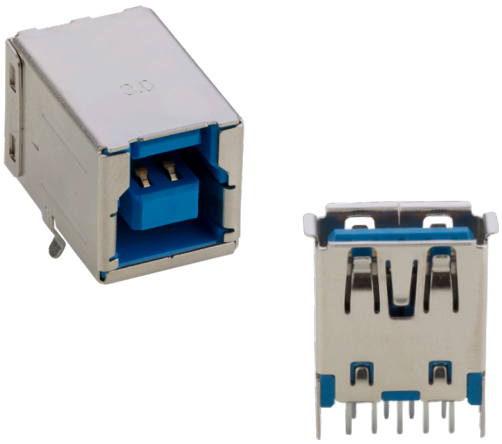
USB 3.1 Gen 2 – GSB4X Series

COMPLIANT TO USB 3.1 SPECIFICATIONS; IDEAL FOR SERVER APPLICATIONS

Amphenol USB 3.1 Gen 2 Connector operates with full-duplex signaling over two differential pairs, improving host-directed simultaneous bidirectional communication. It supports scalable power delivery up to 100W and performance speed up to 10Gb/s.

- Supports SuperSpeed communication 10Gb/s
- Improved efficiency in data transfer and power efficiency
- Backward compatible with USB 3.1 Gen 1 (USB 3.0) and USB2.0
- Fast charging and sync performance



TARGET MARKETS



FEATURES

BENEFITS

FEATURES	BENEFITS
▪ Supports SuperSpeed communication 10Gb/s	▪ Minimizes user waiting time ▪ Ready for next-generation applications
▪ 9, 10, 18 positions available	▪ Suitable for a wide variety of application requirements
▪ DIP and SMT options for shell application	▪ Reliable mounting performance on PCB
▪ Terminal design enables high and reliable contact force	▪ Provides superior electrical performance for low contact resistance
▪ Optimized design on shell structure	▪ Full metal shielding protects against EMI (Electromagnetic Interference) / RFI (Radio-Frequency interference) / ESD (Electromagnetic Discharge)
▪ Rugged gold-plated leaf contact design	▪ Improves contact resistance and prevents corrosion
▪ Metal friction lock grounding fingers and polarization plastic	▪ Superior tactile sense in the snap-in and catch operation ▪ Robust mating operation ensures strong connection
▪ High temperature thermoplastic for SMT process	▪ High flammability rating
▪ Halogen-free material	▪ Meets environmental, health and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Housing: High Temperature Thermoplastic, complies with UL 94V–0, Optional Colour
- Contact: Copper alloy, 0.2mm thickness, Selective gold plated on contact area, 100u" min. matte tin plated on soldering tail, 50u" min. nickel under–plated overall
- Shell: Stainless Steel, Nickel Plating Overall

MECHANICAL PERFORMANCE

- Insertion Force: 35N (3.57 Kgf) max.
- Withdrawal Force:
  - 10N (1.02 Kgf) min.
  - After test: 8N (0.81Kgf)
- Durability: 5000 cycle unplug/plug
- Vibration: No disturbance greater than 1microsecond
- Mechanical Shock: No disturbance greater than 1microsecond

ELECTRICAL PERFORMANCE

- Low Level Contact:
  - Initial: 30mΩ max. for VBUS and GND contacts
  - 50mΩ max. for all other contacts
  - R:10mΩ max.
- Insulation:100mΩ min.
- Voltage: 30 Volts DC
- Current: 1.8A max.
- Mated connection impedance: 90Ω±15Ω (85Ω~~105Ω)

PACKAGING

- Tape and Reel
- Tray

SPECIFICATION

- Amphenol Product Specification: PS–7530

ENVIRONMENTAL

- Operating Temperature: 0°C to +60°C
- Shipping and Storage Temperature: –20°C to +85°C
- Thermal Shock:
  - No physical damage
- Cyclic Temperature Humidity:
  - No physical damage
- Temperature Life:
  - No physical damage
- Solderability: 95% of immersed area must show no voids, Pin holes
- Mixed Flowing Gas: No physical damage
- Soldering Heat: No physical damage

TARGET MARKETS/APPLICATIONS



Datacom Equipment
Telecommunication
Test Card and Card Extenders



Gaming
IP Phone
Set Top Box



High End Computers
Routers
Servers



Test and Measurement Equipment

Disclaimer
Please note that the above information is subject to change without notice.

PART NUMBERS

Description	Orientation	Pins	Application	Tail Pin Length (mm)	Shell Hold Down Length (mm)	Part Numbers
Type A Receptacle	Right Angle	9	DIP	2.4 / 3	3.2 / 3.6	GSB41113XXHR
Type A Receptacle	Right Angle, Stacked	18	DIP	2.4 / 3	3.0 /3.5	GSB41123XXHR
Type A Receptacle	Vertical	9	DIP	2.3 / 3.0	2.85	GSB412137CHR
Type A Receptacle	Upright	9	DIP	1.9 / 2.4 / 4.4	2.8 / 3.8	GSB411634XHR
Type A, Plug	Cable assembly	9	–	–	–	GSB417131HR
Type A, Plug	Right Angle offset 0.3mm	9	SMT	–	1.8	GSB4164X5XHR
Type B Receptacle	Right Angle	9	DIP	2.8	–	GSB4211311WEU
Type B, Plug	Cable assembly	9	–	–	–	GSB422137EU
Micro B, Receptacle	Right Angle	10	SMT	–	–	GSB443133HR
Micro B, Receptacle	Right Angle	10	SMT	–	1 / 1.4	GSB443K33HR
Micro B, Receptacle	Right Angle, High Rise	10	SMT	–	0.81	GSB443T33HR

CMIOUSB31GEN20418EA4

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Unikeyic Electronics

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Amphenol:

86093488314745V1LF 86093968191755E3LF DCMF37P 95157-140LF LD25S33E4GV00LF DEM09P032N 68002116HLF 70430-164LF RJE061661210 54202-G0805CLF 86093968813H45V1LF 91614-403ALF RJSBE5080C2 65781-158 67996-204HLF 68001-108HLF LD15P33E4GV00LF 54202-S08-07LF 68000-236HLF 86130202123355E1LF 863013A CD15S13E4RV09LF D15P13A6RV12LF 68001-200HLF 70234-112LF 76384-316LF 86093967896755LF DAPO15S365TLF 69192-408HLF 70218-1116LF