

Amphenol

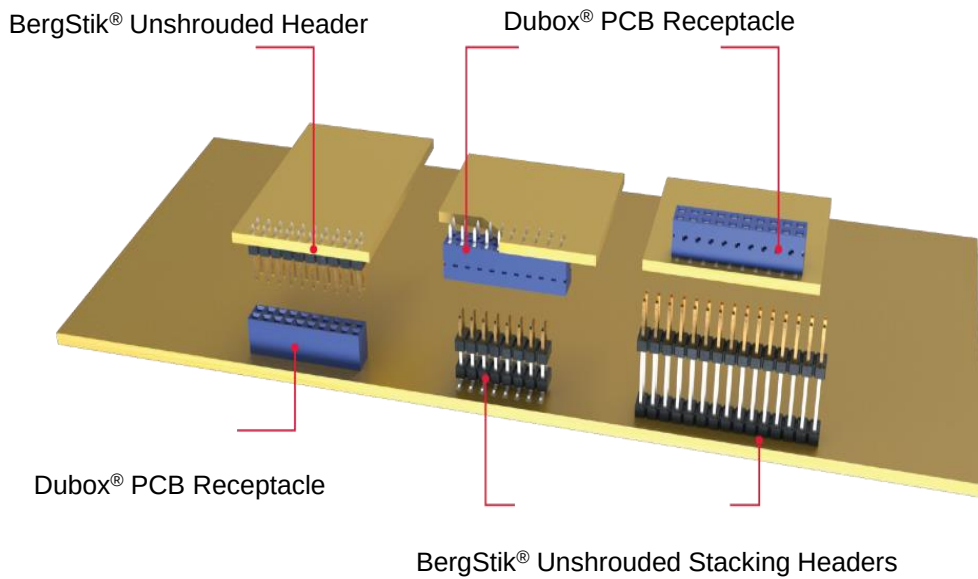
COMMUNICATIONS SOLUTIONS

BergStik® Product Presentation

 **FCi Basics**

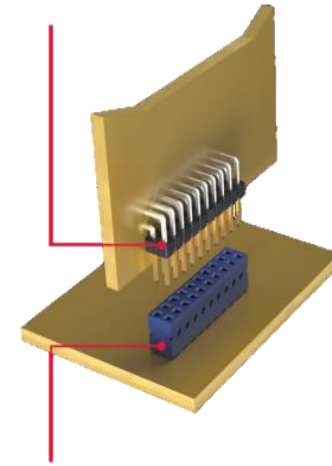
- BergStik® is a standard, proven unshrouded header family on 2.54mm pitch, available in through-hole; surface-mount, pin-in-paste and press-fit solder options
- BergStik® comes in single and double row; straight or right-angle orientation with to 2 to 72 positions and stack heights up to 65 mm
- BergStik® “breakaway” design enables each connector to be easily cut or broken at the required length
- BergStik® is capable of carrying up to 3A per contact

