

### QSFP28-100G-DAC-3M-C

MSA and TAA Compliant 100GBase-CU QSFP28 Direct Attach Cable (Passive Twinax, 3m)

#### **Features:**

- Up to 100 Gbps bi-directional data links
- Compliant with QSFP28 MSA specifications
- AC coupled inputs and outputs
- 100 Ohm differential impedance
- All-metal housing for superior EMI performance
- Single power supply 3.3V, low power consumption
- Operating Temperature: 0 to 70 Celsius
- ROHS Compliant



## **Applications:**

- 100 Gigabit Ethernet
- Serial Data Transmission
- Infiniband

### **Product Description**

This is a MSA Compliant 100GBase-CU QSFP28 to QSFP28 direct attach cable that operates over passive copper with a maximum reach of 3m. It has been programmed, uniquely serialized, and data-traffic and application tested to ensure it is 100% compliant and functional. We stand behind the quality of our products and proudly offer a limited lifetime warranty. This cable is TAA (Trade Agreements Act) compliant and is built to comply with MSA (Multi-Source Agreement) standards.

ProLabs' transceivers are RoHS compliant and lead-free.

TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to foster fair and open international trade. TAA requires that the U.S. Government may acquire only "U.S. – made or designated country end products."



## **General Specifications**

Parameter	Symbol	Min.	Тур.	Max.	Unit	Notes
Bit Error Rate	BER			10 <sup>-12</sup>		
Operating Temperature	Тс	0		70	°C	1
Storage Temperature	Tstg	-40		85	°C	2
Input Voltage	Vcc	3.14	3.3	3.46	V	3
Cable Impedance	Z	90	100	110	Ω	
Product Weight	GD		175	g/PCS		4
Cable Weight	GC		94	g/M		
Dust Cap Weight	GQ		1.40	g/PCS		

## Notes:

- 1. Case temperature.
- 2. Ambient temperature.
- 3. For electrical power interface.
- 4. For example, the weight of a 5m cable with 26AWG is 190 + 110\* (5-1) + 1.40\*2=632.8g.

## **Cable Dimensions and Insertion Loss Level**

Length	Wire Gauge AWG	Cable Diameter OD (mm)	Minimum Bending Radius R (mm)	Insertion Loss Level
3m	30AWG	6.9	35	CA-25G-S

