Алматы (7273)495-231 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Благовещенск (4162)22-76-07 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Владикавказ (8672)28-90-48 Владимир (4922)49-43-18 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Коломна (4966)23-41-49 Кострома (4942)77-07-48 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Курган (3522)50-90-47 Липецк (4742)52-20-81

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Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокуэнецк (3843)20-46-81 Ноябрьск (3496)41-32-12

Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Петрозаводск (8142)55-98-37

Петрозаводск (8142)55-Псков (8112)59-10-37 Пермь (342)205-81-47

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Самара (846)206-03-16
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Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
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Ставрополь (8652)20-65-13
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Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97

Ростов-на-Дону (863)308-18-15

Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Улан-Удэ (3012)59-97-51 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чебоксары (8352)28-53-07 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Ярославль (4852)69-52-93

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# **Amphenol**

## **Board-Level Connectors**



#### 127/HE801-HE804-HE807

The 127/HE8 series is a medium-density range of multi-contact plug-in connectors for PCB. This range of 2.54 staggered grid, low profile connectors offers the widest range of hardware, guides, and contact terminations, providing more flexibility to PCB designers.



#### 254/HE701-HE901

The 254 series is a double-sided, 2,54 [.100] pitch, range of connectors for printed circuit boards.



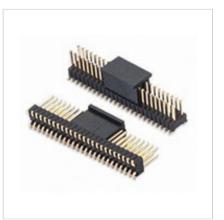
#### 804SLD

HE804 derivated connector for use with thermal clamps.



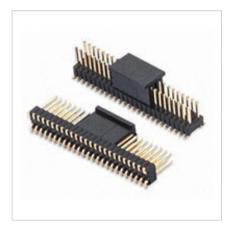
#### AgilBrick™ 1.27mm Board-to-Board Header G802

AgilBrick™ 1.27mm Board-to-Board Header G802 Series offers a cost-effective solution with a flexible structure and 1 to 4 A current rating. These headers from Amphenol ICC can be customized to meet various customer requirements. It comes in customizable pin length, including contact pin and solder tail, which makes it an ideal choice for several applications and specific designs.



#### AgilBrick™ 2.00mm Board-to-Board Header G825

AgilBrick™ 2.00mm Board-to-Board Header G825 Series offers a cost-effective solution with a flexible structure and 1 to 4 A current rating. These headers from Amphenol ICC can be customized to meet various customer requirements. It comes in customizable pin length, including contact pin and solder tail, which makes it an ideal choice for several applications and specific designs.



#### AgilBrick™ 2.54mm Board-to-Board Header G800

AgilBrick™ 2.54mm Board-to-Board Header G800 Series offers a cost-effective solution with a flexible structure and 1 to 4 A current rating. These headers from Amphenol ICC can be customized to meet various customer requirements. It comes in customizable pin length, including contact pin and solder tail, which makes it an ideal choice for several applications and specific designs.



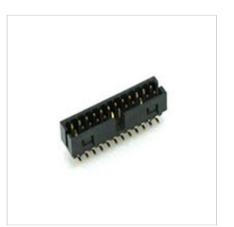
#### AgilLink™ 1.20mm Wire-to-Board Header G823H

AgilLink™ 1.20mm Wire-to-Board G823H series is the most common solution for transferring power and signal. This series can carry a maximum current rating of 1A. Amphenol ICC offers a comprehensive range of these headers including V/T SMT and vertical and R/A right angle SMT to meet various customer requirements. It is offered in customizable for high current ratings, which makes it an ideal c...



#### AgilLink™ 1.50mm Wire-to-Board Header G886

AgilLink™ 1.50mm Wire-to-Board G886 series is the most common solution for transferring power and signal. This series can carry a maximum current rating of 2.5A. Amphenol ICC offers a comprehensive range of these headers including, vertical and right-angle DIP, and vertical and right angle SMT, to meet various customer requirements. It comes with customizable pin length, latch, or location post...



#### AgilLink™ 2.00mm Wire-to-Board Header G823

AgilLink™ 2.00mm Wire-to-Board Header G823 Series is the most common solution for transferring power and signal. It can mate with both wire-to-board and board-to-board applications. This series can carry a maximum current rating of 4A. Amphenol ICC offers a comprehensive range of these headers including, V/T DIP, V/T SMT, R/A DIP to meet various customer requirements.



#### AgilLink™ 2.50mm Wire-to-Board Header G863

AgilLink™ 2.50mm Wire-to-Board is the most common solution for transferring power and signal. This series can carry a maximum current rating of 1.25A to3A. Amphenol ICC offers a comprehensive range of these headers including, vertical DIP, right-angle DIP, vertical SMT, and right angle SMT to meet various customer requirements.



## BergStak HS™ 0.50mm Mezzanine Connector

FLEXIBLE SOLUTION FOR HIGH-SPEED APPLICATIONS BergStak HS<sup>™</sup> 0.50mm connector is a flexible solution designed for high speed and high density, parallel board-to-board applications with various heights in different sizes. The BergStak HS<sup>™</sup> 0.50mm connector series meets the new 25Gb/s and 32Gb/s performance requirements.



#### BergStak HS™ 0.80mm Board-to-Board Connector

FLEXIBLE SOLUTION FOR HIGH-SPEED APPLICATION FCI Basics BergStak HS™ connector family is known for its fast data transmission, high signal quality, and time-proven reliability under extended periods of application. BergStak HS™ 0.80mm connector family with 0.80mm pitch enables high-speed data applications with up to PCIe® Gen 5 32Gb/s.



#### BergStak+™ 0.80mm Mezzanine Connector

BergStak+™ 0.80mm is designed to be the next generation PCIe 4.0 compliant mezzanine connector system. It is compatible with the existing BergStak® 0.80mm product recommended by the OCP. It guarantees to support up to 16Gb/s performance. Customers can upgrade its board-to-board performance from PCIe 3.0 to PCIe 4.0 while leveraging BergStak+™'s backward compatibility and same footprint feature.



#### BergStak® 0.40mm Self-Alignment Board-to-Board Connector

FCI Basics BergStak® 0.40mm self-alignment connectors come with a stack height of 3.50mm and 30 positions extendable up to 10 to 60 positions with 10 positions incremental. It has a unique self-alignment feature that supports blind mating, ensuring a reliable connection. The USCAR-2 compliant connector is also ideal for the automotive market.



#### BergStak® 0.50mm Mezzanine Connector

The BergStak® product range is expanded to include 0.5mm mezzanine connectors. Available in 3mm to 6mm stack height options in 0.5mm increments, this connector is offered in 10 to 60 positions in 10 position increments. Designed with scoop-proof housing the terminals are protected from damage when parts are mated.



## BergStak® 0.50mm Self-Alignment Board-to-Board Connector

FINE PITCH SOLUTION WITH SELF-ALIGNMENT FEATURE FCI Basics BergStak® 0.50mm self-alignment connectors come with a stack height of 3mm and 50 positions extendable across 20 to 60 positions in increments of 10. It has a unique self-alignment feature that supports blind mating.



#### BergStak® 0.80mm Pitch

FLEXIBLE SOLUTION FOR HIGH-DENSITY APPLICATIONS FCI Basics BergStak® 0.8mm is a flexible solution designed for high speed and high density, parallel board-to-board connector system with 16 PCB stack heights in 9 sizes up to 200 positions.



#### BergStak® 0.80mm Shielded Board-to-Board Connector

FCI Basics BergStak® 0.80mm connector family is known for its fast data transmission, high signal quality, and time-proven reliability under extended periods of application. Bergstak® shielded connector with 0.80mm pitch supports high-speed data applications up to 10Gb/s.



#### BergStak® FX10 0.50mm Board-to-Board Connector

FCI Basics BergStak® product range is expanded to include a 0.50 mm BergStak® FX10 board-to-board connector known for its fast data transmission and high signal quality. This connector is offered in 144 positions and is available in 4.30mm and 6.00mm stack height options. BergStak® FX10 supports speed performance up to 15Gb/s+ and is available in vertical SMT configuration.



## BergStak® Lite 0.80mm Board-to-Board Connector

Amphenol's BergStak® Lite 0.8mm is a comprehensive, versatile, and flexible solution designed for high speed and high density, parallel board-to-board connector system with 16 PCB stack heights in 4 sizes up to 100 positions. This is an economical version that uses Gold Flash plating that can meet up to 50 mating cycles while extending the mechanical advantage of the standard BergStak® 0.80mm.