Vertical



Right-Angle

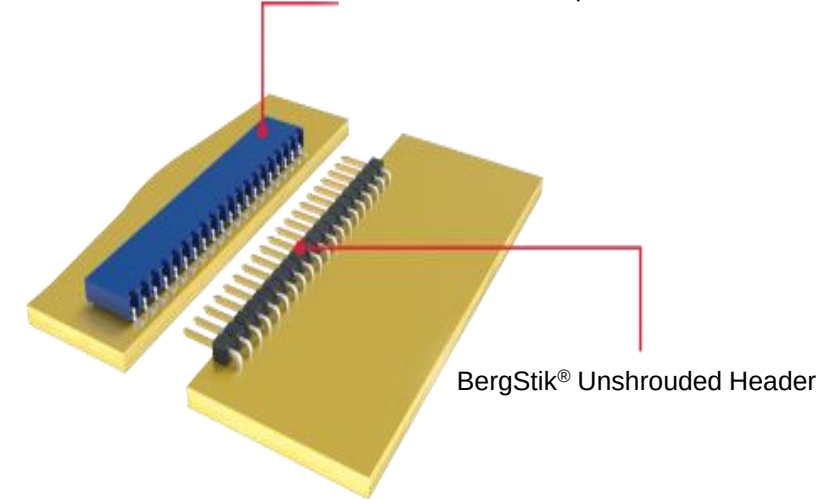
BergStik® Unshrouded Header



Dubox® PCB Receptacle

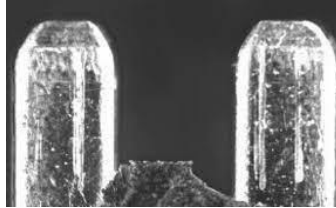
Coplanar

Dubox® PCB Receptacle

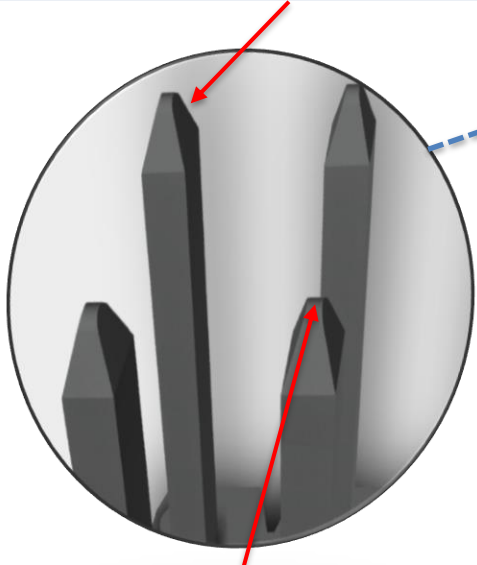


Stamped pin tip from drawn wire
with perfect symmetry and no burr

- ✔ Perfect symmetry
- ✔ Smoother insertion
- ✔ High numbers of mating cycles
- ✔ No metal burrs on the edges

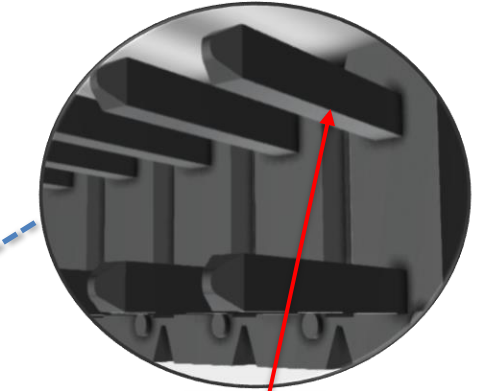
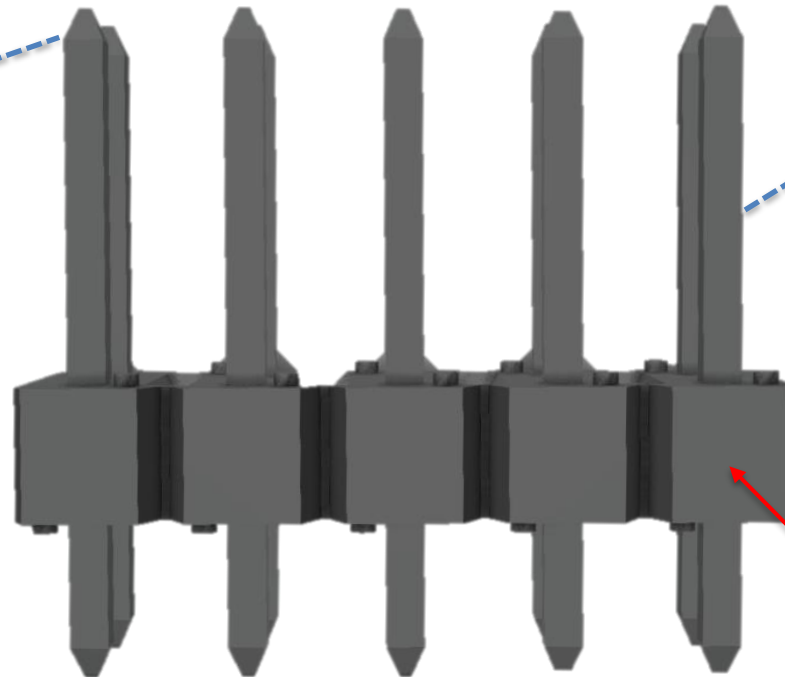


