



## External Cables Transceivers | Loopbacks



**ENSURE RELIABLE  
DATA CENTER  
CONNECTIVITY**

- BizLink's DACs are compliant with IEEE 802.3bj and IEEE 802.3cd, which are compatible with industry standard connectors and cages.

# DATA CENTER SOLUTIONS

Direct Attach Cables

Active Optical Cables

Optical Transceiver

Loopback Modules

- Provide series active optical cables for data center applications with varying speeds
- Compliant with MSA standards
- Fulfill customers' needs in high-speed transmission with low power consumption

- Support total data rates from 10Gb to 400Gb with fully SFF and QSFP-DD MSA compliant
- Provide 2-wire serial communication interface for EERPOM

- Offer a line of 100G and 40G SFP transceivers based on ruggedized integrated optics assembled on automated production lines
- Commercialize 200G and 400G solutions for next generation networks

## APPLICATIONS

- Routers
- Switches
- Data Center Networking
- External Storage Systems

# LOOPBACK MODULES



## 400G QSFP-DD

### Key Features

- Differential impedance: 100 ±10 ohm
- Supply voltage: 3.3V (Typical)
- Operating temperature: 0°C to 70°C
- Storage temperature: -20°C to 80°C
- Durability: 50 cycles
- Mating force: Max. 40N (Insertion force), max. 30N (Extraction force)
- Module retention: Min. 125N
- Support IEEE 802.3cd



## 100G QSFP28

### Key Features

- Compliant with 25G/lane NRZ with an aggregate of 100Gb/s total bandwidth
- Available with and without power consumption
- Customized EEPROM
- Excellent EMC/EMI performance
- Operating temperature: 0°C to 70°C
- Single +3.3V power supply
- RoHS 2 compliance
- Support IEEE 802.3bj



## 40G QSFP+

### Key Features

- Compliant with 10G/lane NRZ with an aggregate of 40Gb/s total bandwidth
- Available with and without power consumption
- Customized EEPROM or QSFP-DD MSA EEPROM
- Excellent EMC/EMI performance
- Operating temperature: 0°C to 70°C
- Single +3.3V power supply
- RoHS 2 compliance
- Support IEEE 802.3ba



## 10G SFP+

### Key Features

- Compliant with SFF-8431, SFF-8432, and SFF-8472
- Up to 10.3125G data rate per channel
- Operating temperature: 0°C to 70°C
- Single +3.3V power supply
- RoHS compliant
- Support IEEE 802.3ba



## 25G SFP28

### Key Features

- Compliant with 25G/lane NRZ.
- Compliant with SFF-8431, SFF-8432, and SFF-8472
- Available with and without power consumption
- Customized EEPROM or QSFP-DD MSA EEPROM
- Excellent EMC/EMI performance
- Operating temperature: 0°C to 70°C
- Single +3.3V power supply
- RoHS 2 compliance
- Support IEEE 802.3bj



# ACTIVE OPTICAL CABLES



## 400G QSFP-DD

### > Key Features

- 8-channel full-duplex active optical cable
- Electrical interface only
- Multi-rate capability: 53Gbps per channel
- Power consumption < 10W per end
- QSFP-DD high-density form factor
- Reliable VCSEL array technology using multimode fiber
- Hot pluggable
- Case operating temperature: 0°C to 70°C
- RoHS 6 compliant
- Support IEEE 802.3cm



## 100G QSFP28

### > Key Features

- Active optical cable with 4 independent full-duplex channels
- Programmable Rx output amplitude and pre-emphasis
- Programmable Tx input equalizer
- Selectable retiming
- 2.5W max. power dissipation (each end)
- Up to 100m length (OM4 fiber)
- SFF-8665 compliant QSFP28 port
- SFF-8636 compliant I2C management interface
- RoHS compliant
- Support IEEE 802.3bm



## 100G QSFP28 to 4x SFP28

### > Key Features

- Support 100G to 25G Ethernet interoperability
- SFF-8436 QSFP28 compliant
- SFF-8431 SFP28 compliant
- 4-channel 850nm VCSEL array
- Less cabling to order and manage
- Lengths up to 100 meters
- Case operating temperature: 0°C to 70°C
- 3.3V power supply voltage
- Low power consumption



