

## Features

- SFF-8431 Compliant
- Broadband serial data rate oper 10 Mbps to 12 Gbps
- Power Level I: 15 mW per cable
- 100 Ohm differential impedance
- Retractable pin latch
- EEPROM signature
- Pull to Release latch design
- 360°cable braid crimp
- Enhanced EMI skirt design
- Color options for strain relief and pull tab
- Linear design for use with EDCs
- AC-coupled inputs and outputs
- 30AWG to 24AWG cable available



## Applications

- 10 Gigabit Ethernet and Gigabit
- Ethernet (IEEE 802.3ae)
- Fiber Channel: 1, 2, 4, 8, and 10GFC
- Infiniband SDR, DDR, and QDR
- Fiber Channel over Ethernet (FCoE)
- Serial data transmission

## 1. Recommended Operation Conditions (Electrical)

| Parameter               | Symbol                                 | Minimum | Typical | Max     | Unit  |
|-------------------------|--|---------|---------|---------|-------|
| Operating Temp.         |  | 0       |         | 70      | °C    |
| Input Voltage           | V <sub>ccT</sub> ,<br>V <sub>ccR</sub> | 1.8     | 3.3     | 5.5     | Volts |
| Clock Frequency         | f <sub>SCL</sub>                       |         |         | 400     | kHz   |
| Maximum Power           |  |         |         | 15      | mW    |
| Maximum Average Current | I <sub>cc</sub>                        |         |         | 4       | mA    |
| Data Rate               |  | 0.010   |         | 10.3125 | Gbps  |

## 2. WDP Specifications

| Cable Gauge | Cable Length | WDPO (dB) | WDPI (dB) | dWDP |
|-------------|--------------|-----------|-----------|------|
| Spec Limit  | --           | --        | --        | 6.75 |
| 30 AWG      | 3 meter      | 6.16      | 2.4       | 3.76 |
| 28 AWG      | 5 meter      | 7.49      | 2.4       | 5.09 |
| 24 AWG      | 7 meter      | 7.44      | 2.4       | 5.04 |

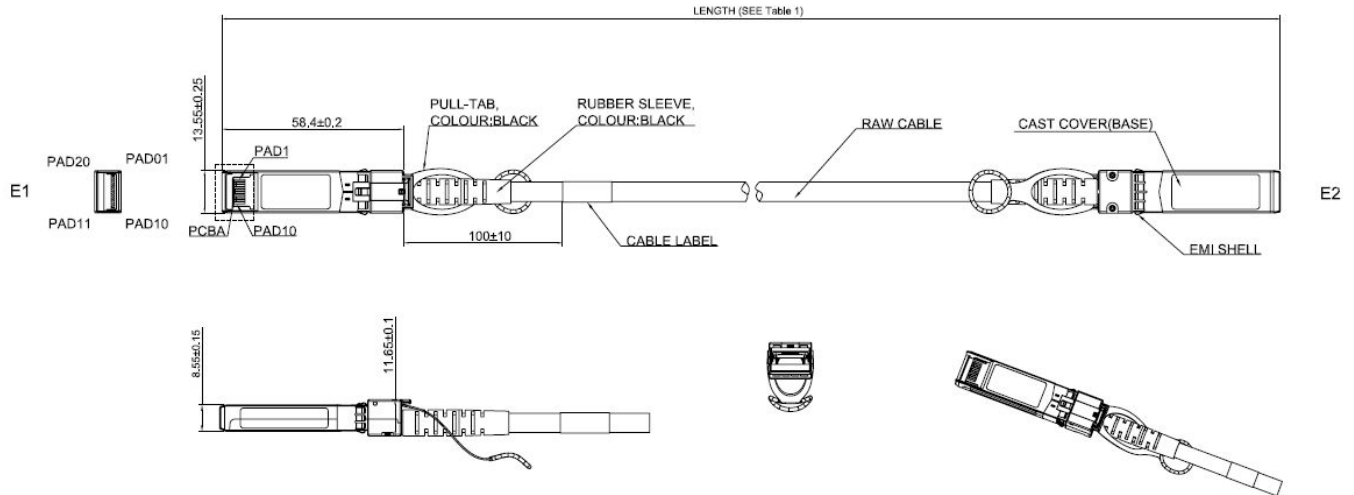
## 3. Time Domain

| Item | Test Parameter             | Specification (Proposal )   |
|------|----------------------------|---|
| 1    | Intra-Skew*                | 30 ps Max   |
| 2    | Impedance                  | 100 +/- 10 Ohm  |
| 3    | Insertion Loss*<br>(SDD21) | a. 0.6GHz : -1.5 dB Max<br>b. 1.25GHz : -2.15 dB Max<br>c. 2.50GHz : -3.22 dB Max<br>d. 3.25GHz : -3.95dB Max<br>e. 5.0GHz : -5.52 dB Max |