Example of uneven pin tips



Selective plating

- ✔ Cost efficient plating process
- ✔ Controlled porosity



Coined drawn wire with regular
section and geometry

- ✔ Optimized plating
- ✔ Reduced risk of whiskers, bumps
- ✔ No risk of peeling for the plating

Nickel underlayer applied on the
whole pin

- ✔ No air exposure
- ✔ Limited risk of corrosion



Example of damaged pin plating

Features	Benefits
High Temperature thermoplastic material	Reflow Compatible
Variable spacing height for Stacking Headers	Meets your needs for a wide range of applications
Allow dual entry mating from top or bottom	Suitable for mezzanine applications with extra flexibility in case of different stack height requirements
Drawn (not stamped) 0.64mm square wire presenting 4 equal quality surfaces	Can be used for wire wrapping
Stand offs design	Allow cleaning to eliminate soldering contaminations
Selective plating	Cost efficient, while maintaining excellent performance
Tin-Lead plating in press-fit area	Easy pin insertion on the PCB
Retention Legs Optional	Higher retention on your PCB
Flexible press-fit pin designed to fit the same 1.02mm diameter hole as the solder to board product	Same layout on TMT and Press Fit
According to DIN 41651 specification, HE13 and BT D2632	Industry qualified , proven products

BergStik® Board-to-Board configuration

Range overview, Vertical

BergStik® Vertical Unshrouded Header Single Row

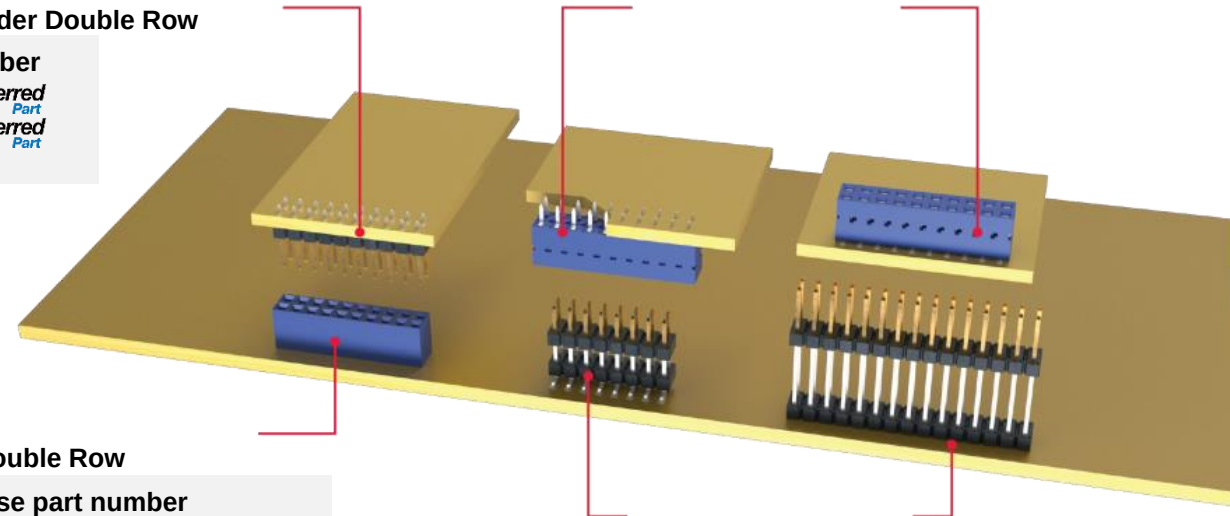
Type	Base part number
Single Row TMT	77311 
Single Row SMT	95293
Single Row Press-Fit	93689