## 400G QSFP-DD

### > Key Features

- Differential impedance: 100 ±10 ohm
- Supply voltage: 3.3V (Typical)
- Operating temperature: 0°C to 70°C
- Storage temperature: -20°C to 80°C
- Durability: 50 cycles
- Mating force: Max. 40N (Insertion force), max. 30N (Extraction force)
- Module retention: Min. 125N
- Bend radius: Min. 5x cable OD
- Support IEEE 802.3cd



## SFP28/QSFP28

### > Key Features

- SFP28: Total data transmission rate 25Gbps Ethernet
- QSFP28: Total data transmission rate 100Gbps Ethernet (25Gbps\*4 channels), 25Gb/s Ethernet per channel
- SFF-8665: QSFP+ pluggable solution, compliant to SFF-8685 and SFF-8635
- Support IEEE 802.3bj



### 25G SFP28

#### Key Features

- 850nm vertical cavity surface emitting laser
- Up to 25.78Gb/s bi-directional data links
- SFP28 MSA compliant
- Case operating temperature: 0°C to 70°C
- Single 3.3V power supply
- Max. link length of 100m on OM4 Multimode Fiber (MMF)
- Low power consumption < 1W
- Compliant to RoHS directives
- Rigid pull-tab
- Diagnostic features per SFF-8472 (Diagnostic Monitoring interface for optical transceivers)
- Support IEEE 802.3by

### 10G SFP+

#### Key Features

- 1 channel operating at up to 10.3125 Gbps
- BER @ 10-12
- Hot pluggable
- Bend insensitive fiber
- Compliant with SFF-8431 specifications
- All-metal housing for superior EMI performance
- Low power consumption < 1W
- Cost effective SFP+ solution for higher port densities and greater bandwidth
- RoHS compliant
- Support IEEE 802.3ae



### 40G QSFP+ 4x SFP+

#### Key Features

- Support 40G to 10G Ethernet interoperability
- SFF-8436 QSFP+ compliant
- SFF-8431 SFP+ compliant
- 4-channel 850nm VCSEL array
- Less cabling to order and manage
- Lengths up to 100 meters
- Case operating temperature: 0°C to 70°C
- 3.3V power supply voltage
- Low power consumption



### 40G QSFP+

#### Key Features

- Active optical cable with 4 independent full-duplex channels
- Electrical interface only
- Comply with QSFP MSA high-density form factor
- Reliable VCSEL array technology using multimode fiber
- Round LSZH-rated cable
- Low power dissipation: <0.7W per cable end
- Case operating temperature: 0°C to 70°C
- RoHS 6 compliant
- Support IEEE 802.3bq



### 56G QSFP+ FDR

#### Key Features

- 100-ohm differential impedance system
- Allow for 14Gbps per channel transmission with an aggregate of 56Gbps total bandwidth
- Optimized PCB interface board to minimize crosstalk and insertion loss
- Robust diecast covers for superior EMI shielding effectiveness
- EEPROM for cable signature and system communications
- 30AWG to 26AWG available
- RoHS compliant
- Support InfiniBand FDR

# DIRECT ATTACH CABLES



### 100G QSFP28 CWDM4 (10km/2km)

#### Key Features

- Hot pluggable QSFP28 form factor
- Two-wire common management interface (SFF-8636 MSA)
- CAUI-4 compliant electrical interface (4 x 25.78125 Gbps)
- Transmission distance up to 10km/2km
- Low power consumption: <3.5W
- Commercial temperature operating up to 70°C
- Duplex LC receptacle for optical connectivity
- Pull tab based latching mechanism (MSA compliant purple color)
- Remote firmware upgrade capability using I2C interface
- Provide capability to place CDRs in bypass mode for 40G operation
- Programmable output de-emphasis and input CTLE



### 40G QSFP+ CWDM4 (10km/2km)

#### Key Features

- Hot pluggable QSFP+ form factor
- Two-wire common management interface (SFF-8436 QSFP+ Rev. 4.8)
- CAUI-4 compliant electrical interface (4 x 10.3125 Gbps)
- Transmission distance up to 10km/2km
- Low power consumption: <3.5W
- Commercial temperature operating up to 70°C
- Duplex LC receptacle for optical connectivity
- Pull tab based latching mechanism (MSA compliant blue color)
- Remote firmware upgrade capability using I2C interface