#### **BergStak® Secure Connector**

HIGH SECURITY/HIGH DENSITY/HIGH-SPEED BOARD-TO-BOARD CONNECTOR The BergStak® Secure connector contains One-time-use and Multi-times-use solutions. Both solutions have unique shield designs to protect signal transmission. The 3-row contact design with 1.0mm pitch improves board surface utilization by 20%. The family can support high-speed data transmission up to 32Gb/s.



#### BergStik® 2.54mm

BergStik® FCI Basics 2.54mm unshrouded headers are available in SMT, THT, press-fit, stacking, and PIP versions. Designed in single and double row, they are available in straight or right angle options, from 2 to 72 positions. Featuring a "breakaway" design, each connector can be cut or broken into lengths to suit the application profile with a maximum current rating of 3A per contact.



#### **Board Level Connectors**

Amphenol SOCAPEX offers a wide range of board to board (PCB) & board to cable connectors. Our solutions cover different types of technologies using copper and/or fiber optic are proposed as high pin count connector or high speed solutions. Our connectors are designed to meet performances of main standards as MIL-DTL-55302, MIL-DTL-83513 and VITA (either VITA 46 or VITA 66).



#### **BoardLock™ Family**

Available in AT, ATHD, ATM, and ATP Series Versions. Amphenol Sine Systems' BoardLock™ Family combines flanged or flangeless, 180° straight or 90° right angle pin-oriented, wire-to-board versatility with the proven reliability of the A Series™ environmentally-sealed thermoplastic connection system with a maximum current rating up to 100A. Compact, durable, low-profile, and lightweight.



#### Board-to-Board $100\Omega$ (0.80mm pitch)

Amphenol high-speed BTB connectors provide high contact force reliability ensuring strong connectivity, forced insertions, and removals. A broad range of stacking heights & pin counts is offered to provide maximum design flexibility. With superior signal integrity (SI) performance, this 0.80mm pitch connector design is suitable for high-performance applications & meets SAS 3.0, 12GT/s.



#### Board-to-Board 85Ω (0.60mm pitch)

Amphenol high-speed BTB connectors provide high contact force reliability ensuring strong connectivity, forced insertions, and removals. A broad range of stacking heights & pin counts is offered to provide maximum design flexibility. With superior signal integrity (SI) performance, this 0.60mm pitch connector design is suitable for high-performance applications & meets PCIe Gen 3, 8GT/s.



#### Board-to-Board 85Ω (0.80mm pitch)

Amphenol high-speed BTB connectors provide high contact force reliability ensuring strong connectivity, forced insertions, and removals. A broad range of stacking heights & pin counts is offered to provide maximum design flexibility. With superior signal integrity (SI) performance, this 0.80mm pitch connector design is suitable for high-performance applications & meets PCIe Gen 3, 8GT/s.



#### **Board-to-Board Connectors (0.50mm pitch)**

0.50MM PITCH,  $85\Omega$  BOARD-TO-BOARD SOLUTION Amphenol high-speed board-to-board connectors provide high contact force reliability ensuring strong connectivity, forced insertions, and removals. A broad range of stacking heights and pin counts are offered to provide maximum design flexibility. Amphenol 0.50mm pitch connector design is suitable for high-performance applications.



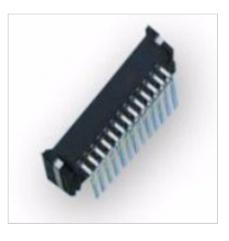
#### Board-to-Board Connectors - B401/B402 Series (0.80mm pitch)

HIGH DENSITY VERTICAL BOARD-TO-BOARD CONNECTORS Amphenol's B401/B402 series is 0.80mm pitch board-to-board connectors designed for high-density applications. They support stack heights up to 10mm and 100 positions. These connectors feature surface mount terminations and are available in a comprehensive range to satisfy different customer requirements.



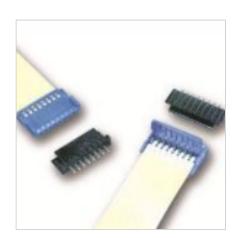
#### **Boltrack™ Connector**

FCI Basics Boltrack™ connector promotes signal and PoE++ transmission over Cat 5e and 6 cables in a wide range of datacom and industrial applications. It offers lightning protection, EMI shielding, and is field-installable. Boltrack™ connector comes in a 4-pair right-angle board receptacle and cable plug mating combination. The connector can resist voltages up to 2,500V.



#### **BTFW Floating Board To Board**

The BTFW Series is a floating board-to-board connector system consisting of plugs and receptacles with two rows of staggered contacts on 1.00mm (0.039in.) centerlines. This connector system is designed for applications that require high density, and high reliability interconnects with higher pin counts and surface mount termination, such as audio-video (AV) and navigation systems in automobiles.



#### **Clincher™ Flex Connectors**

FCI Basics the Clincher™ 2.54mm pitch connector family includes single-row pin-and-receptacle connectors designed for termination to flat flexible circuitry. All receptacle connectors use the same customer-preferred and patented Clincher™ contact and are ideal for applications where shock or vibration are concerns.



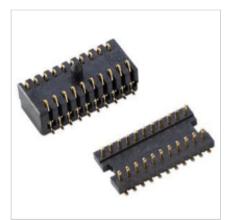
#### ComboLock® Wire-to-Board Connector System

The ComboLock® Wire-to-Board connector's compact design for the limited space application needs carries power and signal requirements. The connector system has hybrid 1.00mm pitch signal and 3.00mm pitch power configuration with an active latching feature. The connector has a nominal current carrying capacity of 10A/pin max for power and 1.5A/pin max for signal. Power wire sizes from 26 to 18AWG



#### ComboStak® and PowerStak® Board-to-Board Connectors

ComboStak® and PowerStak® are compact, hybrid (signal and power), and power board-to-board connectors. ComboStak® combines existing, BergStak® 0.8mm pitch signal pins with 2.00mm pitch power blades. PowerStak® is the power-only version. Both ComboStak® and PowerStak® provide high signal and current density with a wide range of stack heights.



#### **Compression Connectors**

COMPRESSION-TYPE SURFACE MOUNT CONNECTORS FOR HDD (HARD DISK DRIVE) Compression connectors are customizable single-piece solutions that facilitate read & write functions in traditional low-cost bulk-storage HDDs and helium HDDs.



#### Conan® 1.00mm Connector

Amphenol ICC's Conan® 1.00mm is a mezzanine connector designed for industrial applications and harsh environments. Conan® 1.00mm provides a mechanically secure, high-density electrical interface between parallel printed circuit boards. Its unique design with an audible 'click' sound enhances the security and ease of use. It has good mating performance, rugged design, and is under 70 positions.



#### Conan® Lite 1.00mm Connector

Conan® Lite 1.00mm connectors come with a robust metal down feature that helps in establishing a reliable connection with the PCB in both parallel and perpendicular board-to-board applications. These connectors also feature an audible "click" sound ensuring mating in place. Conan® Lite vertical headers, receptacles, and right-angle headers are offered in 9-69 positions.



#### **Cross-Mate™ 2.00mm Wire-to-Board Connector System**

FCI Basics Cross-Mate<sup>™</sup> series is a 2.00mm pitch wire-to-board system that offers a compact design and active latching for applications requiring good mating retention. The Terminal-Position-Assurance (TPA) guarantee that the contact is properly mounted into the cable housing eliminating functional problem due to wrong connector assembly.



#### **DDR2 SO-DIMM Memory Module Sockets**

DDR2 SO-DIMM sockets are designed to accept modules that conform to JEDEC MO-224. The sockets come with a small form factor which allows fitting into smaller chassis, aiding the development of smaller & lighter notebooks. It comes in two voltage options with different key-ID to prevent incorrect mating. It operates at a higher speed & bandwidth lowers power consumption.



#### **DDR3 Memory Module Sockets**

DDR3 vertical DIMM sockets are designed to accept 240 position DDR3 memory modules that conform to JEDEC M0-269. Low-resistance contacts support the use of RDIMM (registered DIMM), which helps to further reduce power consumption in data center hardware.



#### **DDR4 Memory Module Sockets**

Vertical DDR4 DIMM sockets from Amphenol provide 288 contacts on 0.85mm pitch and are designed to accept DDR4 memory modules that conform to JEDEC MO-309. The DDR4 series complies with the new interface standard JEDEC POD12. It allows a module seating plane of 2.40mm and supports module variants in UDIMM, RDIMM, and LRDIMM.