Dubox® Vertical Receptacle Single Row

Type	Base part number
Single Row TMT	75915
Single Row SMT	91601 
Single Row SMT (w/ pegs)	91614

BergStik® Vertical Unshrouded Header Double Row

Type	Base part number
Double Row TMT	77313 
Double Row SMT	95278 
Double Row Press-Fit	93690



Dubox® Vertical PCB Receptacle Double Row

Type	Base part number
Double Row TMT	87606
Double Row SMT	89898 
Double Row SMT (w/ pegs)	91618

BergStik® Vertical Unshrouded Stacking Header

Type	Base part number
Single Row Stacking, TMT	54121
Double Row Stacking, TMT	54122
Double Row Stacking, SMT	54242

 **Preferred Part**

- ✓ Available at distributors
- ✓ Shortest lead-times
- ✓ Industrial standard & proven solutions

BergStik® Board-to-Board configuration

Range overview, Right-Angle

Dubox® Horizontal PCB Receptacle Single Row

Type	Base part number
Single Row TMT	89882
Single Row SMT	71607
Single Row SMT (w/ pegs)	10119678

Dubox® Horizontal PCB Receptacle Double Row

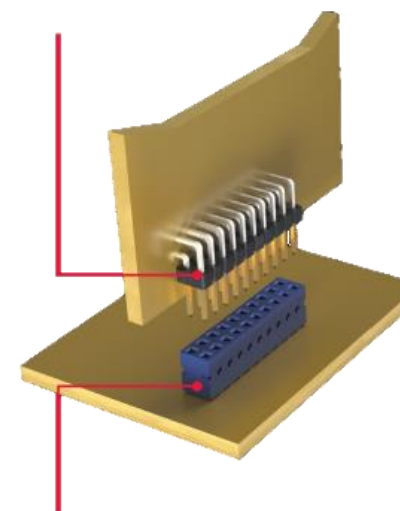
Type	Base part number
Double Row TMT	89883
Double Row SMT	71609

BergStik® Right-Angle Unshrouded Header Single Row

Type	Base part number
Single Row TMT	77315
Single Row PiP	10082201
Single Row SMT	10119333
Single Row SMT (w/ pegs)	10119332

BergStik® Right-Angle Unshrouded Header Double Row

Type	Base part number
Double Row TMT	77317
Double Row PiP	10082202
Double Row SMT	10118084
Double Row SMT (w/ pegs)	10118085



Preferred Part

- ✓ Available at distributors
- ✓ Shortest lead-times
- ✓ Industrial standard & proven solutions

Dubox® Vertical Receptacle Single Row

Type number	Base part
Single Row TMT	75915
Single Row SMT	91601 Preferred Part
Single Row SMT (w/ pegs)	91614

Dubox® Vertical PCB Receptacle Double Row

Type number	Base part
Double Row TMT	87606
Double Row SMT	89898 Preferred Part
Double Row SMT (top entry w/ pegs)	91618

Material

- Housing: High Temperature Thermoplastic, Black
- Flammability Rating: UL94V-0
- Pin: Phosphor-bronze
- Plating: Gold / GXT or Tin over 1.27µm (50µ") nickel

Environmental

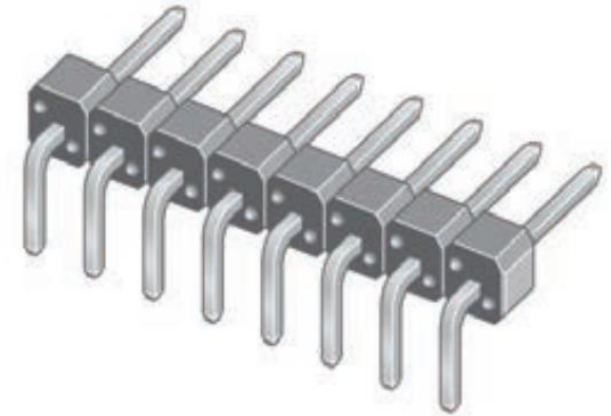
- Operating Temperature: -65°C to +125°C

