# Dolphin MSP3M Fiber Pigtail Data Sheet

## PCle Gen3 x4 SFF-8644 MPO Male Active Optical Pigtail

Dolphin provides a SFF-8644 to MPO fiber cable for PCIe over fiber. The Dolphin cables are fiber optic cables that enable connecting a various patch length patch cables up to 100m. The cables end with a male MPO connector that can be connected to a standard MPO female connector. By connecting the two MSP3M cables with a patch cable, various fiber cable lengths can be supported



### **Features**

- Cable lengths 1m
- Conforms to the mechanical dimensioning requirements of SFF-8644
- x4 PCle Gen 3 support
- Male MPO connector
- 12 Stand Fiber

- 1 EEPROMs
- RoHS compliant

## Part Numbers

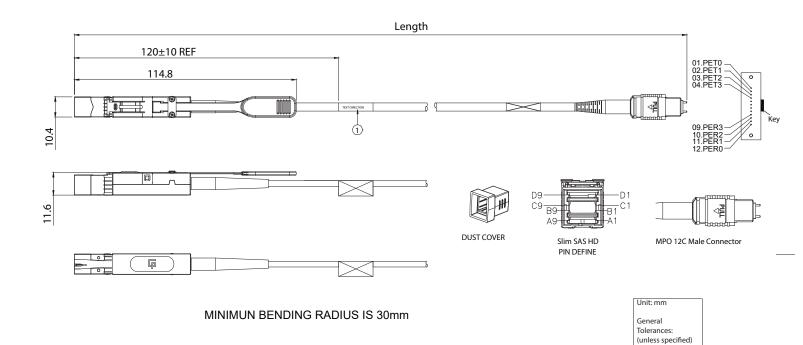
| Part  | Description     |
|---|-----------------|
| MSP3M-1M                                      | 1 Meter Pigtail |
| Custom lengths are available on special order |                 |

| Companion parts |   |
|-----------------|---|
| MTPC            | MPO to MPO Bulkhead connector               |
| MTFC4FF-XXXM    | MPO Fiber Cable, 12 fiber, Female to Female |

## Pin-Out

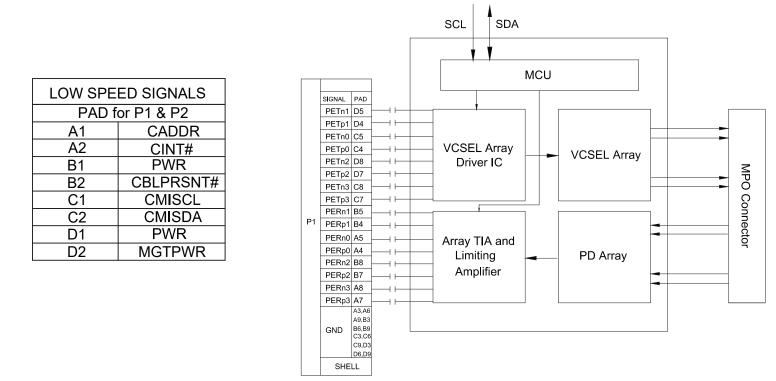
| External PCIe x4 Cable Pin-out |     |       |       |     |       |       |     |           |        |
|--------------------------------|-----|-------|-------|-----|-------|-------|-----|-----------|--------|
| Row                            | 9   | 8     | 7     | 6   | 5     | 4     | 3   | 2         | 1      |
| D                              | GND | PETn2 | PETp2 | GND | PETn1 | PETp1 | GND | MGTPWR    | PWR    |
| С                              | GND | PETn3 | PETp3 | GND | PETn0 | PETp0 | GND | CMISDA    | CMISCL |
| В                              | GND | PERn2 | PERp2 | GND | PERn1 | PERp1 | GND | CBLPRSNT# | PWR    |
| Α                              | GND | PERn3 | PERp3 | GND | PERn0 | PERp0 | GND | CINT#     | CADDR  |





### WIRING DIAGRAM

0 = +/-.45 0.0 = +/-.30  $0^{\circ} = +/-.2^{\circ}$   $0.0^{\circ} = +/-.1^{\circ}$ 



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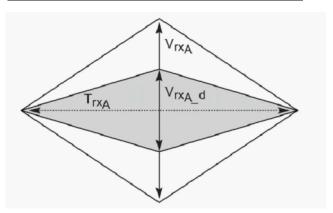
## **Product High-Speed Characteristics**

### OPERATION CONDITION

| Parameter                  | Min   | Typical | Max   | Unit |
|----------------------------|-------|---------|-------|------|
| Case Operating Temperature | 0     | 40      | 70    | °C   |
| Power Supply Voltage       | 3.135 | 3.300   | 3.465 | V    |
| Date Rate per Channel      | 1     | 8       | 12    | Gbps |
| BER per Channel            |       | 1E-12   |       |      |
| Test Pattern               |       | PRBS31  |       |      |

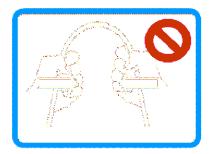
### **ELECTRICAL CHARACTERISTICS**

| Parameter              | Min  | Typical | Max | Unit |
|------------------------|------|---------|-----|------|
| Input Signal           |      |         |     |      |
| Maximum Intput Voltage |      |         | 1.3 | V    |
| Eye Height             | 34.0 |         |     | mV   |
| Eye Width              | 41.2 |         |     | ps   |
| Output Signal          |      |         |     |      |
| Maximum Output Voltage |      |         | 1.3 | V    |
| Eye Height             | 34.0 |         |     | mV   |
| Eye Width              | 41.2 |         |     | ps   |



#### HANDLING

Care should be taken to restrict exposure to the conditions defined in the Absolute Maximum Ratings. Put the product in an even and stable location. If the product falls down or drops, it may cause an injury or malfunction. The cable must not be subject to extreme bends during installation or while in operation. If you bend the cable at a radius less than the cable minimum bend radius, then the cable may get damaged. Don't twist or pull by force ends of the cable, which might cause malfunction.





### NOTE 🗆

- 1. LABEL 1 INFO
  - a BARCODE CONTENT YYMMDDRRSSSS
    YY= THE LAST 2 DIGITAL OF YEAR
    MM= MONTH OF THE YEAR
    DD=DATE
    RR=Revision
    SSSS= SERIAL NO.
- 2. EACH CABLE HAS SERIAL ID (BOTH END)
- 3. MATERIALS:

PLUG SHELL- ZINC DIECAST , NICKEL PLATING LATCH- STAINLESS STEEL PULL TAPE- NYLON PA66 OPTICAL FIBER- OM3 MMF