#### **DDR4 SO-DIMM Memory Module Sockets**

HIGH-SPEED HIGH-DENSITY SO-DIMM SOCKETS DDR4 SO-DIMM connectors deliver high-speed and bandwidth. Being half the size of regular DIMMs, they lower power consumption and promote better thermal management. Different key positions aid alignment and prevent mismating. 260 position SO-DIMM connectors are available in 4.00mm, 5.20mm, 8.00mm, 9.20mm height, in standard or reverse options.



#### **DDR4 Ultra Low Profile Memory Module Sockets**

DDR4 Ultra Low Profile (ULP) vertical DIMM sockets provide 288 contacts on 0.85mm pitch. It facilitates convenient memory expansion in servers, workstations, desktop PCs, and embedded applications in communications and industrial equipment. With an ultra-low module seating height of 1.1mm and connector height of 13.1mm, it reduces the overall profile of the connector.



#### **DDR5 Memory Module Sockets (SMT)**

COMPLIES TO NEW INTERFACE STANDARD JEDEC SO-023 Vertical DDR5 DIMM sockets from Amphenol provide 288 contacts on 0.85mm pitch and are designed to accept DDR5 memory modules that conform to JEDEC MO-329. The sockets facilitate convenient memory expansion in servers, workstations, desktop PCs, and embedded applications in communications and industrial equipment.



#### **DDR5 SO-DIMM Connectors**

HIGH-SPEED HIGH-DENSITY SO-DIMM SOCKETS DDR5 SO-DIMM connectors deliver high-speed and bandwidth. Being half the size of regular DIMMs, they lower power consumption and promote better thermal management. 262 positions SO-DIMM connector is available in 4.00mm height with the standard option. Sketching design of DDR5 SO-DIMM 8.00mm height with the standard option now.



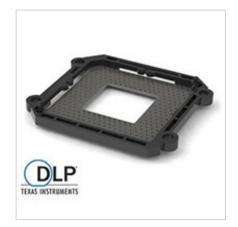
#### **DIN 41612 Headers and Receptacles**

FCI Basics DIN 41612 connector systems are the most popular backplane interconnect systems in IEC 603-2 specifications due to the widespread standard adoption, easy availability, cost-effectiveness, and durability. The product design for Board-to-Board and I/O solutions involve both standard mount and reverse mount mating combination.



#### **DIN 41612 High-Temperature Headers and Receptacles**

DIN 41612 High Temperature (HT) connectors meet the fire safety standards required in the Industrial (Transportation, Power) market. DIN is most suitable for hazardous and high-risk product platforms of fire safety applications required in the industrial market. The 2.54mm pitch HT connectors comply with the relevant standards like IEC 603-2, NFF 16-101/102, and EN45545-2.



#### **DLP® Sockets**

Amphenol's sockets for DLP® products are interconnect solutions for the Texas Instruments DLP® chips suitable for ultra-mobile and portable applications. TI's DLP technology leads the industry in display and advanced light control solutions.



#### Dubox® 2.54mm

The Dubox®, connector family offers an extensive range of through-hole and surface-mount part options. It is available in single or double-row in both straight and right angle orientations from 2 to 50 positions, with a maximum current rating of 3A per individual contact. This cost-efficient solution offers high reliability in electrical performance.



#### **Dubox® 2.54mm Crimp to Wire**

The Dubox®, connector families offer an extensive range of through-hole and surface-mount part options, including single or double-row in either straight or right-angle orientation from 2 to 50 positions, with a current rating of 3A (maximum) per individual contact. The Dubox® contact has a pre-stressed, dual-beam design to enable low insertion force, 4-wall contact design for signal protection.

## **Board-Level Connectors**



#### **Duflex™ Flex Connectors**

FCI Basics Duflex™ connectors represent a low-cost and reliable solution for terminating FPC/FFC and touch membrane switches. These are designed for 2.54mm grids. The Duflex connector combines the advantage of the well-proven Dubox™ receptacle with the assembly speed of IDC termination techniques. These connectors are available in both single and double row versions with up to 36 contacts per row.



#### EconoStik™ 2.54mm

EconoStik™ 2.54mm is an economical range of 2.54mm unshrouded header. It is available in single-row and double-row with vertical through-hole, right-angle through-hole, and vertical SMT terminations. EconoStik™ 2.54mm is a standard 0.64mm square header with high-temperature resin and 1µ" gold plating in contact and tail. It supports up to 50 mating cycles.



#### **eSATA Connectors**

eSATA connectors are designed for external storage applications that require a single-lane Serial ATA cable connection up to approximately two metres in length. The connectors comply with the Serial ATA Specification issued by the Serial ATA International Organization (SATA-IO). eSATA connectors support both Gen 1 (1.5Gb/s) and Gen 2 (3Gb/s) SATA data rates.



#### **Fan Connector Card-to-Wire**

CTW (Card-to-Wire) fan module connector comes with a flexible design for card-to-wire power applications used in fan modules. It allows different wire gauges ranging from 28AWG - 22AWG. The connector provides a maximum current rating of 4A/pin.



#### FFC/FPC Connectors (0.50mm pitch)

 $0.50 \, \mathrm{mm}$  pitch flex connectors utilize  $0.50 \, \mathrm{mm}$  contact spacing to terminate mobile devices across a variety of applications. These connectors are offered with top, bottom, dual beams & dual contact positions with both ZIF and Non-ZIF cable terminations. The connector series comes with a wide height range of  $0.70 \, \mathrm{mm}$  to  $5.80 \, \mathrm{mm}$  with 4 to 80 contact positions in both vertical and right angle orientations.



#### FFC/FPC Connectors (1.00mm pitch)

1.00mm pitch flex connectors utilize 1.00mm contact spacing to terminate displays and support complex board-to-board connections. These connectors are offered with top and bottom contact positions in both ZIF and Non-ZIF cable terminations. The connector series comes with a wide height range of 1.90mm to 5.04mm with 3 to 34 contact positions in both vertical and right angle orientations.



# FFC/FPC Connectors with Autolock Mechanism - F308/F332 Series (0.50mm pitch)

F308/F332 series is a 0.50mm pitch right angle Non-ZIF flex connector with an auto-lock mechanism and surface mount termination. It features a height of 2.45mm and comes in 6 to 68 contacts. This series features a cable thickness of 0.33mm and provides the durability of 20 mating cycles. Its robust connector design makes it suitable for robotic operations, supporting Industry 4.0.



#### **Filter Micro-Ribbon Connectors**

FCE57 Micro-Ribbon Filter connectors combine filtering and connectivity by having the capability to filter unwanted EMI while providing the required data connectivity. Also, enhanced EMI Control/EMC Compliance on the connector outperforms that of the same filter components on a PCB.



#### Fine Pitch Floating Board-to-Board (0.40mm pitch)

HIGH-SPEED FINE PITCH FLOATING BOARD-TO-BOARD CONNECTORS This fine pitch 0.40mm 4mm stacked height 80pos floating board-to-board connectors are suitable for a wide range of high-reliability applications and demanding environments.



#### Flex Connectors (0.21mm pitch)

FCI Basics 0.21mm pitch flex connectors utilize 0.21mm contact spacing & possess the lowest height making them suitable for applications where board space is at a premium. HFW series of connectors have no-flip Low Insertion Force (LIF) for strong FPC retention and come with a profile of 0.5mm. FCI Basics has been the first in the industry to offer less than 1mm height for its flex products.



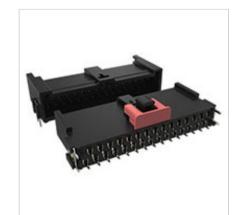
## Flex Connectors (0.30mm pitch)

FCI Basics 0.30mm pitch flex connectors utilize 0.3mm contact spacing for applications where board space is at a premium. YLL series of connectors are available in 13 to 51 positions and have zero insertion force for strong FPC retention. The connector series comes with a profile of < 1mm. FCI Basics has been the first in the industry to offer less than 1mm height for its flex products.



#### Flex Connectors (0.40mm pitch)

FCI Basics 0.40mm pitch flex connectors utilize 0.4mm contact spacing to offer a high pin count within a small footprint. The SFGL series connectors have zero insertion force for strong FPC retention. The connector series comes with a profile of < 1mm. FCI Basics has been the first in the industry to offer less than 1mm height for its flex products.