Electrical Performance

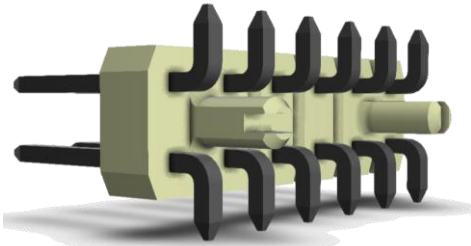
- Current Rating: 3A continuous
- Insulation Resistance: 5000 MΩmin.
- Dielectric Withstanding Voltage: 1500V

Mechanical Performance

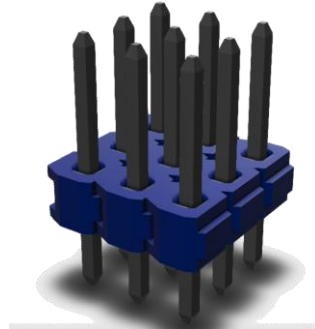
- Pin Retention to Housing: 9N min



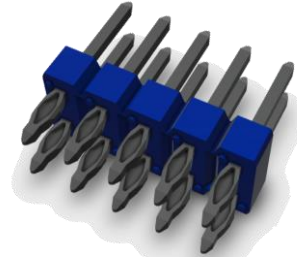
BergStik® Accessories & options



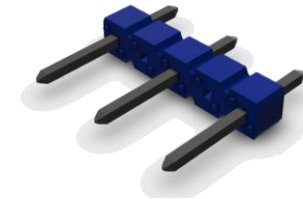
Locating peg



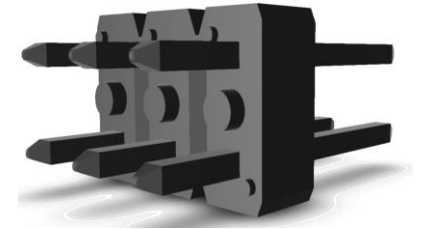
Stackable headers



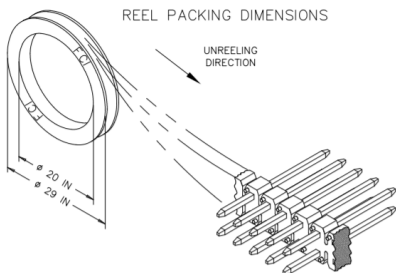
Press-Fit



Selective loading



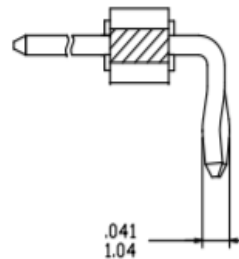
Pin Paste



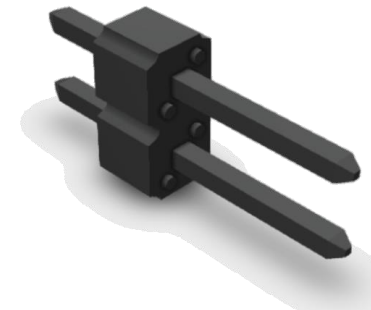
Bergstrip® endless reel



Triple body



Retention legs



ECONOSTIK® series
full gold flash plating
(0.025µm)