## 4. Mechanical Specifications

| Parameter                      | Minimum | Typical | Maximum | Unit   |
|--------------------------------|---------|---------|---------|--------|
| Cable Diameter (24 AWG)        |         | 0.255   |         | Inches |
| Bend Radius (24 AWG)           | 1.25    |         |         | Inches |
| Cable Diameter (28 AWG)        |         | 0.185   |         | Inches |
| Bend Radius (28AWG)            | 0.8     |         |         | Inches |
| Cable Diameter (30 AWG)        |         | 0.175   |         | Inches |
| Bend Radius (30 AWG)           | 0.7     |         |         | Inches |
| Within Pair Skew               |         |         | 120     | ps/10m |
| Cable Insertion Loss           |         | 10 d    |         | B/10m  |
| Bulk Cable Crosstalk           |         |         | 1       | %      |
| Bulk Cable Time Delay          |         |         | 4.3     | ns/m   |
| Cable Capacitance (intra-pair) |         |         | 43      | pF/m   |
| Bulk Cable Impedance           | 95      | 100     | 105     | Ohms   |

## 5. Mechanical Diagram



**Note:** External physical characteristics are subject to variation. This may include, but is not limited to, external case designs, pull tab colors and/or shapes, removal latch styles or colors, and label sizes and placement. These variations do not affect the function or characteristics of the transceivers.

## 6. Ordering Information

| OEM            | Part Number          | OEM       | Part Number             |
|----------------|----------------------|-----------|-------------------------|
| Calix          | 100-01423-5M-A       | Arista    | CAB-SFP-SFP-5M-A        |
| Calix          | 100-01423-7M-A       | Arista    | CAB-SFP-SFP-7M-A        |
| Calix          | 100-01423-A          | Juniper   | EX-SFP-10GE-DAC-1M-C1   |
| Calix          | 100-01424-A          | Juniper   | EX-SFP-10GE-DAC-3M-C1   |
| Calix          | 100-01793-1.5M-A     | Juniper   | EX-SFP-10GE-DAC-50CM-C1 |
| Calix          | 100-01793-2.5M-A     | Juniper   | EX-SFP-10GE-DAC-5M-C1   |
| Calix          | 100-01793-2M-A       | Juniper   | EX-SFP-10GE-DAC-7M-C1   |
| Calix          | 100-01793-A          | Mellanox  | MC3309124-005-A         |
| Brocade        | 10G-SFPP-TWX-0.5-A   | Mellanox  | MC3309124-007-A         |
| Brocade        | 10G-SFPP-TWX-01.5-A  | Mellanox  | MC3309130-002-A         |
| Brocade        | 10G-SFPP-TWX-0101-A  | Mellanox  | MC3309130-003-A         |
| Brocade/Ruckus | 10G-SFPP-TWX-0101-C1 | Mellanox  | MC3309130-00A-A         |
| Brocade        | 10G-SFPP-TWX-0201-A  | Mellanox  | MCP2100-X001A-A         |
| Brocade        | 10G-SFPP-TWX-0301-A  | Mellanox  | MCP21J3-X01AA-A         |
| Brocade/Ruckus | 10G-SFPP-TWX-0301-C1 | Mellanox  | MCP21J3-X02AA-A         |
| Brocade        | 10G-SFPP-TWX-0501-A  | Palo Alto | PAN-SFP-PLUS-CU-0.5M-A  |
| Brocade        | 10G-SFPP-TWX-0701-A  | Palo Alto | PAN-SFP-PLUS-CU-1.5M-A  |
| Brocade        | 10G-SFPP-TWX-2.5M-A  | Palo Alto | PAN-SFP-PLUS-CU-1M-A    |

