

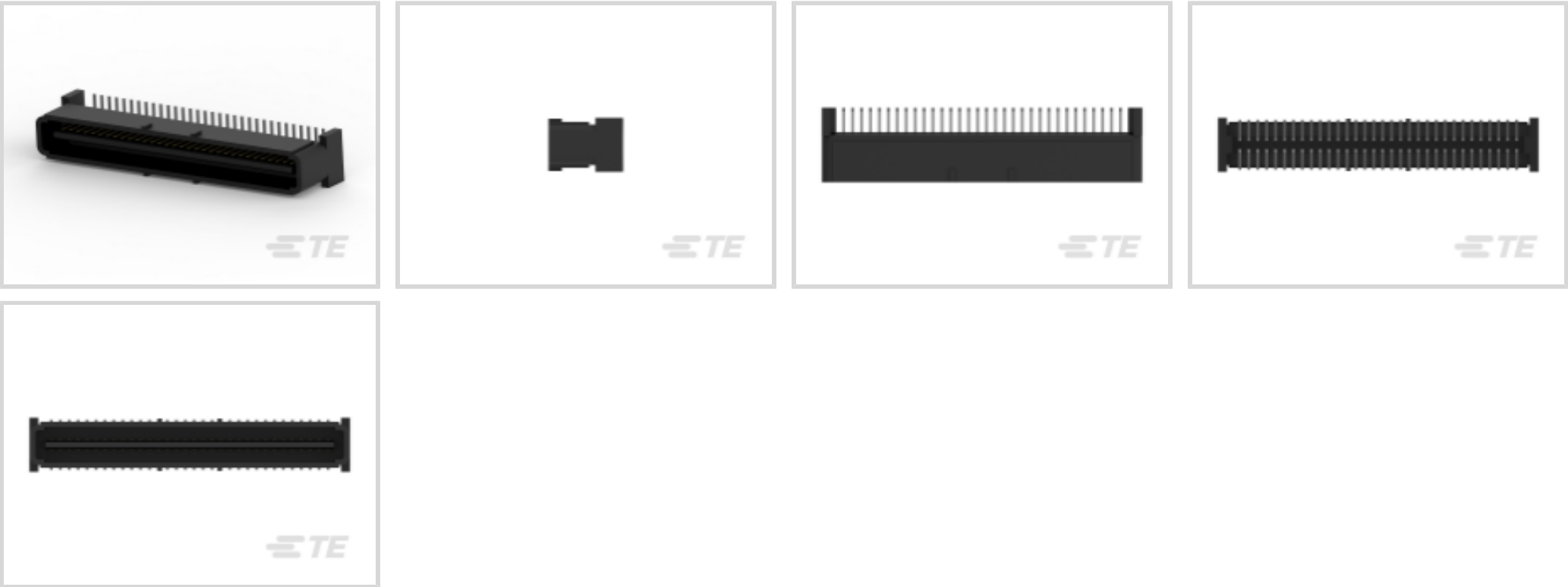


Free Height

TE Internal #: 5120534-1  
PCB Mount Header, Vertical, Board-to-Board, 64 Position, 1 mm [.039 in] Centerline, Fully Shrouded, Gold (Au), Surface Mount, Signal, Free Height

[View on TE.com >](#)

Connectors > PCB Connectors > PCB Headers & Receptacles > Free Height Plug Connector: Board-Board, Vertical, 64, 1mm



PCB Connector Type: **PCB Mount Header**  
Connector System: **Board-to-Board**  
Number of Positions: **64**  
Centerline (Pitch): **1 mm [ .039 in ]**  
PCB Mount Orientation: **Vertical**

[All Free Height Plug Connector: Board-Board, Vertical, 64, 1mm \(39\)](#)

Features

Product Type Features

|                                   |                       |
|-----------------------------------|-----------------------|
| PCB Connector Type                | PCB Mount Header      |
| Connector System                  | Board-to-Board        |
| Header Type                       | Fully Shrouded        |
| Sealable                          | No                    |
| Connector & Contact Terminates To | Printed Circuit Board |
| Connector Product Type            | Connector Assembly    |

Configuration Features

|                              |          |
|------------------------------|----------|
| Number of Columns            | 32       |
| Stackable                    | Yes      |
| Number of Positions          | 64       |
| PCB Mount Orientation        | Vertical |
| Board-to-Board Configuration | Parallel |



Electrical Characteristics

|                       |         |
|-----------------------|---------|
| Operating Voltage     | 250 VAC |
| Insulation Resistance | 2 MΩ    |

Signal Characteristics

|                        |     |
|------------------------|-----|
| Differential Signaling | Yes |
|------------------------|-----|

Body Features

|                       |       |
|-----------------------|-------|
| Primary Product Color | Black |
|-----------------------|-------|

Contact Features

|                                                         |                   |
|---------------------------------------------------------|-------------------|
| Contact Underplating Material Thickness                 | 1.27 μm[50 μin]   |
| PCB Contact Termination Area Plating Material Finish    | Matte             |
| Mating Tab Width                                        | .63 mm[.024 in]   |
| PCB Contact Termination Area Plating Material Thickness | 3.81 μm[150 μin]  |
| Contact Shape & Form                                    | Single Beam       |
| Contact Layout                                          | Inline            |
| Contact Mating Area Length                              | 4.27 mm[.168 in]  |
| Contact Base Material                                   | Phosphor Bronze   |
| Mating Tab Thickness                                    | .2 mm[.008 in]    |
| PCB Contact Termination Area Plating Material           | Tin               |
| Contact Mating Area Plating Material Thickness          | .76 μm[29.92 μin] |
| Contact Mating Area Plating Material                    | Gold (Au)         |
| Contact Type                                            | Pin               |
| Contact Current Rating (Max)                            | 1 A               |