### 100G QSFP28 LR4

#### Key Features

- Hot pluggable electrical interface QSFP28 MSA form factor
- QSFP footprint (Quad small form factor pluggable)
- Low power dissipation < 4.5W
- Case operating temperature: 0°C to 70°C
- Single 3.3V power supply
- 4x25Gb/s transmitter
- 4x25G retimed electrical interface
- Duplex LC receptacles
- I2C management interface
- Support 103.1Gbps aggregate bit rate
- Compliant to IEEE 802.3ba 100GBASE-LR4
- RoHS 6 compliant
- Up to 10 km reach for G.652 SMF

# OPTICAL TRANSCEIVERS



### 10G SFP+ 850 SR

#### Key Features

- Optical interface compliant to IEEE 802.3ae 10GBASE-LR
- Electrical interface compliant to SFF-8431
- Hot pluggable
- 850nm VCSEL transmitter, PIN photo-detector
- Max. link length of 300m on 2000MHz/km MMF
- Low power consumption
- All-metal housing for superior EMI performance
- Advanced firmware allows customer system encryption information to be stored in transceiver.
- Cost effective SFP+ solution for higher port densities and greater bandwidth
- RoHS 6 compliant
- Support IEEE 802.3ae



### 10G SFP+ BIDI

#### Key Features

- Up to 11.1Gbps data links
- Up to 10km transmission on SMF
- Low power dissipation < 1.5 W
- 1270nm DFB laser and PIN receiver for uplink
- 1330nm DFB laser and PIN receiver for downlink
- 2 wire interface with integrated Digital Diagnostic Monitoring
- Internal calibration for DDM
- EEPROM with serial ID functionality
- Hot-pluggable SFP+ footprint
- Compliant with SFP+ MSA with LC connector
- Single + 3.3V power supply
- Case operating temperature: 0°C to 70°C
- Compliant with RoHS, SFF-8472, and SFF-8431



### 25G SFP28 BIDI (30km)

#### > Key Features

- Up to 25.78Gbps data links
- Up to 30km on SMF
- High sensitivity APD photodiode and TIA
- Rate adaptation
- LC single connector
- Hot-pluggable SFP footprint
- Support Digital Diagnostic Monitoring interface
- Single +3.3V power supply
- RoHS compliant
- Case operating temperature
- Industrial: -40°C to +85°C



### 25G SFP28 BIDI (10km)

#### > Key Features

- Up to 25.78125Gbps data links
- 1310/1270nm DFB laser transmitter and 1270/1310nm PIN receiver
- Up to 10km on SMF
- Hot-pluggable SFP footprint
- Single LC/UPC type pluggable optical interface (bi-directional)
- Metal enclosure for lower EMI
- RoHS compliant
- Support Digital Diagnostic Monitoring interface
- Single +3.3V power supply
- Case operating temperature
- Industrial: -40°C to +85°C



### 100G QSFP28 SR4 (100m)

#### > Key Features

- Compliant with 100G Ethernet IEEE 802.3bm and SFF-8636 QSFP28 MSA
- Hot pluggable electrical interface
- QSFP footprint (Quad small form factor, pluggable)
- Low power dissipation < 3.5W
- Case operating temperature: 0°C to 70°C
- Single 3.3V power supply
- 4 independent full-duplex channels
- MTP/MPO optical connector
- Up to 28Gb/s data rate per channel
- Up to 100m OM4 MMF transmission
- RoHS 6 compliant
- Support IEEE 802.3bm



### 40G QSFP+ 850 SR4

#### > Key Features

- 4-channel 850nm VCSEL array and 4-channel PIN photo detector array
- 4-channel full-duplex transceiver modules
- Low power consumption <1.5W
- Hot pluggable QSFP form factor
- Hot pluggable electrical interface
- Single MPO connector receptacle
- Built-in digital diagnostic functions
- Transmission data rate up to 10.5Gbps per channel
- Case operating temperature: 0°C to 70°C
- 3.3V power supply voltage
- Compliant with 40G Ethernet IEEE 802.3ba 40GBASE-SR4 standard, RoHS 6 compliant (lead free)
- Max. link length of 100m on OM3 MMF and 150m on OM4 MMF