|                  |                           |                   |                        |
|------------------|---------------------------|-------------------|------------------------|
| MSA Champion ONE | 10G-SFPP-TWX-P-0101-C1    | Palo Alto         | PAN-SFP-PLUS-CU-2.5M-A |
| Cisco            | 10GESPDC-01-CSC           | Palo Alto         | PAN-SFP-PLUS-CU-2M-A   |
| HP               | 10GESPDC-01-HP            | Palo Alto         | PAN-SFP-PLUS-CU-3M-A   |
| Aruba            | 10GESPDC-03-ARB           | Palo Alto         | PAN-SFP-PLUS-CU-5M-A   |
| Cisco            | 10GESPDC-03-CSC           | Palo Alto         | PAN-SFP-PLUS-CU-7M-A   |
| HP               | 10GESPDC-03-HP            | Palo Alto         | PAN-SFP-PLUS-CU-7M-A   |
| MSA Champion ONE | 10GSFP+E-DA01             | Juniper           | SFP-10GE-DAC-1.5M-A    |
| MSA Champion ONE | 10GSFP+E-DA03             | Juniper           | SFP-10GE-DAC-1M-A      |
| Adtran           | 1179680G1-0.5M-A          | Juniper           | SFP-10GE-DAC-2.5M-A    |
| Adtran           | 1179830G1-2.5M-A          | Juniper           | SFP-10GE-DAC-2M-A      |
| Adtran           | 1179830G1-A               | Juniper           | SFP-10GE-DAC-3M-A      |
| Adtran           | 1710484F1-1.5M-A          | Juniper           | SFP-10GE-DAC-50CM-A    |
| Adtran           | 1710484F1-A               | Juniper           | SFP-10GE-DAC-5M-A      |
| Adtran           | 1710484F3-A               | Juniper           | SFP-10GE-DAC-7M-A      |
| Adtran           | 1710484F5-7M-A            | Cisco             | SFP-H10GB-CU0.5M-C1    |
| Adtran           | 1710484F5-A               | Cisco             | SFP-H10GB-CU1.5M-A     |
| Dell             | 470-AAVG-A                | Cisco             | SFP-H10GB-CU10M-C1     |
| Dell             | 470-AAVH-1.5M-A           | Cisco             | SFP-H10GB-CU1M-A       |
| Dell             | 470-AAVH-A                | Cisco             | SFP-H10GB-CU1M-C1      |
| Dell             | 470-AAVI-A                | Cisco             | SFP-H10GB-CU2.5M-A     |
| Dell             | 470-AAVJ-A                | Cisco             | SFP-H10GB-CU2M-A       |
| Dell             | 470-AAVK-A                | Cisco             | SFP-H10GB-CU2M-C1      |
| Dell             | 470-ABPS-2.5M-A           | Cisco             | SFP-H10GB-CU3M-A       |
| Dell             | 470-ABPS-A                | Cisco             | SFP-H10GB-CU3M-C1      |
| Molex            | 74752-1208-A              | Cisco             | SFP-H10GB-CU50CM-A     |
| MSA              | AN-SFP-10G-P-1.5M         | Cisco             | SFP-H10GB-CU5M-A       |
| MSA              | AN-SFP-10G-P-1M           | Cisco             | SFP-H10GB-CU5M-C1      |
| MSA              | AN-SFP-10G-P-2.5CM        | Cisco             | SFP-H10GB-CU7M-A       |
| MSA              | AN-SFP-10G-P-2M           | MSA Champion ONE  | SFP-H10GB-CU7M-C1      |
| MSA              | AN-SFP-10G-P-3CM          | Broadcom/Ubiquiti | SFP10G-BCUB-CU-2M-C1   |
| MSA              | AN-SFP-10G-P-50CM         | Broadcom/Ubiquiti | SFP10G-BCUB-CU-4M-C1   |
| MSA              | AN-SFP-10G-P-5M           | Brocade/Intel     | SFP10G-BRIN-CU-5M-C1   |
| MSA              | AN-SFP-10G-P-7M           | Cisco/Intel       | SFP10G-CSIN-CU-3M-C1   |
| MSA Champion ONE | CAB-SFP-10GB-DACP-0.5M-C1 | Cisco/Meraki      | SFP10G-CSMK-CU-1M-C1   |
| MSA Champion ONE | CAB-SFP-10GB-DACP-1M-C1   | Cisco/Meraki      | SFP10G-CSMK-CU-3M-C1   |
| MSA Champion ONE | CAB-SFP-10GB-DACP-2M-C1   | Intel             | XDACBL0.5M-A           |
| MSA Champion ONE | CAB-SFP-10GB-DACP-3M-C1   | Intel             | XDACBL1.5M-A           |

|        |                    |       |              |
|--------|--------------------|-------|--------------|
| Arista | CAB-SFP-SFP-0.5M-A | Intel | XDACBL1M-A   |
| Arista | CAB-SFP-SFP-1.5M-A | Intel | XDACBL2.5M-A |
| Arista | CAB-SFP-SFP-1M-A   | Intel | XDACBL2M-A   |
| Arista | CAB-SFP-SFP-2.5M-A | Intel | XDACBL3M-A   |
| Arista | CAB-SFP-SFP-2M-A   | Intel | XDACBL5M-A   |
| Arista | CAB-SFP-SFP-3M-A   | Intel | XDACBL7M-A   |

## 7. Contact Information

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