#### FlexLock® 2.54mm FPC-to-Board Connectors

AUTOMOTIVE-GRADE CONNECTOR SYSTEM WITH FLEXIBLE SOLDERING FlexLock®2.54mm FPC-to-Board connectors are designed to address the growing demands of the automotive market. These compact USCAR-T2V2 compatible connectors have a nominal current carrying capacity of 3A per contact to support higher power applications as well.



#### Floating Board-to-Board Connectors - B406/B407/B410 Series (0.80mm pitch)

Amphenol's B406/B407/B410 series is 0.80mm pitch floating board-to-board connectors that support stack height up to 23mm and positions from 30 to 120. Its unique connector design has a floating range of  $\pm 0.50$ mm in the X, Y, and Z directions which makes it resistant to vibration. It also supports speed performance up to 2.5Gb/s to meet high transmission requirements.



#### FLTStack 0.50mm Floating Board-to-Board Connector

FLTStack 0.50mm is a floating type Board-to-Board (BTB) connector designed to operate a minimum of  $\pm 0.50$ mm floating range in the XY directions. It features a self-cleaning function, vibration resistance, and self-alignment for easier mating. In addition, it supports up to 3Gb/s communication data rates. It features a fine pitch design at 0.5mm and supports a current rating of up to 0.5A/pin.



## **GIG-Array®**

Amphenol's GIG-Array® connectors are designed to meet the needs of applications up to 10Gb/s requiring up to 296 signal pins per connector. Amphenol as a BGA connector innovator assures expertise and reliability in the GIG-Array® BGA design with a combination of multiple stack heights (15mm to 40mm) and sizes (104 signals to 296 signals) utilizing a  $100\Omega$  differential matched impedance design.



#### Greenbrush

Standardized product MIL DTL 55302/166 to /172.



#### **HDAS**

Amphenol Socapex's versatile HDAS board-to-board connector offers a wide range of contact types and arrangements. HDAS is used in more than 10 civil & military aircraft programs. HDAS is a high-density connector dedicated to harsh environments.



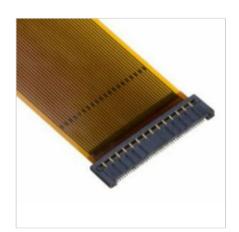
#### HDB3 - HSB3

High-density brush connector HDB3/HSB3.



#### **High Pin Count Backplane Connectors**

The HPC connector is a traditional backplane interface providing rugged mechanical and electrical performance. It enables 3 and 4-row daughter cards to the backplane interface. Onboard connector guiding and keying are available to control and discriminate daughter-card engagement with the backplane card slot.



#### **High-Speed Flex Connectors**

FCI Basics High-Speed flex connectors can transfer data rates up to 10Gb/s. It has a 0.30mm pitch, in-line layout, and backflip actuator coupled with a locking feature for strong FPC retention. High-speed FPC provides a low profile and compact solution while maintaining high-speed signal integrity. It is ideal for applications where space is a constraint.



#### **HSBridge+ Connector System**

HSBridge+ connectors come with automotive-grade USB Type C interface. These connectors have headers compliant with USCAR-30 USB and are performance tested according to USCAR-2. They are an ideal solution for in-vehicle connections with high data rates of up to 5Gb/s supporting advanced infotainment, telematics, and camera devices across the automotive and commercial vehicle industries.



#### **ID Rugged Bulkhead Adaptor Series Connector**

RUGGED INDUSTRIAL/MILITARY RJ45 (ETHERNET) CONNECTORS Amphenol's line of Rugged Bulkhead Adaptors serves many markets and applications across the globe including Transportation, Military, Medical, and Industrial.



#### Latch-N-Lok Cable-to-Board Connector System

FCI Basics Latch-N-Lok is a shielded, latching input/output connector with PCB receptacles and cable plug kits for signal, power, grounding, and shielding applications. Latch-N-Lok connector produces an audible 'click' sound when it is properly connected, indicating that the IO is ready to function. The cable connectors accommodate a wide variety of cable diameters and wires ranging from 32-20AWG.



#### **MEG-Array®**

The MEG-Array® Mezzanine Connector provides the high density and high-speed benefits of a large array supported by the reliability and low costs of standard surface mount PCB assembly. 1.27x1.27mm array of discrete circuit contacts allows flexible ground distribution to optimize high-speed signal integrity at speeds up to 32Gb/s. MEG-Array® is offered in a variety of PCB mezzanine stack heights



#### MEG-Array® R+

56GB/S HIGH-SPEED MEZZANINE BGA CONNECTOR SYSTEM Leveraging proven technologies, including an industry-leading BGA design, offering superior self-aligning and self-leveling. Next-generation differential pair contact design for up to 56Gb/s PAM4 and NRZ performance.



#### **Metral® Board Connectors**

FCI Basics Metral® product offers the broadest range of backplane connector solutions which includes RA and vertical for both header and receptacle series. The connectors are designed in accordance with IEC 61076-4-104 and Telcordia GR-1217- CORE. Metral® backplane connectors meet Futurebus+ standards to support applications in data, industrial and instrumentation, medical and telecom markets.



#### **Metral® Cable Connectors**

Metral® FCI Basics 2mm pitch cable connector is designed in accordance with IEC 61076-4-104, and Telcordia GR-1217-CORE.to meet Board-to-Cable interface requirements Metral® cable connectors come in single and multi-module configurations and mates with both vertical and right-angle headers in 4 and 5-row versions.



#### **Metral® HDXS IO Connector**

Metral® FCI Basics HDXS is a cable-to-board connector designed for high-end telecom applications including Telecom Access Equipment and Base Stations. Metral® HDXS is designed with minimum guaranteed clearance and creepage distances to comply with ANSI requirements of resistibility to overvoltages of up to 2500V. It is ideal for use in ADSL/VDSL for harsh environments.



#### Metral® High Speed 1000 Series Backplane Connectors

FCI Basics Metral® 1000 Series is a high-speed 2mm backplane connector system consisting of right-angle receptacles and vertical headers. The 1000 Series features a unique stripline structure in the receptacle and outer ground shields in the header. The stripline structure allows improved signal performance when routed in either a single-ended or a differential pair configuration.



#### Metral® High Speed 2000 Series Backplane Connectors

FCI Basics Metral® 2000 Series is a high-speed 2mm backplane connector system of vertical headers. The 2000 Series features a unique stripline structure that allows having improved signal performance when routed in either a single-ended or a differential pair configuration.



#### Metral® High Speed 4000 Series Backplane Connector

FCI Basics Metral® 4000 Series is a high-speed 2mm backplane connector system consisting of right-angle receptacles and vertical headers. The 4000 Series features a unique stripline structure in both the receptacle and header. Compared to the Metral® 1000 and 2000 Series, Metral® 4000 receptacle connectors employ a modified receptacle contact geometry optimized for  $100\Omega$  differential signals.



#### Mezzostak® 0.50mm Pitch 5.2mm Stacked Height

Mezzostak® 0.50mm is a robust fine-pitch mezzanine connector suitable for a wide range of high-reliability applications and demanding environments. The innovative hermaphroditic design of these connectors provides a precise mating interface with extra housing guidance. Mezzostak® 0.50mm mezzanine connectors are available in 120 positions with other position options provided on request.



#### Mezzostak® 0.5mm Mezzanine Connectors

Mezzostak® is a robust 0.5mm fine pitch mezzanine connector suitable for a wide range of high-reliability applications and demanding environments. The hermaphroditic design of these connectors provides a precise mating interface with extra housing guidance. Mezzostak® 0.5mm are available in two versions, which offer a choice between supplemental PCB hold-downs and pegs for short overall length.



## Micro Board-to-Board 0.60mm Stack Height - 103 Series (0.35mm pitch)

Amphenol's 103 series are 0.35mm pitch micro board-to-board connectors designed for high-density applications. They support an extreme low profile 0.60mm stack height and a high current rating up to 5A. These connectors are offered in 4 to 60 positions. These meet USB 3.1 Gen 2 signal transmission rates and are ideal for consumer applications.



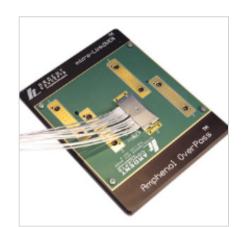
#### Micro Board-to-Board 1.00mm Stack Height - 101 Series (0.35mm pitch)

HIGH-DENSITY MICRO BOARD-TO-BOARD Amphenol's 101 series are 0.35mm pitch micro board-to-board connectors designed for high-density applications. They support extreme low profile 1.00mm stack height. These miniaturized connectors feature SMT terminations and are ideal for consumer applications such as mobile phones, smartwatches, smart glasses, and VR/AR devises.