### 100G CWDM4 (TOSA R-LD/TOSA M-LD)

#### > Key Features

- Up to 25.78125 ±100 ppm operation (NRZ)
- Direct Modulation Laser (DML) Base Quad TOSA for CWDM4
- Useable with M37049G-16 CDR
- Integrated LDD
- 2 wire communication up to 400 kHz
- CWDM4 optical MUX integrated
- Pigtail with LC connector
- SMT style for electrical RF signals



### 100G CWDM4 ROSA (10km/2km)

#### > Key Features

- Up to 25.78125 ±100 ppm operation (NRZ)
- PIN Photodiode (PIN-PD) Base Quad ROSA for CWDM4
- Integrated TIA/LA/CDR
- Programmable output swing, squelch, and de-emphasis
- 2 wire communication up to 400 kHz
- CWDM4 optical De-MUX integrated
- Pigtail with LC connector
- SMT style for electrical RF signals



### 200G FR4 TOSA/ROSA

#### > Key Features

- Up to 26.56 GBd/s (PAM4)
- Direct Modulation Laser (DML) Base Quad TOSA 200G FR4
- PIN Photodiode (PIN-PD) Base Quad ROSA 200G FR4
- Integrated LDD for TOSA and Integrated TIA for ROSA
- 2 wire communication up to 400 kHz
- CWDM optical MUX integrated for TOSA and CWDM optical
- De-MUX integrated for ROSA
- Pigtail with LC connector

**BizLink**



**DataCenter  
Solutions**

# Internal Cables



**ENSURE RELIABLE  
DATA CENTER  
CONNECTIVITY**



# INTERNAL CABLES

**SlimSAS  
Cables**

**OCuLink  
Cables**

**GenZ  
Cables**

## DATA CENTER SOLUTIONS

BizLink's internal interconnect solutions include MiniSAS HD, SlimSAS, SlimSAS Anti-Skew, OCuLink, Mini IO, and GenZ cable assemblies for a wide variety of applications in data centers, servers, and high-performance computing.



## APPLICATIONS

- Data Center and Networking Equipment
- Servers and Storage Devices
- High-Performance Computing





## SlimSAS Cables

### Key Features

- Dedicated to address the anticipated I/O and direct attached storage requirements
- The cables are available for both right angle and vertical versions.
- The mating cable products with positive latch are for both right angle and straight-out cable exit styles.
- Support SAS 3.0/SAS 4.0/PCIe 3.0/PCIe 4.0



## Mini-SAS HD Cables

### Key Features

- Support short 18mm straight and right angle connectors
- 100 ohm and 85 ohm impedance cables, composite flat 30AWG twin axial cable with side bands
- Support SAS 3.0/PCIe 3.0



## OCuLink Cables

### Key Features

- Support protocols: SAS, PCIe 3.0/PCIe 4.0, SATA
- OcuLink is available in both right angle and vertical versions.
- The mating cables offer positive active or passive detent latches for both right angle and straight-out cable exit styles.
- Provide more effective cable management through ribbon cable enabled assemblies



## SlimSAS Anti-skew

### Key Features

- SlimSAS with anti-skew interface is designed to prevent the terminal damage as connector mating with incorrect angle.
- Support SAS 3.0/SAS 4.0/PCIe 3.0/PCIe 4.0



## GenZ Cables

### Key Features

- Pitch 0.6mm, 1.57mm PCB card thickness compatible with PCIe riser cards
- Optional multiple channels: 1C (56pos.), 2C (84pos.), and 4C (140pos.)
- Excellent SI performance with signal rates up to 56 GT/s PAM4
- Support power and high-speed signal transmission simultaneously
- 30-32AWG wires are available for both discrete and ribbon cables.
- Mechanical performance: Mating force 31N (max.), unmating force 6N (min.), and 25 rated durability cycles (min.)
- Signal integrity: RL meets 56G PAM4; FEXT meets 56G PAM4; NEXT meets 56G PAM4; IL meets 56G PAM4
- Support SAS 4.0/SAS 5.0/PCIe 4.0/PCIe 5.0



## Mini IO Cables

### Key Features

- Fully compatible with Mini CoolEdge (MCIO) connectors and cables
- Pitch 0.6mm, 1.57mm PCB card thickness compatible with PCIe riser cards
- Options: Straight, right angle, side exit and customization cable plug; 38pin (4x), 74pin (8x and 12x), and 124pin (16x and 20x) plugs
- Support 85 ohm and 100 ohm impedance application
- 30-34AWG cables are available.
- Mechanical performance: Mating force max. 55.5N, unmating force max. 49N, and min. 250 rated durability cycles
- Support SAS 4.0/SAS 5.0/PCIe 4.0/PCIe 5.0





## Power Whips | DC Power Cables High-Power Connectors

A photograph of a data center aisle with rows of server racks. The racks have perforated metal doors, and some are open, revealing internal components and yellow power cables. The floor is a light-colored tile, and the ceiling has exposed pipes and lighting fixtures.

