

**Conan<sup>®</sup>**

Product Presentation

**Amphenol Information Communications  
and Commercial Products**

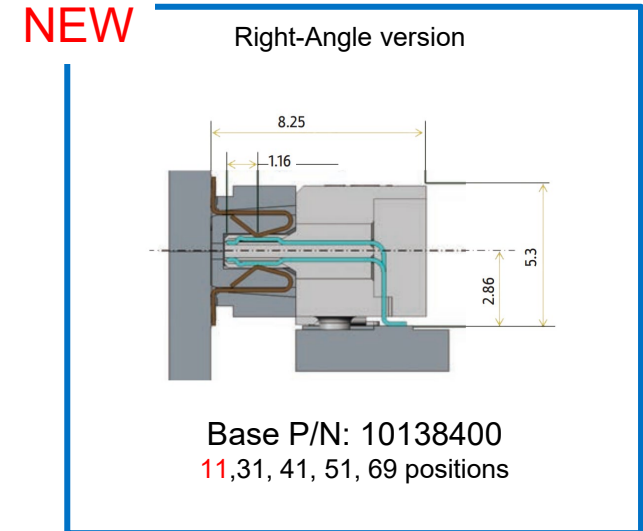
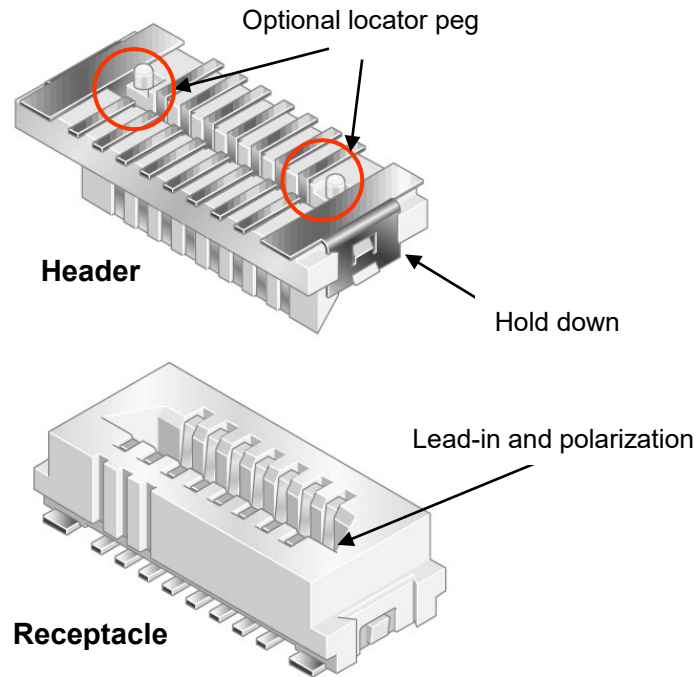
**≡FCi Basics**

**Amphenol ICC**

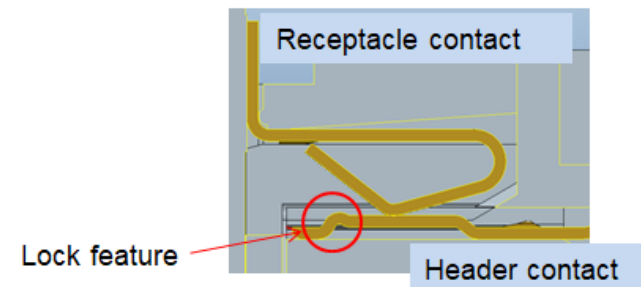
- Conan<sup>®</sup> 1.00mm **mezzanine connector system** provides a mechanically secure, high density electrical interface between parallel or perpendicular printed circuit boards or flexible printed circuits
- Conan<sup>®</sup> 1.00mm is a comprehensive and versatile solution **designed for handheld and portable electronics**. It has good mating performance, rugged design and is under 70 positions
- Conan<sup>®</sup> 1.00mm solution includes **5 standard stack heights** for precision in a tight range from **4.15mm to 7mm** and **9 sizes up to 69 positions**
- Conan<sup>®</sup> out-performs competitors because of superior mating characteristics that include **“click” audible feedback** and high mated retention with **zipper un-mating**
- Conan<sup>®</sup> provides reliability and reduced business risk with a **lead-in and polarized housing** to assist proper alignment during blind mating
- Conan<sup>®</sup> 1.00mm solution is especially ideal for Industrial Electronics applications and Harsh Environments.

# Conan<sup>®</sup> 1.00mm

## Product Overview



- Positions: 9 to 69
- Stack height: 4.15mm to 7.0mm
- Current rating: 1A/pin, with all pin powered
- Speed: up to PCIe Gen3 with 8Gbps
- Unique feature: Lock feature on contact to improve un-mating force(connection reliability)



### Specifications

- 9 to 69 positions
- Stack height: 4.15mm to 7.0mm
- Audible click during mating signals proper engagement
- Signal speed: up to 8Gb/s(PCIe Gen3)
- Lead-in and polarized housing supports blind mating

### Materials

- Housing: high temperature plastic
- Terminal: Beryllium-copper
- Plating: 0.38  $\mu\text{m}$  GXT<sup>™</sup>/ 1.27  $\mu\text{m}$  Sn  
0.76  $\mu\text{m}$  GXT<sup>™</sup>/ 1.27  $\mu\text{m}$  Sn

### Electrical Performances

- Insulation Resistance: 1000M $\Omega$  min.
- Current Rating: 1.0A continuous (all contacts powered)
- Contact Resistance: 30m $\Omega$  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: 30/200 mating cycles
- Mating Force: 125 g per contact max.
- Un-mating Force: 45g per contact min.
- Contact retention to housing: 1.10N min.
- Retention Force (connector to PCB): 44N (10lbf) min.