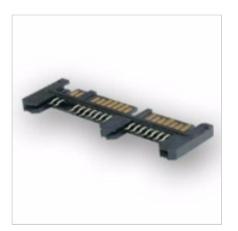
#### **Micro HDAS**

Micro HDAS is the 1.27mm pitch connector based on existing HDAS technology. Smaller, lighter, and just as strong, this miniature connector is used in board-to-board or board-to-cable applications. Offering a crimp version, Micro HDAS can be used in harnesses from panel to board when used with an I/O 38999 connector.



#### micro-LinkOVER™ Above PCB Connector System

micro-LinkOVER™ is an above PCB Twinax connector system that provides system designers and layout engineers a cost-effective approach to unlock the design flexibility needed to manage the technical challenges of PAM4 56G and 112G systems and beyond. Supporting data rates from 10G to more than 112G PAM4 per lane with a high signal-to-noise ratio and low VSWR.



#### **Micro SATA Connectors**

Micro SATA connectors from Amphenol enable smaller 1.8inch SATA drive form factors for hard disk drives (HDDs) or solid-state drives (SSDs). The connectors comply with the Serial ATA specification issued by the Serial ATA International Organization (SATA-IO). Micro SATA signal and power contacts consist of 16 contacts on a 1.27mm pitch size.



#### Micro SD and SD Card Sockets

MEMORY CARD CONNECTORS WITH SUPPORT FOR UHS-I AND UHS-II Micro SD and SD card sockets are user-friendly and ideal for use in portable devices such as digital cameras and mobile phones. They are also suitable for server applications as well as automotive devices, notebooks, and servers.



#### microSD Express Connector

Amphenol is the first in the industry to offer card sockets for both microSD Express and Micro SD cards (UHS-I). The 17 pin microSD Express connector is capable of achieving high speeds up to 985MB/s and meeting PCIe® 3.0 requirements. The connector enables microSD Express platform to reach its full potential; making microSD Express card possible to serve as a removable Solid State Drive (SSD).



#### **Micro-TCA Card Edge Connectors**

FULLY COMPLIANT CONNECTOR FOR ADVANCED MC™ MODULES MicroTCA (µTCA) vertical card edge connectors provide 170 contacts on a 0.75mm pitch and enable Advanced MC™ modules to be plugged directly into a backplane. MicroTCA card edge connectors' conventional press-fit or surface mount assembly processes and connector designs require no costly hardware, resulting in low total applied cost.



## Millipacs® Cable Connectors

FCI Basics Millipacs® is a 2.00mm modular board to board or cable to board Interconnection system in Hardmetric configuration designed in accordance with IEC 917 and IEC 61076-4- 101. FCI Basics offers Millipacs® cable connectors in standard 5+2 row configuration, transversal mounting on pin array



#### Millipacs® Compact PCI

FCI Basics Compact PCI Millipacs® 2mm hard metric (HM) connectors are designed in accordance with IEC 61076-4-101 and fulfill the interconnection requirement of the Compact PCI bus architecture. Millipacs® range currently supports 10Gb/s and 25Gb/s data rate with backward mating compatibility to the standard 2mm HM IEC 61076-4-101 connectors.



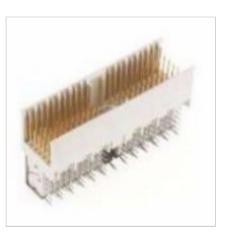
#### Millipacs® High Speed Right Angle Receptacle

FCI Basics offers Millipacs® speed (HS) right-angle receptacle suitable for data rate up to 25Gbps and with mating compatibility to the IEC 61076-4-101 series 2mm hard metric (HM) backplane header. The Millipacs HS receptacle and standard 2mm HM vertical header mating combination deliver low cross talk performance at higher frequencies.



#### Millipacs® Mezzanine

FCI Basics Millipacs® Vertical header and receptacle mating combination offer a range of stack heights between 15mm and 25mm for low speed and 10Gb/s mezzanine applications. Millipacs® connector interfaces provide high reliability and robustness making them suitable for the most demanding applications in aerospace, industrial, and also traditional telecom segments.



#### Millipacs® R/A Headers

FCI Basics Millipacs® Hard Metric Right Angle header Modules are available in all popular versions - Type A, B, C, B19, B22, AB22, and AB25 with options for top row shielding, high-temperature grade,



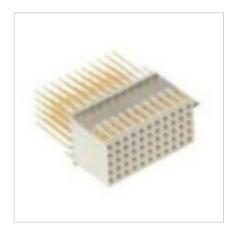
## Millipacs® R/A Receptacles

FCI Basics Millipacs® is a 2.00mm modular, BTB & CTB Interconnection System in Hard Metric (HM) configuration designed in accordance with IEC 917, IEC 61076- 4-101, and Telcordia GR-1217-CORE standards. These connectors are enriched with additional options for higher speed, shielding, High operating temperature (175°C), higher current rating (3A/pin), and low smoke low halogen compatibility.



#### Millipacs® Vertical Headers

FCI Basics Millipacs® is a 2.00mm modular BTB or CTB Interconnection system in a hard metric configuration designed in accordance with IEC 917 and IEC 61076-4-101 and Telcordia GR-1217-CORE standards. These connectors are enriched with additional options for higher operating temperature (175°C), current rating (3A+/pin), low smoke low halogen (LSLH) materials, touch-proof / dust-free caps.



#### Millipacs® Vertical Receptacles

FCI Basics Millipacs® is a 2.00mm modular, Board-To-Board or Cable-To-Board Interconnection system in Hard Metric (HM) configuration designed in accordance with IEC 917, IEC 61076- 4-101, and Telcordia GR-1217-CORE standards. These connectors are enriched with options for the outer row.

## **Board-Level Connectors**



#### Mini Cool Edge 0.60mm Connectors

Mini Cool Edge is a 0.60mm high density, high-speed card edge connector for a new generation small form factor system. These fine pitch solutions offer multiple BTB applications like a right angle, mezzanine, and coplanar and support cable interconnect options. Mini Cool Edge 0.60mm meets SFF TA-1002, Gen Z, EDSFF and OCP NIC 3.0 specifications.



#### Minitek127® 1.27mm Board-to-Board

FCI Basics Minitek127® standard board-to-board connector is the improved 1.27mm pitch modular system. The halogen-free product includes the straight, right-angle, and surface mount, post option for surface mount, different plating variations, and position numbers up to 100.



### Minitek127® 1.27mm Wire/Cable-to-Board Connector System

FCI Basics Minitek127® 1.27mm connector system is an extensive range of modular connectors for all types of wire/ cable-to-board applications. It includes straight and right angle, surface mount and through-hole, pin headers and board receptacles in different plating variations, customized stacking headers, IDC version, available in up to 100 positions.



#### Minitek MicroSpace™ 1.27mm Crimp-to-Wire Connector Platform

FCI Basics Minitek MicroSpace™ Crimp-to-Wire connector platform's unique design enables LV214 Severity-2 and performs at 1.8, 1.5, and 1.27mm pitch. The connector is rated up to 100 mating cycles on Gold/GXT® contacts and enables a current rating of up to 4A per contact. LV214 Severity-2 compatibility makes this crimp-to-wire connector especially suitable for automotive applications.



#### Minitek MicroSpace™ 1.50mm Crimp-to-Wire Connector Platform

FCI Basics Minitek MicroSpace™ Crimp-to-Wire connector platform's unique design enables LV214 Severity-2 and performs at 1.8, 1.5, and 1.27mm pitch. The connector is rated up to 100 mating cycles on Gold/GXT® contacts and enables a current rating of up to 4A per contact. LV214 Severity-2 compatibility makes this crimp-to-wire connector especially suitable for automotive applications.



#### Minitek MicroSpace™ 1.80mm Crimp-to-Wire Connector Platform

FCI Basics Minitek MicroSpace™ Crimp-to-Wire connector platform's unique design enables LV214 Severity-2 and performs at 1.8, 1.5, and 1.27mm pitch. Minitek MicroSpace™ will be available in single and double row versions, with top and side latch configuration.