**ENSURE RELIABLE  
DATA CENTER  
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# POWER WHIPS



## US Single Phase

- ▶ **Key Features**
  - Meet UL 817/UL 62
  - Rating 25A 250V\*3 group output 18KW power whip
  - Approved by UL and cUL PSE



## US 3-Phase

- ▶ **Key Features**
  - Meet to UL 817/UL 62
  - Rating 25A 277V\*3 group output 18KW power whip
  - Approved by UL and cUL



## EU Single Phase

- ▶ **Key Features**
  - Meet to IEC 61984/IEC EN50525-2
  - Rating 25A 250V\*3 group output 18KW power whip
  - Approved by KEMA-KEUR AUS and KC



## EU 3-Phase

- ▶ **Key Features**
  - Meet to IEC 61984/IEC EN50525-2
  - Rating 25A 250V\*3 group output 18KW power whip
  - Approved by KEMA-KEUR

Designed for power supply units and server power supplies

DC Power Cables

Power Whips

Designed for Open Rack or customized projects

High Power Connectors

Designed for power distribution of data center servers, hyperscale computing architecture, and modular power supplies

# DATA CENTER SOLUTIONS



## APPLICATIONS

- OCP ORV2/V3 DC Busbar Output
- Cloud Server DC Busbar Output
- Server, Storage, Computing, Power Distribution, and Industrial Applications
- PSU/PDU AC/DC Input and Output







### DC Power Cable (DAC-054306)

► Key Features

- Meet UL 817/UL 62
- Rating 10A 435V DC/AC
- UL and TUV Certified



### DC Power Cable (DAC-038530)

► Key Features

- Meet UL 817/IEC 61984/UL 62OR/IEC 50525
- Rating 30A 600V DC/AC
- UL and TUV Certified

## DC POWER CABLES



### DC Power Cable (DAC-041872)

► Key Features

- Meet UL 62
- Rating 30A DC Power Cable
- UL Certified



### DC Power Cable (DAC-PLB3W3)

► Key Features

- Meet UL 62
- Rating 30A DC Power Cable
- UL Certified



### DC Power Cable (DAC-043644)

► Key Features

- Meet UL 62
- Rating 30A DC Power Cable
- UL Certified



### AC Power Whip Connector (745-07A/B/F/G Series)

► Key Features

- Meet the standards of UL1977 and EN61984
- Lateral/central ground options
- 600V/32A@10AWG and 50A@8AWG options
- Designed for server power whip 600V AC input, special for Open Rack V2/V3 or customized projects
- Rated current: 50A@8AWG/32A@10AWG
- Operation temperature: -40°C to +85°C (including ambient)

## HIGH POWER CONNECTORS



### DC Busbar Connector (BzKlip300)

► Key Features

- Featured with low contact resistance, gold plating, and high conductivity to secure high reliability and system efficiency in high current applications
- Support single-pole DC applications with rated currents up to 300A
- Mated with specified copper blades for easy assembly and maintenance
- Designed with screw-mounted fixation and high temperature thermoplastic housing
- Designed for server power shelf 12/48V DC output, special for Open Rack V2/V3 or customized projects

- Rated voltage: Max. 600V/General 12VDC
- Rated current: Max. 300A/General 250A
- Mating busbar: 3.0/3.18mm
- Operation temperature: -40°C to +125°C (including ambient and temperature rising)



### PSU AC/DC Input Connector (DSUB Connector 53A)

► Key Features

- Meet the standards of UL 1977 and EN 61984
- 250V/53A rated specification
- Soldering wire/crimped wire options
- DSUB type, anti-reversible design
- Designed for PDU/PSU AC/DC input/output applications

- Rated voltage: UL 250VAC/VDC, TUV 150VAC/VDC
- Rated current: 53A@8AWG
- Operation temperature: -55°C to +105°C (including ambient and temperature rising)



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