## **Notes:**

1. Cable insertion loss classification standard: IEEE 802.3by 110-10.

## **Length Tolerance**

Nominal Length L1 (m)	Tolerance Range <u>+</u> (cm)		
2 < L1 ≤ 4	4		

## **Pin Descriptions**

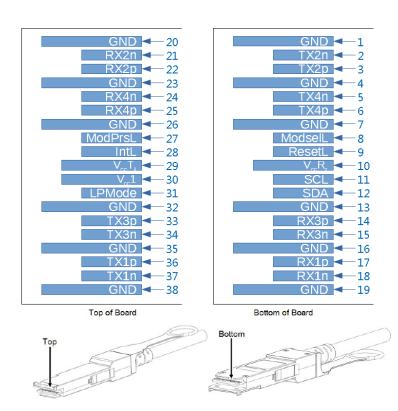
1 GND Module Ground. 2 Tx2- Transmitter Inverted Data Input. LAN2. 3 Tx2+ Transmitter Non-Inverted Data Input. LAN2. 4 GND Module Ground. 5 Tx4- Transmitter Non-Inverted Data Input. LAN4. 6 Tx4- Transmitter Non-Inverted Data Input. LAN4. 7 GND Module Ground. 5 ModSell, Module Select Pin. The module responds to 2-wire serial communication when low level. 9 Resett. Module Select Pin. The module responds to 2-wire serial communication when low level. 1 9 Resett. Module Select Pin. The module responds to 2-wire serial communication when low level. 1 1 SCL 2-Wire Serial Interface Clock. 1 2 SDA 2-Wire Serial Interface Clock. 1 3 GND Module Ground. 5 Module Ground. 7 ModPrst. The module is inserted into the indicator pin and grounded in the module. 7 ModPrst. The module is inserted into the indicator pin and grounded in the module. 7 ModPrst. The module Ground. 8 Module Ground. 9 WocTx Hansmitter Module Ground. 9 WocTx Hansmitter Module Ground.	Pin	Symbol		
2         Tx2-         Transmitter Inverted Data Input. LAN2.           3         Tx2+         Transmitter Non-Inverted Data Input. LAN2.           4         GND         Module Ground.         5           5         Tx4-         Transmitter Inverted Data Input. LAN4.         6           6         Tx4+         Transmitter Non-Inverted Data Input. LAN4.         7           7         GND         Module Ground.         5           8         ModSell.         Module Select Pin. The module responds to 2-wire serial communication when low level.         1           9         Resett.         Module Select Pin. The module responds to 2-wire serial communication when low level.         1           9         Resett.         Module Ground.         2           10         VccRx         +3.3V Receiver Power Supply.           11         SCL         2-Wire Serial Interface Clock.           12         SDA         2-Wire Serial Interface Clock.           12         SDA         2-Wire Serial Interface Data.           13         GND         Module Ground.         5           14         Rx3+         Receiver Inverted Data Output. LAN3.           15         Rx3-         Receiver Non-Inverted Data Output. LAN1.           18         Rx1-	1	GND	Module Ground	
3         Tx2+         Transmitter Non-Inverted Data Input. LAN2.           4         GND         Module Ground.         5           5         Tx4-         Transmitter Inverted Data Input. LAN4.         5           6         Tx4+         Transmitter Non-Inverted Data Input. LAN4.         5           7         GND         Module Ground.         5           8         ModSell.         Module Select Pin. The module responds to 2-wire serial communication when low level.         1           9         Resetl.         Module Reset.         2           10         VccRx         +3.3V Receiver Power Supply.         1           11         SCL         2-Wire Serial Interface Clock.         1           12         SDA         2-Wire Serial Interface Data.         1           13         GND         Module Ground.         5           14         Rx3+         Receiver Non-Inverted Data Output. LAN3.         1           15         Rx3-         Receiver Inverted Data Output. LAN1.         1           16         GND         Module Ground.         5           17         Rx1+         Receiver Inverted Data Output. LAN1.         1           18         Rx2+         Receiver Inverted Data Output. LAN2.         2				