#### Minitek MicroSpaceXS™ 1.27mm Crimp-to-Wire Connector Platform

Minitek MicroSpaceXS™ Crimp-to-Wire connector platform's unique design meets LV214 Severity-3 and USCAR-T2V2 specifications. These 1.27mm pitch connectors come with a current rating of up to 4A per contact making them ideal for higher power applications. Minitek MicroSpaceXS™ connectors are available in staggered pin configurations in vertical and horizontal orientations.



# Minitek MicroSpaceXS™ Waterproof 1.27mm Crimp-to-Wire Connector Platform

Minitek MicroSpaceXS™ Waterproof Crimp-to-Wire connector platform's unique design is compatible with LV214 Severity-3 & USCAR-T2V2 specifications. These 1.27mm pitch connectors come with a current rating of up to 3A per contact - ideal for higher power applications. Available in a staggered vertical and horizontal configuration with, PIP soldering, and tin or gold plating.



#### Minitek® 0.80mm Wire-to-Board Connector System

Designed for the finest pitch wire-to-board applications, FCI Basics Minitek® 0.80mm is the ideal solution for devices that require compact and low-profile connectors. With wire gauge range from 32AWG-28AWG, these connectors are available in a single row vertical SMT and right angle SMT configurations. These connectors come with locking features to provide enhanced contact reliability.



#### Minitek® 1.00mm Wire-to-Board Connector System

FCI Basics Minitek® 1.00mm connector system is the ideal solution for devices that require compact and low-profile connectors. These connectors are designed for fine pitch wire-to-board application with wire gauge range from 32AWG-28AWG. Minitek® 1.00mm solution includes single row vertical surface mount and right angle surface mount configurations.



#### Minitek® 1.50mm Wire-to-Board Connector System

FCI Basics Minitek® 1.50mm connector system is the ideal solution for devices that require connectors with robust features and the ability to carry more signal lines in less space. Minitek® 1.50mm solution includes terminals, crimp housings, and PCB headers in right angle and vertical surface mount configurations in a single row design, and is available from 2 to 15 circuits.



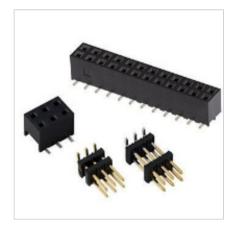
## Minitek® 2.00mm

Minitek® is Amphenol ICC's brand for BTB and wire/cable to board connectors in 2.00mm pitch. It is a fully modular system enabling all types of connections between PCBs, wires, and flat cables. Its 2mm spacing allows up to 38% space saving compared to traditional modular systems. It is available in vertical and horizontal configurations both in single and double row with 2 to 25 positions per row.



## Minitek® 2.00mm Blind Mate Interface (BMI) Connectors

FCI Basics Minitek® 2.00mm Blind Mate Interface (BMI) is a flexible and comprehensive solution designed for application with a current rating of up to 2A per circuit. It allows misalignment and provides floating for easy blind-mate connections. BMI option is available in a dual row with 8 or 12 circuits. These connectors provide an ideal solution for panel-to-board applications.



#### Minitek® 2.00mm - Wire-to-Board

Minitek® is FCI Basics brand for board-to-board and wire/cable-to-board connectors in 2.00mm pitch. It is a fully modular system enabling all types of connections between PCBs, wires, and flat cables. Its 2mm spacing allows up to 38% space saving compared to traditional modular systems.



#### Minitek® Board-In 2.00mm and 2.50mm Connector

Minitek® Board-In connector system is a flexible solution designed for economical and permanent wire-to-board applications up to 3A. It is a one-piece direct solder-to-board solution that provides space and cost savings compared to a two-piece connector system. It is currently offered in 2-16 positions under 2.00mm and 2.50mm pitch sizes covering vertical and horizontal configurations.



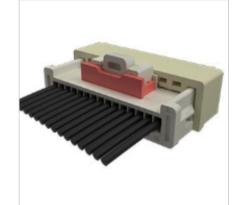
#### Minitek® MicroSpeed 1.00mm Board-to-Board Connector

FCI Basics Minitek® MicroSpeed connector family with 1.00mm pitch supports high-speed data applications with up to 25Gb/s. These connectors feature a shielded design that provides superior EMC performance and significantly improved electromagnetic compatibility. The pokayoke polarization prevents visual mismating, which makes it ideal for use in industrial environments.



#### Minitek® Multipitch 1.25mm Wire-to-Board Connector System

FCI Basics Minitek® Multipitch 1.25mm WTB connector's compact design addresses the growing demand for miniaturizing components. The connector system is offered in single & double rows with active latching, and optional TPA and CPA features. The single row connectors are available in 2 to 15 positions with horizontal configurations and the double row connectors are available in 10 to 30 positions.



#### Minitek® Multipitch 1.50mm Wire-to-Board Connector System

Minitek® Multipitch platform connector's compact design addresses the growing demand for miniaturizing components. The connector system has a single row and double row with active latching, and TPA and CPA features can be optional. The connector has current carrying capacity of 2A and cable external diameter from 24 AWG to 28 AWG.



## Minitek® Pwr 3.0 BMI Connector System

FCI Basics Minitek® Pwr 3.0 Blind Mate Interface (BMI) is a flexible and comprehensive solution designed for power applications with a current rating of up to 5A per contact. These connectors provide an ideal solution for wire-to-board applications. Minitek® Pwr 3.0 BMI is featured with scoop-proof housings that prevent terminals and headers from damage during angled mating.



#### Minitek® Pwr 3.0 Connector System

FCI Basics Minitek® Pwr 3.0 is a flexible and comprehensive solution designed for power applications with a current rating oup to 5A per contact. It is available in 2 to 24 circuits for dual row and 2 to 12 circuits for single row. Crimp, snap-in header and receptacle contacts are used to terminate 30-20AWG wires. Header and receptacle housings allow wire-to-wire and wire-to-board configurations.



#### Minitek® Pwr 3.0 High Current Connector

3.0MM HIGH CURRENT SOLUTION WITH CURRENT RATING UP TO 12A FCI Basics Minitek® Pwr 3.0 High Current Connector (HCC) is designed for high-current, and power-dense applications with a current rating of up to 12A per contact and wire gauge range from 20AWG-16AWG. These are used for both wire-to-wire and wire-to-board applications. It is available in 2 to 24 circuits for dual row.



#### Minitek® Pwr 4.2 BMI Connector System

FCI Basics Minitek® Pwr 4.2 Blind Mate Interface (BMI) is a flexible and comprehensive solution designed for power applications with a current rating of up to 9A per contact. These connectors provide an ideal solution for wire-to-board applications. Minitek® Pwr 4.2 BMI is featured with scoop-proof housings that prevent terminals and headers from damage during angled mating.



## Minitek® Pwr 4.2 Connector System

FCI Basics Minitek® Pwr 4.2 is a flexible and comprehensive solution designed for power applications with a current rating ofup to 9A per contact. It is available in 2 to 24 circuits in dual row and 3 to 5 circuits in single row. Crimp, snap-in header and receptacle contacts are used to terminate 38AWG-16AWG wires. Header and receptacle housings allow wire-to-wire and wire-to-board configurations.



#### Minitek® Pwr 4.2 High Current Connector

FCI Basics Minitek® Pwr 4.2 High Current Connector (HCC) is designed for high-current, and power-dense applications with a current rating of up to 13A per contact and wire gauge range from 20AWG- 16AWG. These are used for both wire-to-wire and wire-to-board applications. It is available in 2 to 24 circuits for dual row and 3 to 5 circuits for single row. Current rating up to 13A per contact.



#### Minitek® Pwr CEM-5 PCIe® Connector System

Amphenol ICC introduces the Gen 5, Minitek® Pwr PCIe® connector system. This new introduction CEM 5.0 PCI Express® 12VHPWR auxiliary hybrid connector and cable assembly support the 600W GPU cards. The 12VHPWR connector is not designed to mate with legacy PCI Express® 2x3 and 2x4 12V Auxiliary Power connectors. The 12VHPWR connector power pins have a 3.00mm pitch.



#### Minitek® Pwr Hybrid 4.2 Connector System

FCI Basics Minitek® Pwr Hybrid 4.2 is designed for power and signal application with a current rating of up to 9A per contact, available for dual row and 2 to 24 power circuits, and 2 to 12 signals for wire-to-board applications. Crimp, snap-in receptacle contacts are used to terminate 30AWG-16AWG wires. Receptacle housings allow wire-to-board configurations.