Termination Features

|                                               |                |
|-----------------------------------------------|----------------|
| Rectangular Termination Post & Tail Width     | .3 mm[.012 in] |
| Rectangular Termination Post & Tail Thickness | .2 mm[.008 in] |
| Termination Method to PCB                     | Surface Mount  |

Mechanical Attachment

|                          |                |
|--------------------------|----------------|
| Mating Retention         | Without        |
| PCB Mount Alignment Type | Locating Posts |
| Mating Alignment Type    | None           |
| Mating Alignment         | Without        |
| PCB Mount Alignment      | Without        |



PCB Mount Retention

Without

Housing Features

|                       |               |
|-----------------------|---------------|
| Mating Entry Location | Top           |
| Centerline (Pitch)    | 1 mm[.039 in] |
| Housing Material      | Thermoplastic |

Dimensions

|                  |                                     |
|------------------|-------------------------------------|
| Connector Width  | 3.81 mm[.15 in]                     |
| Connector Height | 8.38 mm[.329 in]                    |
| Connector Length | 34.22 mm[1.347 in]                  |
| Stack Height     | 10 mm, 12 mm, 13 mm, 15 mm[.591 in] |

Usage Conditions

|                             |                            |
|-----------------------------|----------------------------|
| Operating Temperature Range | -55 – 110 °C[-67 – 230 °F] |
|-----------------------------|----------------------------|

Operation/Application

|                          |                      |
|--------------------------|----------------------|
| Assembly Process Feature | Pick and Place Cover |
| Circuit Application      | Signal               |

Industry Standards

|                                             |                       |
|---------------------------------------------|-----------------------|
| Compatible With Agency/Standards Products   | CSA, UL               |
| Industry Standard                           | IEEE 1386             |
| UL Rating                                   | Listed                |
| Compatible With Approved Standards Products | CSA LR7189, UL E28476 |
| UL Flammability Rating                      | UL 94V-0              |

Packaging Features

|                    |             |
|--------------------|-------------|
| Packaging Quantity | 400         |
| Packaging Method   | Tape & Reel |

Product Compliance

For compliance documentation, visit the product page on TE.com>

|                                               |                                                         |
|-----------------------------------------------|---------------------------------------------------------|
| EU RoHS Directive 2011/65/EU                  | Compliant                                               |
| EU ELV Directive 2000/53/EC                   | Compliant                                               |
| China RoHS 2 Directive MIIT Order No 32, 2016 | 有害物质含量符合标准要求 No Restricted Substance(s) Above Threshold |
| EU REACH Regulation (EC) No. 1907/2006        | Current ECHA Candidate List: JUNE 2025 (250)            |



Candidate List Declared Against: JUNE 2025 (250)  
Does not contain REACH SVHC

|                           |                                                                                  |
|---------------------------|----------------------------------------------------------------------------------|
| Halogen Content           | Low Halogen - Br, Cl, F < 900 ppm per homogenous material. Also BFR/CFR/PVC Free |
| Solder Process Capability | Reflow solder capable to 260°C                                                   |

Product Compliance Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked. Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulation, the information TE provides on SVHC in articles for this part number is based on the latest European Chemicals Agency (ECHA) 'Guidance on requirements for substances in articles' posted at this URL: <https://echa.europa.eu/guidance-documents/guidance-on-reach>

Compatible Parts

TE Part # CAT-314-RCB64  
Free Height Receptacle Conn: Board-Board, Vertical, 64, 1mm

Also in the Series | Free Height

Board-to-Board Headers & Receptacles(738)

PCB Headers & Receptacles(738)

Customers Also Bought



TE Part #440052-3  
2.5MM,HDR,3POS,VERTICAL, CONNECTOR



TE Part #827988-5  
2X 5P MOD2 PIN HEADER



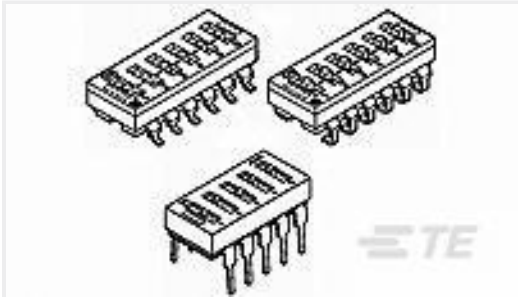
TE Part #917803-3  
DYNAMIC D-5 TAB CONT. M AU



TE Part #2-1658527-0  
622-1230LF=FSKT IDC S 12 30AU



TE Part #1658620-1  
10 NOVO MIL 15DP, LEAD FREE



TE Part #1825360-3  
ADE04A04=4POS DIP SWITCH



TE Part #2170704-2  
CAGE ASSY, QSFP28 1X1, SPRING, HS



TE Part #2291634-2  
SFP+ 1X1 CAGE ASSY, PF,WITH HEATSINK



TE Part #5352068-1  
Z-PACK/A RAF 110P



TE Part #6450849-7  
MBXLE R/A HED 2ACP+1LP+32S+3HDP+1LP+1P

Documents

Product Drawings

1FHP,64,30A/S,N,C,S10,12,13,15

English

CAD Files

3D PDF

English

Customer View Model

ENG\_CVM\_5120534-1\_A.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_5120534-1\_A.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_5120534-1\_A.3d\_stp.zip

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

Datasheets & Catalog Pages



Fine Pitch Stacking Connectors - 1.0mm Free Height (FH) (IEEE 1386) Connectors

English

Stacking Connectors Quick Reference Guide (English)

English

Solutions for AdvancedTCA, AdvancedTCA 300, MicroTCA, and AdvancedMC Standards Datasheet 3-1773445-8

English

Product Specifications

Application Specification

English