4         GND         Module Ground.         5           5         Tx4-         Transmitter Inverted Data Input. LAN4.         6           6         Tx4+         Transmitter Non-Inverted Data Input. LAN4.         7           7         GND         Module Ground.         5           8         ModSell.         Module Select Pin. The module responds to 2-wire serial communication when low level.         1           9         Resett.         Module Select Pin. The module responds to 2-wire serial communication when low level.         1           9         Resett.         Module Select Pin. The module responds to 2-wire serial communication when low level.         1           9         Resett.         Module Ground.         2           10         VccRx         +3.3V Receiver Power Supply.           11         SCL         2-Wire Serial Interface Clock.           12         SDA         2-Wire Serial Interface Data.           13         GND         Module Ground.         5           14         Rx3+         Receiver Inverted Data Output. LAN3.         5           15         Rx4+         Receiver Inverted Data Output. LAN1.         5           19         GND         Module Ground.         5           20         GND         Modul			·	
5         Tx4-         Transmitter Inverted Data Input. LAN4.           6         Tx4+         Transmitter Non-Inverted Data Input. LAN4.           7         GND         Module Ground.         5           8         ModSelL         Module Select Pin. The module responds to 2-wire serial communication when low level.         1           9         ResetL         Module Reset.         2           10         VccRx         +3.3V Receiver Power Supply.           11         SCL         2-Wire Serial Interface Clock.           12         SDA         2-Wire Serial Interface Data.           13         GND         Module Ground.         5           14         Rx3+         Receiver Non-Inverted Data Output. LAN3.         5           15         Rx3-         Receiver Inverted Data Output. LAN1.         5           16         GND         Module Ground.         5           17         Rx1+         Receiver Inverted Data Output. LAN1.         1           18         Rx1-         Receiver Inverted Data Output. LAN2.         5           20         GND         Module Ground.         5           21         Rx2-         Receiver Non-Inverted Data Output. LAN2.         5           22         Rx4+         Rece			·	
6 Tx4+ Transmitter Non-Inverted Data Input. LAN4. 7 GND Module Ground. 8 ModSell. Module Select Pin. The module responds to 2-wire serial communication when low level. 1 9 Resetl. Module Reset. 2 10 VccRx +3.3V Receiver Power Supply. 11 SCL 2-Wire Serial Interface Clock. 12 SDA 2-Wire Serial Interface Data. 13 GND Module Ground. 5 14 Rx3+ Receiver Non-Inverted Data Output. LAN3. 15 Rx3- Receiver Inverted Data Output. LAN3. 16 GND Module Ground. 5 17 Rx1+ Receiver Non-Inverted Data Output. LAN1. 18 Rx1- Receiver Inverted Data Output. LAN1. 19 GND Module Ground. 5 20 GND Module Ground. 5 21 Rx2- Receiver Inverted Data Output. LAN2. 22 Rx2+ Receiver Inverted Data Output. LAN2. 23 GND Module Ground. 5 24 Rx4- Receiver Inverted Data Output. LAN4. 25 Rx4+ Receiver Inverted Data Output. LAN4. 26 GND Module Ground. 5 27 ModPrsL Receiver Inverted Data Output. LAN4. 28 Rx4- Receiver Inverted Data Output. LAN4. 29 VccTx +3.3V Transmitter Power Supply. 30 Vcc1 +3.3V Power Supply. 31 LPMode Low-Power Mode. 5 32 GND Module Ground. 5 33 Tx3+ Transmitter Non-Inverted Data Input. LAN3.				3
7       GND       Module Ground.       5         8       ModSelL       Module Select Pin. The module responds to 2-wire serial communication when low level.       1         9       ResetL       Module Reset.       2         10       Vccrx       +3.3V Receiver Power Supply.       2         11       SCL       2-Wire Serial Interface Clock.       2         12       SDA       2-Wire Serial Interface Data.       5         13       GND       Module Ground.       5         14       Rx3+       Receiver Non-Inverted Data Output. LAN3.       5         15       Rx3-       Receiver Inverted Data Output. LAN3.       5         16       GND       Module Ground.       5         17       Rx1+       Receiver Inverted Data Output. LAN1.       6         18       Rx1-       Receiver Inverted Data Output. LAN1.       5         20       GND       Module Ground.       5         21       Rx2-       Receiver Inverted Data Output. LAN2.       6         22       Rx2+       Receiver Inverted Data Output. LAN4.       6         23       GND       Module Ground.       5         24       Rx4-       Receiver Non-Inverted Data Output. LAN4.       6			·	