#### **MXM 3.0 Connectors**

Amphenol's MXM connector is a high-density PCIe® solution that supports next-generation server system architectures. These are non-proprietary, industry-standard sockets. With 0.50mm pitch and 314 contacts, the MXM 3.0 connector supports 16 lanes of PCI Express® signal performance with smaller board space.



#### **OCTIS™** - Optical Solutions

FCI Basics OCTIS offers a range of optical solutions meeting ever-increasing bandwidth requirements. SFP version is interoperable with all types of SFP/SFP+ ports and suitable for high data rate applications over long lengths. QSFP version offers enhanced bandwidth (4X SFP/SFP+).



#### **OCuLink Connector**

G14 Series OCuLink connectors are internal and external Small Form Factor PCIe connectors and cables optimized for the client and mobile market segments, while suitable for various datacom, consumer, and industrial applications. The OCulink standard, which is  $85\Omega$  version, accommodates SAS 4.0 (24Gb/s) and PCIe 4.0 (16Gb/s) signaling needs and enables optical and copper technology to coexist.



#### PC/104 Connector

FCI Basics PC/104 is an embedded computer standard defined by its compact footprint. The specification is based on the 104 signal contacts on the two bus connectors (64 pins on P1, plus 40 pins on P2). PC/104 is a modular, ruggedized version of the PC 2.54mm pitch. Instead of using a backplane, PC/104 modules mate together via stackable ISA, PCI, and PCIe® bus connectors.



#### PC/104 Plus Connector

FCI Basics PC/104 is an embedded computer standard defined by its compact footprint. The specification is based on the 104 signal contacts on the two bus connectors (64 pins on P1, plus 40 pins on P2). PC/104 Plus is a modular, ruggedized version of the PC 2.00mm pitch. Instead of using a backplane, PC/104 modules mate together via stackable ISA, PCI, and PCIe $^{\circ}$  bus connectors.



#### PCIe® M.2 Gen 3 and Gen 4 Card Edge Connectors

Amphenol's PCIe® M.2 Gen 3 and Gen 4 connectors provide 67 contacts on 0.50mm pitch. It occupies less board space, offers more connector height options, and supports higher data rates compared to PCIe® Mini Card connector. It is designed for PCIe® 3.0, USB 3.0, and SATA 3.0 applications, making it suitable for tablets, laptops, and low-profile storage and server applications.



### PCIe® M.2 Gen 5 Card Edge Connectors

Amphenol's PCIe® M.2 Gen 5 Connectors provide 67 contacts on 0.50mm pitch. It occupies less board space, offers more connector height options, and supports higher data rates compared to PCIe® Mini Card connector. It is designed for PCIe® Gen 5, making it suitable for tablets, laptops, and low-profile storage and server applications.



#### PCI Express® Gen 3 Card Edge Connectors

Amphenol's 1.00mm pitch, vertical card edge connectors enable PCI Express® (PCIe®) signaling from 2.5Gb/s (Gen 1) and 5Gb/s (Gen 2) up to 8Gb/s (Gen 3) per differential signal pair. A modular design of these connectors allows standard pin counts like 36, 64, 98, 164, and 280.



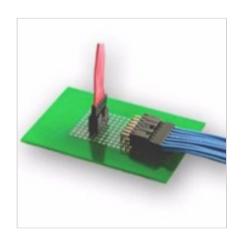
## PCI Express® Gen 4 and Gen 5 Card Edge Connectors

PCIe® Gen 4 and Gen 5 connectors outperform industry-standard PCIe® 4.0 and 5.0 (Proposed) requiring higher speed performance. The optimized series supports backward mating and is footprint compatible with PCIe 3/2/1. Amphenol's expansive range of vertical PCIe® Gen 4 and Gen 5 connectors will include options for SMT, through-hole solder, press-fit (PF), and straddle mount terminations.



#### PHEN/PHEC Board-to-Board

PHEN/PHEC is a series of 1.27mm pitch board-to-board products that can tolerate a maximum misalignment of 1.3mm between the plug and receptacle. This ensures no damage to the housing or contact during angular mating. The tolerance is the result of the robustness of the housing design.



#### **PV® Wire-to-Board Connector System**

VERSATILE DESIGN FOR DEMANDING APPLICATIONS FCI Basics PV® solution is a versatile and modular system able to meet all the board-to-board, board-to-wire, wire-to-wire applications where high density, outstanding electrical and mechanical performances are required.



#### **QSFP+ Cables/Connectors**

QSFP connector, cage, and cable assemblies are designed to meet emerging data center and high-performance computing applications of delivering aggregate data bandwidths of 40Gb/s & 56 Gb/s & 112 Gb/s. This interconnect is fully compliant with existing industry standard specifications such as the QSFP MSA and IBTA.



## Quickie® IDC Cable-to-Board Connector System

FCI Basics Quickie® is a complete solution for flat cable-to-board connections using 2.54mm pitch IDC technology. The highly durable and cost-saving connectors come with specialized features in polarization, plating, and structure. Headers are low profile and come in shrouded versions with or without eject latches. Receptacles have strain relief covers for precise alignment.



#### RADSOK® PGY™

This series, utilizing RADSOK® socket contact technology for right angle power-to-board application, compact footprint, metal square, press-fit high power connector. With five sizes ranging from 2.4mm, 3.0mm, 3.6mm, 4.8mm, and 5.7mm contact sizes and up to 120 amps possible with a standard operating temperature from -40°C to +125°C.



#### RADSOK® PowerBlok™

This series, utilizing RADSOK® socket contact technology for power-to-board backplane application, compact footprint, thermoplastic square, press-fit high power connector. With three sizes ranging from 2.4mm, 3.0mm, and 3.6mm contact sizes and up to 70 amps possible with a standard operating temperature from -40°C to +125°C.



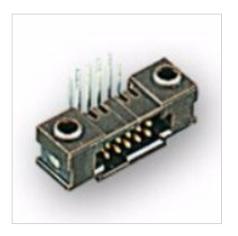
#### RADSOK® PowerBlok™ WTB

This series, utilizing RADSOK® socket contact technology for power-to-board two-point contact terminals application, low profile compact footprint, metal square, press-fit high power connector. With two sizes, 2.4mm and 3.6mm contacts and up to 70 amps possible with a standard operating temperature from -40°C to +105°C.



#### RADSOK® SMT RADSERT™

This series, utilizing RADSOK® socket contact technology for board-to-board mezzanine application, compact footprint, metal circular, press-fit high power connector. With five sizes ranging from 2.4mm, 3.0mm, 3.6mm, 4.8mm, and 6.0mm contact sizes and up to 120 amps possible with a standard operating temperature from -40°C to +125°C.



#### Rib-Cage® Board-To-Board

Rib-Cage® connectors provide optimal precision and reliability at a competitive commercial cost. With an exclusive design, the Rib-Cage® multipoint, gold plated receptacle contacts meet high-performance standards for use in applications with shock and vibration. This versatile system includes dual-row, pin-and-socket connectors for right-angle and mezzanine connections between PCB or FPC.



#### **RMM**

The Rectangular Modular Micro connector series utilizes a .0787" (2mm) center-to-center contact spacing and is designed to work in harsh and difficult applications. Rectangular Modular Micro offers both crimp and PCB type terminations that can work interchangeably with each other.



#### Rotaconnect® Rotatable Board-to-Board Connector

Amphenol ICC extends the RotaConnect® Board-to-Board range with a pegged version. This eliminates the hold-down, hence aids simple placement and saves the space between connectors on the PCB. The RotaConnect® BTB range is a unique rotatable Board-to-Board SMT connector that can be used to support perpendicular, coplanar, and angled connections, in multiple mating and un-mating directions.



#### **RotaConnect® Wire-To-Board Connector**

FCI Basics extends the RotaConnect® range with a WTB solution. The WTB connector mates horizontally with RotaConnect® Board-to-Board (BTB) solution. RotaConnect® WTB is a 3.00mm pitch connector with a dual-beam spring contact design, delivering high-performance and reliability. The connector also features a passive latch for housing retention which protects pins and prevents mismatching.



#### **R-SATA**

The Rugged R-SATA style connector is perfectly suited as the primary internal storage interconnect for desktop and mobile PCs, connecting the system to peripherals such as hard drives, solid-state drives, optical drives, and removable magnetic media drives. The R-SATA supports SATA 3.0 protocol, delivering 6.25 Gb/s data rates & beyond.



