

USB 3.2 GEN 2 Type A/B/Micro Receptacle & Plug – GSB4X Product Series

As SuperSpeed USB 3.2 GEN 2, this upgraded interface offers a number of enhanced features. USB 3.2 GEN 2 now operates with full-duplex signaling over two differential pairs, improving host-directed simultaneous-by-directional communication.

- Delivers 10 Gb/s USB data rate, 2x super speed USB 5Gb/s data rate
- Improved efficient data transfer and I/O power efficiency
- Works and backward compatible with existing USB 3.2 GEN 1 and USB 2.0
- Optimized power efficiency
- Fast Sync-N-Go



TARGET MARKETS



FEATURES

- 9/10/18 positions, USB 3.1 GEN 2 specification compliance
- Optional Dip & SMT for shell application
- Terminal design high reliable contact force
- Super speed up to 5 Gb/s transmission
- Optimized design on shell structure
- Rugged gold-plated leaf contact for reliability needs
- High temperature plastic for SMT process and halogen-free solution
- Metal friction lock grounding fingers and polarization plastic

BENEFITS

- Tape and Reel, Tray packing options
- Shell reliable mounted on PCB
- Superior electrical performance for low contact resistance
- Excellent terminal and shell spring design for high durability
- Full metal shielding for EMI / RFI / ESD protection
- High gold plating improves contact resistance & prevents corrosion
- Use of environmentally friendly materials
- Superior in tactile on plug operation with feeling like snap-in and catch

TECHNICAL INFORMATION

MATERIAL

- Housing: High temperature thermoplastic, complies with UL 94V-0, optional colour
- Shell: Stainless steel, nickel plating overall
- Contact: Copper alloy, selective gold plated on contact area, 100u" min. matte tin plated on soldering tail, 50u" min. nickel under-plated 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 1µs
- Mechanical Shock: No disturbance greater than 1µs

ELECTRICAL PERFORMANCE

- Low Level Contact: Initial 30mΩ max. for VBUS and GND contacts, 50mΩ max. for all other contacts, ΔR:10mΩ max.
- Insulation: 100MΩ min.
- Voltage: 30VDC
- Current: 1.8A max.
- Mated Connection Impedance: 90Ω±15Ω (85Ω ~105Ω)

ENVIRONMENTAL

- Operating Temperature: -40°C~ 85°C
- Shipping and Storage Temperature: -40°C~ 85°C
- Thermal Shock: No physical damage
- Cyclic Temperature and Humidity: No physical damage
- Thermal shock: No evidence of physical damage
- Temperature Life: No physical damage
- Solderability: 95% of immersed area, No voids and pin holes
- Mixed Flowing Gas: No physical damage
- Soldering Heat: No physical damage

SPECIFICATIONS

- Amphenol Specification: PS-7530

PACKAGING

- Tape & Reel
- Tray

TARGET MARKETS/APPLICATIONS



Telecom/Datacom Equipment
Test Card and Card Extenders
High-end Computers
Test and Measurement Equipment
IP Phone
Routers
Servers
Set Top Box
Gaming

PART NUMBERS

Description	Part Numbers
USB 3.2 GEN 2, Type A, Receptacle, Right Angle, 9 Pins, Shell with Nickel Plating, 30μ" Gold, Dip 2.4mm, Blue High Temperature Housing, Tray Packing	GSB4111312HR
USB 3.2 GEN 2, Type A, Receptacle, Right Angle Stacked, 18 Pins, Shell with Nickel Plating, 30μ" Gold, Dip 2.4mm, Blue High Temperature Housing, Tray Packing	GSB4112312HR
USB 3.2 GEN 2, Type A, Receptacle, Vertical, 9 Pins, Shell Forklock with Nickel Plating, 30μ" Gold, Dip 2.3mm, Blue High Temperature Housing, Tray Packing	GSB412137CHR
USB 3.2 GEN 2, Type A, Plug, Right Angle SMT, 9 Pins, Offset 0.3mm, 1.9mm Height, Shell Dip with Nickel Plating, 30μ" Gold, Blue High Temperature Housing, Tape & Reel Packing	GSB416445CHR
USB 3.2 GEN 2, Type A, Plug, Crimping Assembly, 30μ" Gold, Blue Housing, Tray & Bag Packing	GSB417131HR
USB 3.2 GEN 2, Type B, Receptacle, Upright Reverse, 9 Pins, Shell Kink with Nickel Plating, 30μ" Gold, Dip 2.8mm, Blue Housing, Tray Packing	GSB4211311WEU
USB 3.2 GEN 2, Type B, Receptacle, Vertical, 9 Pins, Shell Kink with Nickel Plating, 30μ" Gold, Dip 2.9mm, Blue Housing, Tray Packing	GSB422137EU
USB 3.2 GEN 2, Type Micro B, Receptacle, Right Angle SMT, 10 Pins, Shell with Nickel Plating, 30μ" Gold, Blue Housing, Tape & Reel Packing	GSB443133HR
USB 3.2 GEN 2, Type Micro B, Receptacle, Right Angle SMT, High Rise, 5.2mm Height, 10 Pins, Shell with Nickel Plating, 30μ" Gold, Blue Housing, Tape & Reel Packing	GSB443T33HR
USB 3.2 GEN 2, Type a, Receptacle, Right Angle Stack Dip, High-Rise, 18 Pins, Shell with Nickel Plating, 30μ" Gold, Blue Housing, Tray Packing	GSB411J3511HR