8       ModSelL       Module Select Pin. The module responds to 2-wire serial communication when low level.       1         9       ResetL       Module Reset.       2         10       VccRx       +3.3V Receiver Power Supply.       2         11       SCL       2-Wire Serial Interface Clock.       2         12       SDA       2-Wire Serial Interface Data.       5         13       GND       Module Ground.       5         14       Rx3+       Receiver Non-Inverted Data Output. LAN3.       5         15       Rx3-       Receiver Inverted Data Output. LAN3.       5         16       GND       Module Ground.       5         17       Rx1+       Receiver Inverted Data Output. LAN1.       6         18       Rx1-       Receiver Inverted Data Output. LAN1.       5         20       GND       Module Ground.       5         21       Rx2-       Receiver Inverted Data Output. LAN2.       6         22       Rx4-       Receiver Inverted Data Output. LAN4.       5         24       Rx4-       Receiver Non-Inverted Data Output. LAN4.       5         25       Rx4+       Receiver Non-Inverted Data Output. LAN4.       6         26       GND       Module Groun			·	 
9         Resett.         Module Reset.         2           10         VccRx         ±3.3V Receiver Power Supply.           11         SCL         2-Wire Serial Interface Clock.           12         SDA         2-Wire Serial Interface Data.           13         GND         Module Ground.         5           14         Rx3+         Receiver Non-Inverted Data Output. LAN3.         5           15         Rx3-         Receiver Inverted Data Output. LAN3.         5           16         GND         Module Ground.         5           17         Rx1+         Receiver Non-Inverted Data Output. LAN1.         1           18         Rx1-         Receiver Inverted Data Output. LAN1.         5           20         GND         Module Ground.         5           21         Rx2-         Receiver Inverted Data Output. LAN2.         2           22         Rx2+         Receiver Non-Inverted Data Output. LAN2.         5           23         GND         Module Ground.         5           24         Rx4-         Receiver Non-Inverted Data Output. LAN4.         5           25         Rx4+         Receiver Non-Inverted Data Output. LAN4.         5           26         GND         Module Gro				
VccRx			·	
11 SCL 2-Wire Serial Interface Clock.  12 SDA 2-Wire Serial Interface Data.  13 GND Module Ground.  14 Rx3+ Receiver Non-Inverted Data Output. LAN3.  15 Rx3- Receiver Inverted Data Output. LAN3.  16 GND Module Ground.  17 Rx1+ Receiver Non-Inverted Data Output. LAN1.  18 Rx1- Receiver Inverted Data Output. LAN1.  19 GND Module Ground.  5 GND Module Ground.  5 COND Module Ground.				2
2 SDA 2-Wire Serial Interface Data.  13 GND Module Ground.  14 Rx3+ Receiver Non-Inverted Data Output. LAN3.  15 Rx3- Receiver Inverted Data Output. LAN3.  16 GND Module Ground.  5 IT Rx1+ Receiver Non-Inverted Data Output. LAN1.  18 Rx1- Receiver Inverted Data Output. LAN1.  19 GND Module Ground.  5 SOND Module Ground.	_			
3 GND Module Ground.  14 Rx3+ Receiver Non-Inverted Data Output. LAN3.  15 Rx3- Receiver Inverted Data Output. LAN3.  16 GND Module Ground.  5 17 Rx1+ Receiver Non-Inverted Data Output. LAN1.  18 Rx1- Receiver Inverted Data Output. LAN1.  19 GND Module Ground.  5 20 GND Module Ground.  5 S  21 Rx2- Receiver Inverted Data Output. LAN2.  22 Rx2+ Receiver Inverted Data Output. LAN2.  23 GND Module Ground.  5 S  24 Rx4- Receiver Non-Inverted Data Output. LAN2.  25 Rx4+ Receiver Inverted Data Output. LAN4.  26 GND Module Ground.  5 S  27 ModPrsL The module is inserted into the indicator pin and grounded in the module.  3 IntL Interrupt.  4 Px-3.3V Transmitter Power Supply.  30 Vcc1 +3.3V Power Supply.  31 LPMode Low-Power Mode.  5 GND Module Ground.  5 GND Module Ground.  5 GND Module Ground.  5 GND Module Ground.				
