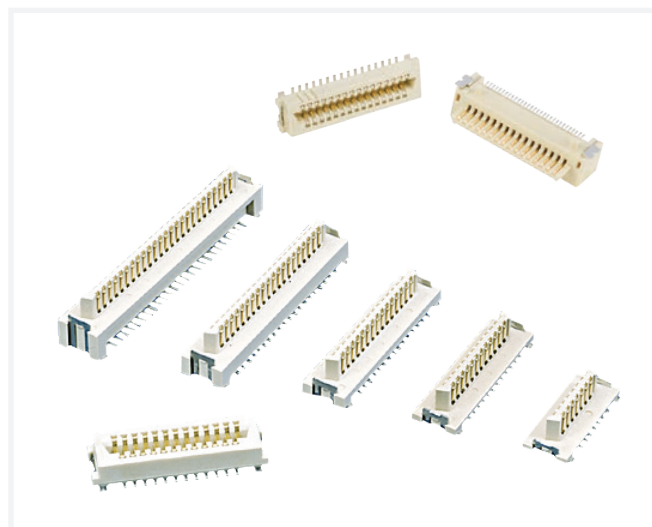


# Conan® 1.00mm Connector System

## SECURE, HIGH SPEED DESIGN FOR HARSH ENVIRONMENTS

Amphenol ICC's Conan® 1.00mm is a mezzanine connector designed for industrial applications and harsh environments. Its unique design with an audible "click" sound enhances the security and ease of use.

- New right angle configuration in 4 pin counts
- Right angle configurations has compact size of 8.5mm depth and 5.3mm height on PCB after mating
- Enables perpendicular stacking application



### TARGET MARKETS



### FEATURES

- Vertical configuration
  - 9 to 69 positions
  - 4.15mm to 7.0mm stack heights increment
- Right angle configuration
  - 31, 41, 51, 69 position increment
- Vertical housing and terminal profile guarantees support of up to 5Gb/s
- Vertical versus vertical mating configuration
- Vertical receptacle versus RA header mating configuration
- Audible "click" sound during mating
- Polarization feature of housing
- Multiple packaging options available
- Locating pegs option
- Metal hold down option
- RoHS compliant and lead free

### BENEFITS

- Comprehensive range of sizes and stack heights support diverse electronic packaging schemes
- Comprehensive solution to satisfy all customers needs
- Compatible with PCIe® Gen high speed performance on selected stack heights
- Useful for parallel board stacking application
- Useful for perpendicular stacking application
- Ensures secure mating interconnection
- Prevents mismating
- Meets various feeding processing needs
- Facilitates ease and accuracy during manual assembly
- Enables better retention on to the PCB
- Meets environmental, health and safety requirements

## TECHNICAL INFORMATION

### MATERIAL

- Contact Base Metal
  - Header: Phosphor Bronze
  - Receptacle: Copper Alloy, High Spring
- Contact Area Finish: Gold or GXT®
- Solder Tail Area: Pure Tin over 1.27µm Nickel
- Housing Material: Cream-colored LCP (UL94V-0)

### MECHANICAL PERFORMANCE

- Mating Force: 125g per contact max.
- Unmating Force: 25g per contact min.
- Retention Force (connector to PCB): 44N min.
- Contact Wipe: 0.64mm
- Durability: 30 mating cycles

### ELECTRICAL PERFORMANCE

- Insulation Resistance: 1000MΩ min.
- Contact Resistance: 30MΩ max.
- Withstanding Voltage: 500VAC RMS 60Hz
- Current Rating: 1.0A continuous (per contact, all contacts powered)
- Signal Integrity (differential pairs, connector only)
  - Impedance: 100Ω +/- 10 @ 50 ps edge (10–90%)
  - Insertion Loss: < 1.5dB up to 5GHz
  - NEXT: ≤ 3.5% for a 50 ps edge (10–90%)
  - FEXT: ≤ 2.5% for a 50 ps edge (10–90%)

### ENVIRONMENTAL

- IMFG per EIA 364–65 class 2a without SO2, 20 days mated
- High Temperature Life: 105°C

### SPECIFICATIONS

- Product Specification: GS-12-006

### PACKAGING

- Tape and reel with vacuum pickup caps

### TARGET MARKETS/APPLICATIONS



Communications and Networking Equipment



Electronic Security  
Energy Controller/Module/Display  
Machine-to-Machine (M2M) Office Equipment  
Point-of-Sale Equipment, Scanning  
Portable Meter/Instrument



Medical Diagnostics

## PART NUMBER SELECTOR

### VERTICAL

|     |   |   |   |   |   |    |    |                |
|-----|---|---|---|---|---|----|----|----------------|
| 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 |

| Header Height | Receptacle Height             | Mated Height | +100<br>-008<br>[+.25]<br>[-.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 |

| Plating           | X |
|-------------------|---|
| 15µin/.38µin. GXT | 1 |

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

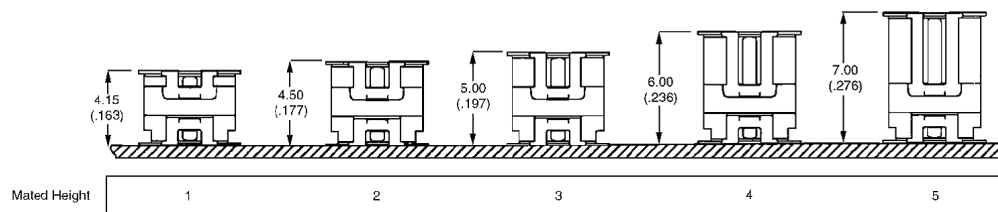
Recommended packaging combinations:

For production: Connector with pick and place cap packaged in tape and reel (XXXX1-3XXXX)

For proto-typing: Connector without pick and place cap packaged in tubes (XXXX0-2XXXX)

For commercial applications see print 10118744

### MODULE



Mated connector max. width: 5.59mm

### RIGHT ANGLE

| Description                             | Part Numbers      |
|-----------------------------------------|-------------------|
| Conan® right angle header, 31 positions | 10138400-111131LF |
| Conan® right angle header, 41 positions | 10138400-111141LF |
| Conan® right angle header, 51 positions | 10138400-111151LF |
| Conan® right angle header, 69 positions | 10138400-111169LF |

