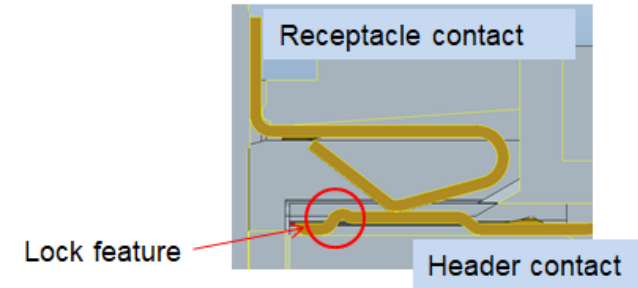
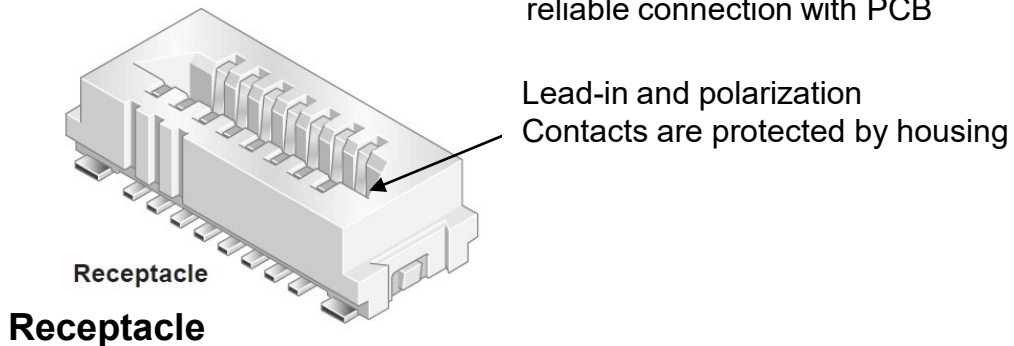
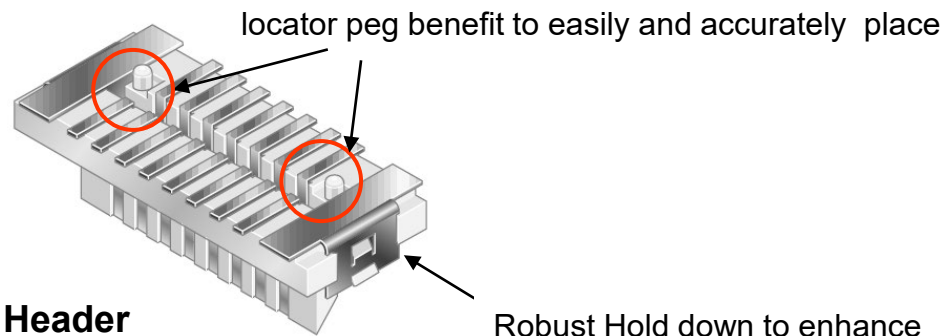
Conan® Lite 1.00mm Connector

Features and Benefits

Features	Benefits
9 to 69 positions and 4.15mm to 7.0mm stack heights to support parallel BTB solution, and 11-69positions to support perpendicular BTB solution	Comprehensive solution to satisfy all customer needs
Unique audible “click” sound when mating is in place	Facilitates assembly process and supports blind mating
Parallel connection supports up to 8Gb/s	Can support applications need to compatible with PCIe® protocol,
Unique lock feature on header contacts benefit to stand higher level vibration	Suitable for vibrant applications need higher connection reliability
Protected terminals and polarization feature on housings to avoid mismatching or reversed mating	Support reliable and secure mating
Robust metal hold down	Enables improved retention to the PCB
Pick up cap and packed in Tape&Reel	Support User to go via auto assembly process
Polarized locating pegs on housings	Easy to place accurately on PCB without issue

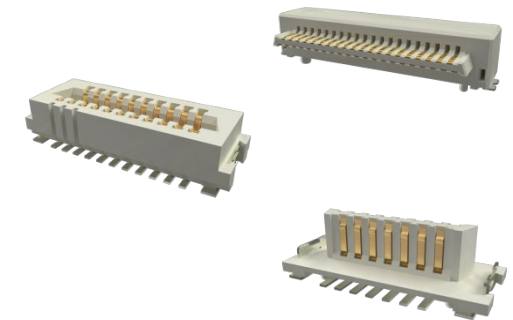
Conan® Lite 1.00mm Connector

Advanced feature



With the lock feature, can hear “click” sound when header and receptacle mate in place.
This feature also makes the connection more reliable, improve mated retention, also improve vibration resistance.

- Other features
- PCIe Gen3 compatible
 - Pick/place cap
 - Tape/reel package



Conan® Lite 1.00mm Connector

Part Number

Parallel Solution

Conan® Lite Vertical Header	Conan® Lite Vertical Receptacle	Conan® Lite Solution you achieve
10162582-11341ZZLF	10162581-31341ZZLF	Parallel solution with 4.15mm stack height 9/11/15/21/25/31/41/51/69 positions
10162582-11342ZZLF		Parallel solution with 4.5mm stack height 9/11/15/21/25/31/41/51/69 positions
10162582-11343ZZLF		Parallel solution with 5mm stack height 9/11/15/21/25/31/41/51/69 positions
10162582-11344ZZLF		Parallel solution with 6mm stack height 9/11/15/21/25/31/41/51/69 positions
10162582-11345ZZLF		Parallel solution with 7mm stack height 9/11/15/21/25/31/41/51/69 positions

*ZZ represents number of position, can be 09/11/15/21/25/31/41/51/69

For instance, if customer has **Parallel** board to board distance of **4.15mm** and need position around **50**, we can propose:

Vertical header 10162582-11341**51**LF and receptacle of 10162581-31341**51**LF

Remark: More options can be extended according to the market needs

Perpendicular Solution

Conan® Lite Right Angle Header	Conan® Lite Vertical Receptacle	Conan® Lite Solution you achieve
10162583-411111LF	10162581-3134111LF	11 positions Perpendicular solution
10162583-411131LF	10162581-3134131LF	31 positions Perpendicular solution
10162583-411141LF	10162581-3134141LF	41 positions Perpendicular solution
10162583-411151LF	10162581-3134151LF	51 positions Perpendicular solution
10162583-411169LF	10162581-3134169LF	69 positions Perpendicular solution

Remark: More options can be extended according to the market needs

Conan® Lite 1.00mm Connector

Main Markets & Applications

Industrial

- Analytical Instruments
- Robotics
- POS
- Ruggedized handhelds
- PLC & Sever Driver
- Industrial PC



Datacenter

- Servers
- Storage



Automotive

- Cluster
- Electronic Control Units
- LED reading light



Medical

- Patient Monitor
- Diagnostics Equipment



- Conan® Lite [Product Series](#)
- Conan® Lite [Datasheet](#)
- Conan® Lite [Product Presentation](#)
- Conan® Lite [Product Specification](#)
- Conan® Lite [Product Overview](#)



Thank you