14 Rx3+ Receiver Non-Inverted Data Output. LAN3. 15 Rx3- Receiver Inverted Data Output. LAN3. 16 GND Module Ground. 5 17 Rx1+ Receiver Non-Inverted Data Output. LAN1. 18 Rx1- Receiver Inverted Data Output. LAN1. 19 GND Module Ground. 5 20 GND Module Ground. 5 21 Rx2- Receiver Inverted Data Output. LAN2. 22 Rx2+ Receiver Inverted Data Output. LAN2. 23 GND Module Ground. 5 24 Rx4- Receiver Non-Inverted Data Output. LAN2. 25 Rx4+ Receiver Inverted Data Output. LAN4. 26 GND Module Ground. 5 27 ModPrsL The module is inserted into the indicator pin and grounded in the module. 3 Intl. Interrupt. 4 Py VccTx +3.3V Transmitter Power Supply. 30 Vcc1 +3.3V Power Supply. 31 LPMode Low-Power Mode. 5 GND Module Ground.		-		
15 Rx3- Receiver Inverted Data Output. LAN3.  16 GND Module Ground.  17 Rx1+ Receiver Non-Inverted Data Output. LAN1.  18 Rx1- Receiver Inverted Data Output. LAN1.  19 GND Module Ground.  5 20 GND Module Ground.  5 21 Rx2- Receiver Inverted Data Output. LAN2.  22 Rx2+ Receiver Inverted Data Output. LAN2.  23 GND Module Ground.  5 24 Rx4- Receiver Inverted Data Output. LAN4.  25 Rx4+ Receiver Inverted Data Output. LAN4.  26 GND Module Ground.  5 27 ModPrsL The module is inserted into the indicator pin and grounded in the module.  3 IntL Interrupt.  4 29 VccTx +3.3V Transmitter Power Supply.  30 Vcc1 +3.3V Power Supply.  31 LPMode Low-Power Mode.  5 33 Tx3+ Transmitter Non-Inverted Data Input. LAN3.	13			5
16 GND Module Ground.  17 Rx1+ Receiver Non-Inverted Data Output. LAN1.  18 Rx1- Receiver Inverted Data Output. LAN1.  19 GND Module Ground.  5 CO GND Module Ground.  5 Rx2- Receiver Inverted Data Output. LAN2.  21 Rx2- Receiver Inverted Data Output. LAN2.  22 Rx2+ Receiver Non-Inverted Data Output. LAN2.  23 GND Module Ground.  5 S CO GND Module Ground.  5 GND Module Ground.  5 GND Module Ground.  5 S CO GND Module Ground.  5 GND Module Ground.	14	Rx3+	Receiver Non-Inverted Data Output. LAN3.	
17Rx1+Receiver Non-Inverted Data Output. LAN1.18Rx1-Receiver Inverted Data Output. LAN1.19GNDModule Ground.520GNDModule Ground.521Rx2-Receiver Inverted Data Output. LAN2.22Rx2+Receiver Non-Inverted Data Output. LAN2.23GNDModule Ground.524Rx4-Receiver Inverted Data Output. LAN4.25Rx4+Receiver Non-Inverted Data Output. LAN4.26GNDModule Ground.527ModPrsLThe module is inserted into the indicator pin and grounded in the module.328IntLInterrupt.429VccTx+3.3V Transmitter Power Supply.30Vcc1+3.3V Power Supply.31LPModeLow-Power Mode.532GNDModule Ground.533TX3+Transmitter Non-Inverted Data Input. LAN3.	15	Rx3-	Receiver Inverted Data Output. LAN3.	
18 Rx1- Receiver Inverted Data Output. LAN1.  19 GND Module Ground.  5 20 GND Module Ground.  5 Rx2- Receiver Inverted Data Output. LAN2.  22 Rx2+ Receiver Non-Inverted Data Output. LAN2.  23 GND Module Ground.  5 Ax4- Receiver Inverted Data Output. LAN4.  25 Rx4+ Receiver Non-Inverted Data Output. LAN4.  26 GND Module Ground.  5 Ax4- Receiver Non-Inverted Data Output. LAN4.  27 ModPrsL The module is inserted into the indicator pin and grounded in the module.  28 IntL Interrupt.  4 Ax4- Receiver Hoverted Data Output. LAN4.  29 VccTx +3.3V Transmitter Power Supply.  30 Vcc1 +3.3V Power Supply.  31 LPMode Low-Power Mode.  5 SAX+ Transmitter Non-Inverted Data Input. LAN3.	16	GND	Module Ground.	5
19 GND Module Ground. 5 20 GND Module Ground. 5 21 Rx2- Receiver Inverted Data Output. LAN2.   22 Rx2+ Receiver Non-Inverted Data Output. LAN2.   23 GND Module Ground. 5 24 Rx4- Receiver Inverted Data Output. LAN4.   25 Rx4+ Receiver Non-Inverted Data Output. LAN4.   26 GND Module Ground. 5 27 ModPrsL The module is inserted into the indicator pin and grounded in the module. 3 28 IntL Interrupt.   4 29 VccTx +3.3V Transmitter Power Supply.   30 Vcc1 +3.3V Power Supply.   31 LPMode Low-Power Mode. 5 32 GND Module Ground. 5 33 Tx3+ Transmitter Non-Inverted Data Input. LAN3.	17	Rx1+	Receiver Non-Inverted Data Output. LAN1.	
20 GND Module Ground. 5 21 Rx2- Receiver Inverted Data Output. LAN2. 22 Rx2+ Receiver Non-Inverted Data Output. LAN2. 23 GND Module Ground. 5 24 Rx4- Receiver Inverted Data Output. LAN4. 25 Rx4+ Receiver Non-Inverted Data Output. LAN4. 26 GND Module Ground. 5 27 ModPrsL The module is inserted into the indicator pin and grounded in the module. 3 28 IntL Interrupt. 4 29 VccTx +3.3V Transmitter Power Supply. 30 Vcc1 +3.3V Power Supply. 31 LPMode Low-Power Mode. 5 32 GND Module Ground. 5 33 Tx3+ Transmitter Non-Inverted Data Input. LAN3.	18	Rx1-	Receiver Inverted Data Output. LAN1.	
