

# Dolphin MSP3M Fiber Pigtail Data Sheet

## PCIe 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 PCIe Gen 3 support
- Male MPO connector
- 12 Stand Fiber
- 1 EEPROMs
- RoHS compliant

### Part Numbers

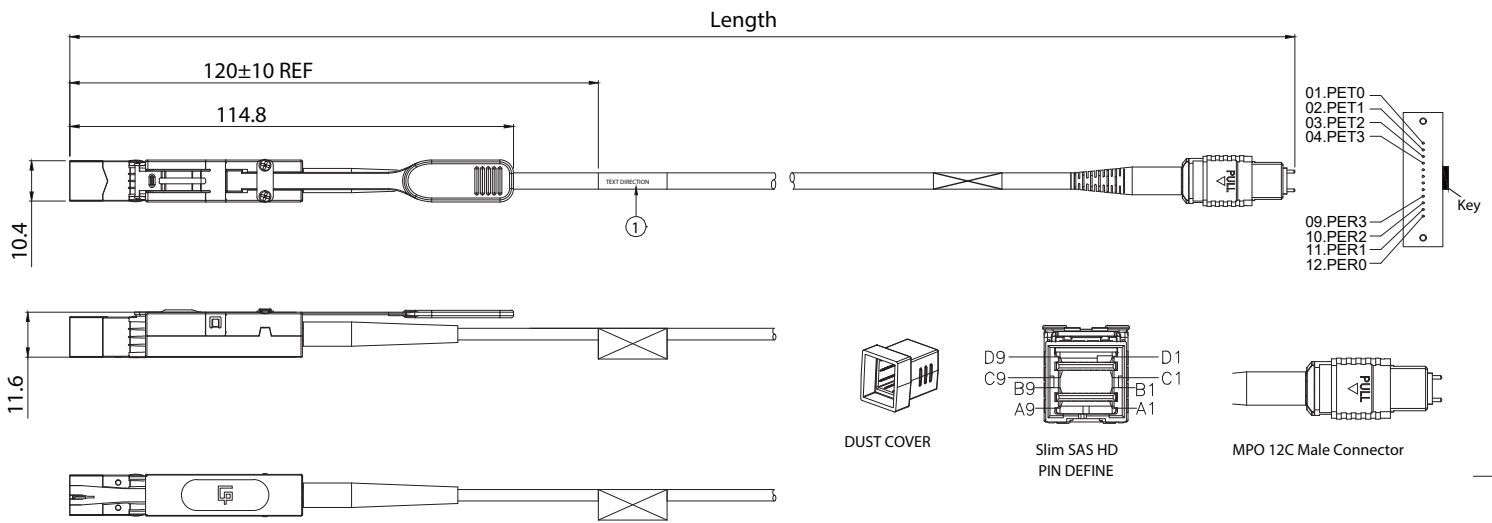
Part	Description
MSP3M-1M	1 Meter Pigtail
Custom lengths are available on special order	

Companion parts	
MTPC	MPO to MPO Bulkhead connector
MTFC4FF-XXXXM	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
C	GND	PETn3	PETp3	GND	PETn0	PETp0	GND	CMISDA	CMISCL
B	GND	PERn2	PERp2	GND	PERn1	PERp1	GND	CBLPRSNT#	PWR
A	GND	PERn3	PERp3	GND	PERn0	PERp0	GND	CINT#	CADDR