#### **R-VPX**

Amphenol's R-VPX is a ruggedized, high-speed, board-to-board interconnect system capable of data rates in excess of 10 Gbps, meeting and exceeding VITA 46 standards. This connector system gives users modularity and flexibility by utilizing PCB wafer construction with customized wafer-loading patterns.



#### **R-VPX Evolution**

Capable of 16+ Gbps data rate transfer and meets VITA 46 & 47 performance requirements.

# **Amphenol**

## **Board-Level Connectors**



#### **R-VPX Evolution 2.0**

Qualified to data rates in excess of 32Gb/s. Fastest VITA 46.30 connectors in the world.



### **SAS 3.0 Connectors**

SAS 3.0 connectors for next-generation servers with 12Gb/s speeds. The 29-position receptacle and plug connectors feature hot-plugging and blind-mating, connector misalignment compensation, and a PCB retention mechanism for robust SMT attachment. It is SATA compliant and meets a wide range of vertical and R/A configurations for usage across server and storage equipment, HDDs, and HDD carriers.



#### **SAS 4.0 Connectors**

SAS 4.0 connectors for next-generation servers with 24Gb/s speeds. The 29-position receptacle & plug connectors feature hot-plugging & blind-mating, connector misalignment compensation, and a PCB retention mechanism for robust SMT attachment. It is SATA compliant and meets a wide range of vertical and R/A configurations for usage across server and storage equipment, HDDs, HDD carriers, and SSDs.



#### SAS/PCIe 3.0 (U.2) Connectors

SAS/PCIe 3.0 connectors are designed for next-generation servers with 12Gb/s speeds. The 68-position, SAS/PCIe receptacle, and header enable high-speed Serial Attached SCSI (SAS) hard disk drive (HDD) interface as well as Peripheral Component Express (PCIe)-based devices. These connectors are backward compatible with 6Gb/s SAS, SATA, and 3Gb/s SFF8482 connectors.



#### SAS/PCIe 4.0 (U.2&U.3) Connectors

SAS/PCIe® 4.0 (U.2 & U.3) connectors come with 16GT/s (PCIe® lanes) or 24Gb/s (SAS lanes) speeds to meet the demands of next-generation servers. The 68-position, SAS/PCIe® receptacle and header enable implementation of high-speed SAS hard disk drive (HDD) interface as well as PCIe®-based devices. The molded guidepost allows the device plug and receptacle to self-align during the mating process.



#### SAS/PCIe 5.0 (U.2 & U.3) Connectors

SAS/PCIe 5.0 (U.2 & U.3) connectors come with 32GT/s (PCIe lanes) and 24Gb/s (SAS lanes) speeds to meet the demands of next-generation servers. The 68-position, SAS/PCIe receptacle and header enable implementation of high-speed Serial Attached SCSI (SAS) hard disk drive (HDD) interface as well as Peripheral Component Express (PCIe)-based devices.



#### **SATA (Serial ATA) Connectors**

Amphenol offers a wide range of high-performance SATA connectors. They are designed to support up to 12Gb/s, enabling the implementation of low cost, high speed, high capacity hard disk drive (HDD). The connectors are SATA compliant and meet a wide range of vertical and right-angle configurations for usage across server and storage equipment, HDDs, and HDD carriers.



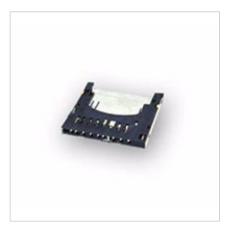
#### **SCA-2 Connectors**

SCA-2 connectors consist of headers and receptacles that enable the hard disk drive to backplane interface in enterprise storage systems. The header resides on the HDD while the receptacle is attached to the backplane. 40pos SCA-2 receptacles are designed to accept Fibre Channel drives, while 80pos receptacle accepts SCSI drives.



## **SD Express**

SD Express offers the fastest data transfer rates up to 985MB/s adhering to PCIe® Gen  $3 \times 1$  lane interface and NVMe application protocol. Meeting SD 7.0 specifications, these connectors come with a pin detection function, which offers enhanced protection and establishes a better read function when the memory card is inserted.



#### **SD Memory Card Connector**

FCI Basics SD Memory Card Connector is tailor-made for the Car Multimedia Device market serving the dashboard and vehicular entertainment applications. This top-mount solution is highly durable, shockproof, and is able to withstand vibrations and high temperatures found in the automotive environment. The connector is shielded, comes with write protection, and is RoHS compliant.



#### SIAL

SIAL is a modular high-density interconnection system that has the capability to mix signal and coax contacts. The contact technology developed for this connector allows the use of thermal clamps. With 3 sizes of modules, the SIAL connectors provide the arrangement needed, from 18 to 392 contacts.



#### **SIHD**

The SIHD connector combines excellent electrical performances with high contact density within a robust housing, which can withstand extreme environmental conditions. In addition, the lateral displacement capability allows the use of thermal clamps for heat management, as well as a more relaxed positional tolerance on the backplane.



#### **SIM Card Connectors**

FCI Basics SIM Card connectors are 6- to 8-pin connectors primarily used as SIM card readers in smartphones and other mobile devices. These are designed for full SIM, mini SIM, and micro SIM "Plug-in" applications with hinges and covers for secure card retention. The SMT connectors are space-saving and low-profile.



#### **SIM Card Sockets**

SIM COMPLIANT FOR 2FF AND 3FF Amphenol is a leader in SIM card sockets. These connectors save space and are user-friendly. The push-push eject feature ensures smooth extraction of the card. It is ideal for use in switches, wifi routers, and mobile phones.



#### **Smart Card Connectors**

FCI Basics Smart Card connectors are 8- or 16-pin connectors primarily used as full-size smart card readers. These are deployed in health, social security, ID cards, and credit card "chip-and-pin" schemes. These products also account for durability with a very large number of mating cycles.



#### **SMASH**

The SMASH connector offers extremely high robustness where signal integrity is required. Based on an aluminum shell with 1, 2, or 3 bays, the SMASH connector can house up to 450 contacts. The chevron grid pattern provides high contact density for advanced electronics packaging. The metallic shell is equipped with grounding, guide pins, and keying devices to ensure mechanical reliability.



#### **Thermal Clamps**

Wedge locks for use with SIAL, SIHD, and 804SLD series.



#### **UHD Connectors**

The Ultra High Density (UHD) interconnect is a high-reliability packaging solution for airborne, space, shipboard, and ground-based applications. With 80 contacts per linear inch, the UHD connector is tested and qualified to DSCC 89065. A modular approach allows for straightforward incorporation of signal, power, coax, and fiber-optic inserts, as well as EMI shielding.



#### Universal Flash Storage (UFS) Connector

MEMORY CARD CONNECTOR IN A NEXT-GENERATION HIGH-SPEED FORM FACTOR Universal Flash Storage (UFS) Connector is a 19-pin connector with a high read/write and transmission speed that is faster than existing memory card types. The connector is designed to meet higher speeds and storage capacity in commercial and non-commercial devices.



#### Viper

Viper connectors offer a ruggedized VPX-compliant interconnect solution capable of up to 10 Gbps. With 63 differential signals per linear inch, this high-density connector system was developed to meet current and future requirements for high speed in high-level vibration and mechanical shock environments. Footprint compatible with VITA 46 connectors to leverage existing module card designs.



#### WireLock®

WireLock® is a 1.80mm pitch wire-to-board connector system. Its compact design addresses the growing need for space-saving automotive-grade connectors. WireLock® is a double row connector system offering four coding types with different colors.



#### Wire-to-Board Connector System (1.20mm pitch)

FCI Basics 1.20mm wire-to-board connector system is low profile and compact with 3, 4, and 6 pin counts. The plug and receptacle use a frictional mating method enabling up to 20 mating cycles. The enclosed receptacle makes sure that the side entry matings are secure in tight spaces. Additional polarized key slots prevent any misalignment between the plug and receptacle.



## Wire-to-Board Connector System (1.25mm pitch)

FCI Basics 1.25mm wire-to-board connector system is designed for a wide variety of applications in Industrial, Automotive, and Consumer markets. The comprehensive range consists of terminals, crimp housings, and PCB headers in straight and RA, SMT, and throughhole configurations. It is available in 2 to 15 circuits in a single row. 1.25mm WTB solution conforms to the EU Industry Safety Standard.

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