21 Rx2- Receiver Inverted Data Output. LAN2. 22 Rx2+ Receiver Non-Inverted Data Output. LAN2. 23 GND Module Ground. 24 Rx4- Receiver Inverted Data Output. LAN4. 25 Rx4+ Receiver Non-Inverted Data Output. LAN4. 26 GND Module Ground. 27 ModPrsL The module is inserted into the indicator pin and grounded in the module. 3 IntL Interrupt. 4 Py VccTx +3.3V Transmitter Power Supply. 30 Vcc1 +3.3V Power Supply. 31 LPMode Low-Power Mode. 5 GND Module Ground. 5 San Tx3+ Transmitter Non-Inverted Data Input. LAN3.	19	GND	Module Ground.	5
22 Rx2+ Receiver Non-Inverted Data Output. LAN2.  23 GND Module Ground.  5 24 Rx4- Receiver Inverted Data Output. LAN4.  25 Rx4+ Receiver Non-Inverted Data Output. LAN4.  26 GND Module Ground.  5 27 ModPrsL The module is inserted into the indicator pin and grounded in the module.  28 IntL Interrupt.  4 29 VccTx +3.3V Transmitter Power Supply.  30 Vcc1 +3.3V Power Supply.  31 LPMode Low-Power Mode.  5 32 GND Module Ground.  5 5  33 Tx3+ Transmitter Non-Inverted Data Input. LAN3.	20	GND	Module Ground.	5
GND Module Ground. 5  Rx4- Receiver Inverted Data Output. LAN4.  Example 1  Rx4- Receiver Non-Inverted Data Output. LAN4.  GND Module Ground. 5  ModPrsL The module is inserted into the indicator pin and grounded in the module. 3  IntL Interrupt. 4  VccTx +3.3V Transmitter Power Supply.  Vcc1 +3.3V Power Supply. 5  GND Module Ground. 5  GND Module Ground. 5  Tx3+ Transmitter Non-Inverted Data Input. LAN3.	21	Rx2-	Receiver Inverted Data Output. LAN2.	
24 Rx4- Receiver Inverted Data Output. LAN4.  25 Rx4+ Receiver Non-Inverted Data Output. LAN4.  26 GND Module Ground.  5 ModPrsL The module is inserted into the indicator pin and grounded in the module.  3 IntL Interrupt.  4 VccTx +3.3V Transmitter Power Supply.  30 Vcc1 +3.3V Power Supply.  31 LPMode Low-Power Mode.  5 GND Module Ground.  5 5  32 GND Module Ground.  5 5	22	Rx2+	Receiver Non-Inverted Data Output. LAN2.	
25 Rx4+ Receiver Non-Inverted Data Output. LAN4.  26 GND Module Ground.  27 ModPrsL The module is inserted into the indicator pin and grounded in the module.  28 IntL Interrupt.  29 VccTx +3.3V Transmitter Power Supply.  30 Vcc1 +3.3V Power Supply.  31 LPMode Low-Power Mode.  3 5  32 GND Module Ground.  5 5  33 Tx3+ Transmitter Non-Inverted Data Input. LAN3.	23	GND	Module Ground.	5
26 GND Module Ground. 5  27 ModPrsL The module is inserted into the indicator pin and grounded in the module. 3  28 IntL Interrupt. 4  29 VccTx +3.3V Transmitter Power Supply. 5  30 Vcc1 +3.3V Power Supply. 5  31 LPMode Low-Power Mode. 5  32 GND Module Ground. 5  33 Tx3+ Transmitter Non-Inverted Data Input. LAN3.	24	Rx4-	Receiver Inverted Data Output. LAN4.	
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28         IntL         Interrupt.         4           29         VccTx         +3.3V Transmitter Power Supply.         5           30         Vcc1         +3.3V Power Supply.         5           31         LPMode         Low-Power Mode.         5           32         GND         Module Ground.         5           33         Tx3+         Transmitter Non-Inverted Data Input. LAN3.	26	GND	Module Ground.	5
29 VccTx +3.3V Transmitter Power Supply.  30 Vcc1 +3.3V Power Supply.  31 LPMode Low-Power Mode. 5  32 GND Module Ground. 5  33 Tx3+ Transmitter Non-Inverted Data Input. LAN3.	27	ModPrsL	The module is inserted into the indicator pin and grounded in the module.	3
30 Vcc1 +3.3V Power Supply.  31 LPMode Low-Power Mode. 5  32 GND Module Ground. 5  33 Tx3+ Transmitter Non-Inverted Data Input. LAN3.	28	IntL	Interrupt.	4
31 LPMode Low-Power Mode. 5  32 GND Module Ground. 5  33 Tx3+ Transmitter Non-Inverted Data Input. LAN3.	29	VccTx	+3.3V Transmitter Power Supply.	
32 GND Module Ground. 5  33 Tx3+ Transmitter Non-Inverted Data Input. LAN3.	30	Vcc1	+3.3V Power Supply.	
33 Tx3+ Transmitter Non-Inverted Data Input. LAN3.	31	LPMode	Low-Power Mode.	5
·	32	GND	Module Ground.	5
34 Tx3- Transmitter Inverted Data Input. LAN3.	33	Tx3+	Transmitter Non-Inverted Data Input. LAN3.	
	34	Tx3-	Transmitter Inverted Data Input. LAN3.	