MINIMUM BENDING RADIUS IS 30mm

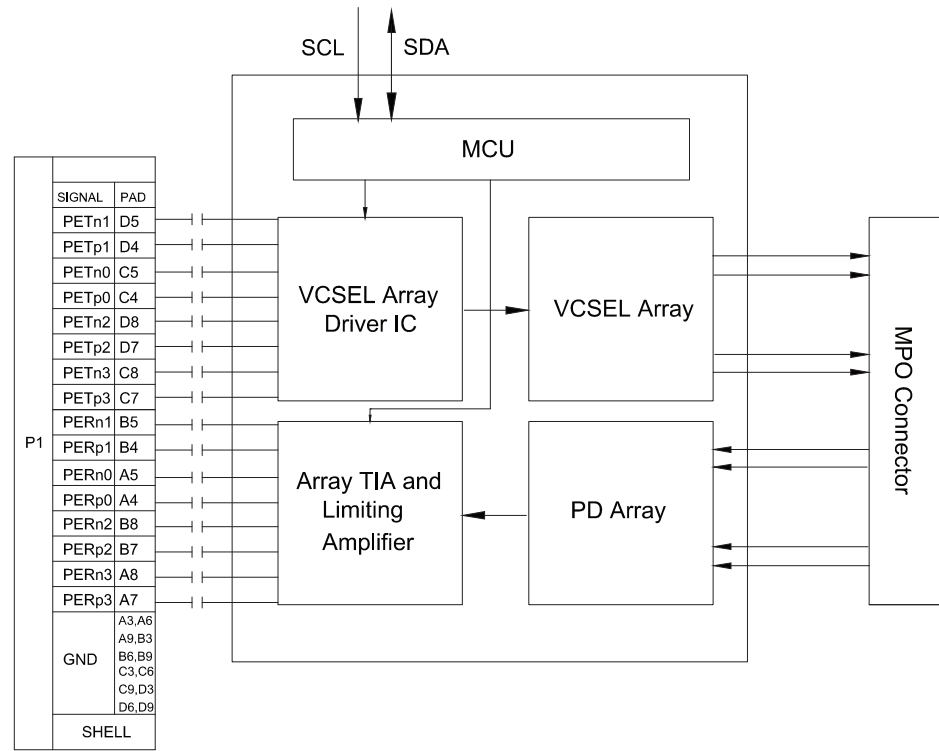
Unit: mm

General Tolerances:  
(unless specified)

0 = +/- .45  
0.0 = +/- .30  
0° = +/- 2°  
0.0° = +/- 1°

WIRING DIAGRAM

LOW SPEED SIGNALS	
PAD for P1 & P2	
A1	CADDR
A2	CINT#
B1	PWR
B2	CBLPRSNT#
C1	CMISCL
C2	CMISDA
D1	PWR
D2	MGTPWR



## Product High-Speed Characteristics

### OPERATION CONDITION

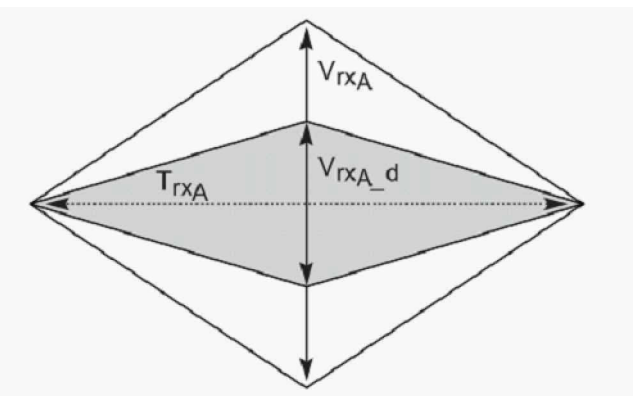
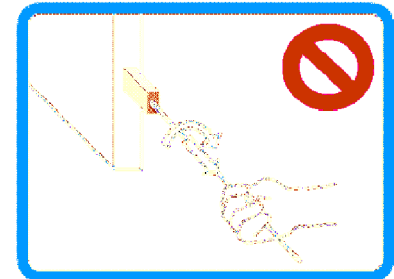
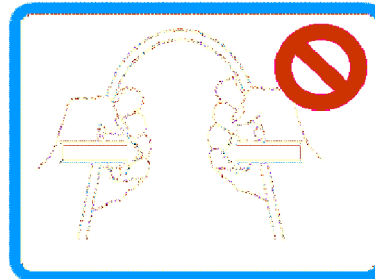
Parameter	Min	Typical	Max	Unit
Case Operating Temperature	0	40	70	°C
Power Supply Voltage	3.135	3.300	3.465	V
Data Rate per Channel	1	8	12	Gbps
BER per Channel		1E-12		
Test Pattern		PRBS31		

### ELECTRICAL CHARACTERISTICS

Parameter	Min	Typical	Max	Unit
Input Signal				
Maximum Input 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