### Environmental

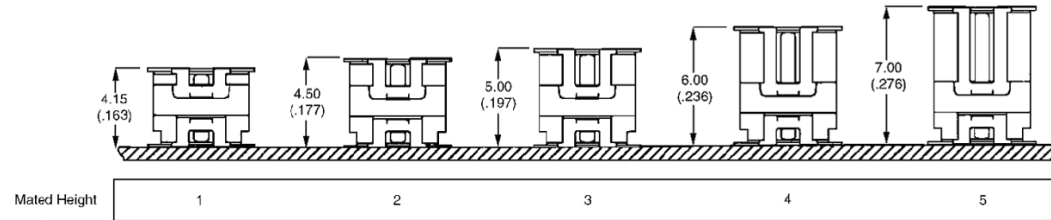
- Operating Temperature: -55°C to +125°C

# Conan<sup>®</sup> 1.00mm

## Features and Benefits

Features	Benefits
Up to 69 positions and 4.15mm to 7.0mm stack heights and suitable for board to board; flex to board and edgecard to board solutions	Comprehensive range of sizes and stack heights support diverse electronic packaging building practises
NEW right-angle configuration	Comprehensive solution to satisfy all customer needs
Parallel connection support up to 8Gb/s	Compatible with PCIe <sup>®</sup> Gen high speed performance on selected stack heights
Audible `click` during mating signals proper engagement	Facilitates assembly process and supports secure blind mating
Unique lock feature on contacts	Suitable for industrial applications need higher connection reliability
Lead-in and polarized housing	Prevents mis-mating during assembly
Optional locating pegs Optional cap	Facilitates easy assembly and increased accuracy during manual assembly Compatible with auto- suction nozzle picker
Metal hold down	Enables improved retention to the PCB
Blade on beam contact design	Resist peeling damage: offers reliability and reduced business risk

### Parallel



919 - T - C - W - X - Y - ZZ - LF - Lead free RoHS

Type	T
Header with no pegs	0
Header with pegs	1
Receptacle with no pegs	2
Receptacle with pegs	3

Pick And Place Cap or Tape	C
Without cap or tape	0
With cap	1
With tape (receptacle only)	2

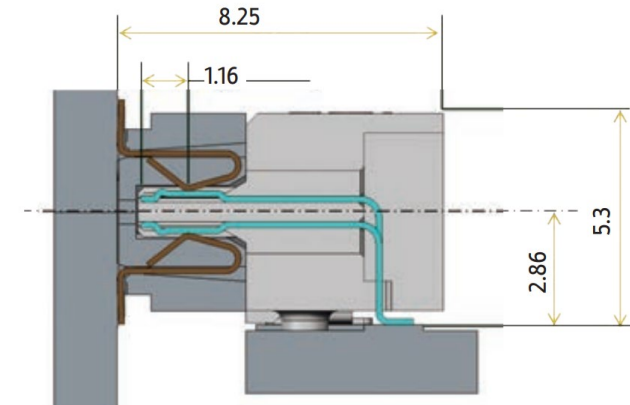
Packaging	W
Tube	2
Pressure sealed tape & reel	3

Plating	X
15µin/.38µin. GXT	1

Header Height	Receptacle Height	Mated Height	+100 -.008 [+.25] [-.20]	Y
0.43 [.80]	.129 [3.28]	.163 [4.15]		1
0.48 [1.23]	See Y = 1 for all receptacles	.177 [4.50]		2
0.68 [1.73]		.197 [5.00]		3
.107 [2.72]		.236 [6.00]		4
.1465 [3.721]		.276 [7.00]		5

Number of Positions	ZZ
9	09
11	11
15	15
21	21
25	25
31	31
41	41
51	51
69	69

### Right-Angle



Description	Part Numbers
Conan® 1.00mm Pitch, Right Angle Header, 11 Positions	10138400-111111LF
Conan® 1.00mm Pitch, Right Angle Header, 31 Positions	10138400-111131LF
Conan® 1.00mm Pitch, Right Angle Header, 41 Positions	10138400-111141LF
Conan® 1.00mm Pitch, Right Angle Header, 51 Positions	10138400-111151LF
Conan® 1.00mm Pitch, Right Angle Header, 69 Positions	10138400-111169LF

R/A header mate with vertical receptacle to achieve perpendicular solution.

### Industrial

- PLC
- Drive



### Data

- Servers
- Storage



### Communication

- Router
- Base Station



### Energy

- Solar Inverter
- Power Control



### Home Automation

- Home controller
- Security Camera



### Automotive

- Electronic Control Units
- Micro Controllers



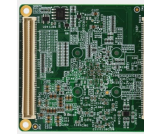
### Medical

- Ultrasound
- Patient Monitor



### Embedded Computing

- Single Board Computers
- System on module (SOM)



### Instrumentation / POS

- Rugged handhelds
- POS terminals



- Conan<sup>®</sup> 1.00mm [Landing Page](#)
- Conan<sup>®</sup> 1.00mm [datasheet](#)
- Conan<sup>®</sup> 1.00mm [Product Presentation](#)





**Thank you**