Jumper series

Industrial

- Industrial Automation
- Instrumentation
- Medical
- Gaming
- Vending Machines

IT/Datacom

- Servers
- Communication Equipment

Automotive

- Electronic Control Systems

BergStik®

Additional Information

- BergStik® web [product landing page](#)
- BergStik® [datasheet](#)
- BergStik® Selective plated headers [product specification](#)
- BergStik® Stacking Headers TMT [product configurator](#)
- BergStik® Single Row Right-Angle TMT [product configurator](#)
- BergStik® Double Row Right-Angle TMT [product configurator](#)
- BergStik® Vertical Unshrouded Headers TMT; SMT [product configurator](#)
- BergStik® Vertical Unshrouded Headers PiP [product configurator](#)
- BergStik® Single Row Press-Fit [product configurator](#)
- BergStik® Double Row Press-Fit [product configurator](#)

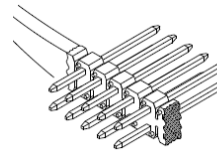
Glossary

Generic terms and definitions

- Header Housing with pins (male connector)
- Receptacle Female housing
- Terminal Crimp-to-Wire contact
- Vertical Connection axis perpendicular to the board
- Horizontal Connection axis parallel to the board
- SMT  Surface-Mount Technology
- TMT  Through-Mount Technology
- PiP Pin-in-Paste
- Low-profile Connector with small height dimensions
- Bottom entry Connection through the lateral side of the receptacle
- Top entry Connection through the upper side of the receptacle
- Locating peg Feature to be positioned on PCB holes for better alignment

Bergstrip® header (Endless pin)

- 0.64mm square pin header in 2.54mm pitch
- Single-row & double-row product
- SMT and THT type
- Customized mating and tail length
- 3A current rating
- Full matte tin plating, Brass with 4000 Hours Tin whisker test



Double row THT type



Single row THT type



Double row SMD type

Product drawing: 10131514 series



Adobe Acrobat
Document

Product drawing: 10142077 series



Adobe Acrobat
Document

Product drawing: 10162181 series



Adobe Acrobat
Document

Main running part numbers:

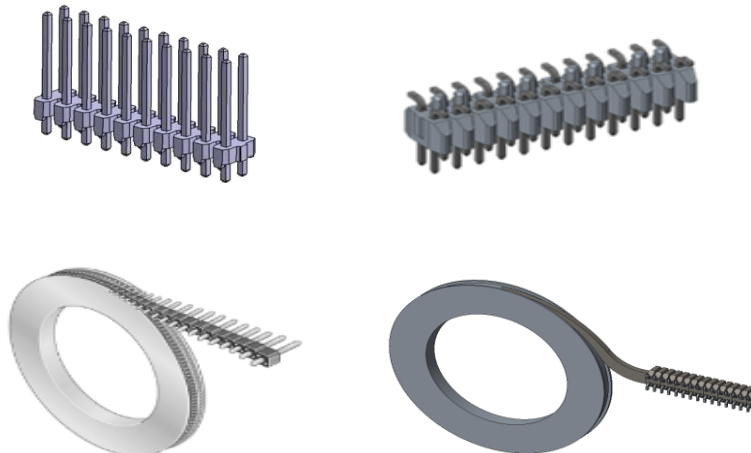
10131514-400HWLF
10131514-400HLF

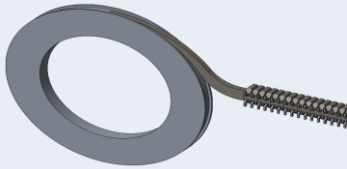
Main running part numbers:

10142077-400HLF

Main running part numbers:

10162181-400204HLF
10162181-400306HLF



	Endless Bergstrip® SMT	Standard BergStik® SMT
Configurations	Endless pin header packaged by reel	Loose pin header packaged by tube or tape and reel
Per pin price	Less than half of standard	Marketing price
Assembly process	High speed sticking machine(900cycle/minute)	Normal speed insertion(60cycle/minute)
Positions	No limited	Maximum position within 100
Application	Flexible to cut for any position	Change over for different position
Terminal	Wire with full area plated	Bandolier Pin with selected plating
Target Market	Automotive	Medical equipment, Military, Industry
Photo of the product		

Thank You

Amphenol
COMMUNICATIONS SOLUTIONS

 **FCi Basics**