35	GND	Module Ground.	5
36	Tx1+	Transmitter Non-Inverted Data Input. LAN1.	
37	Tx1-	Transmitter Inverted Data Input. LAN1.	
38	GND	Module Ground.	5

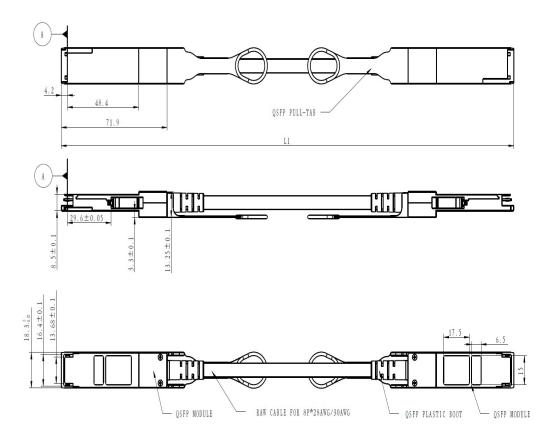
#### Notes:

- ModSelL is the input pin. The module responds to 2-wire serial communication commands when it is held
  "low" by the host. ModSelL allows multiple QSFP modules to be used on a single 2-wire interface bus. If
  ModSelL is "high," the module will not respond to any 2-wire interface communication from the host.
  ModSelL has internal pull-up resistors in the module.
- 2. The module restart pin, when the low level on the ResetL pin lasts longer than the minimum pulse length, resets the module and restores all user modules to their default state. When performing reset device, the host should ignore all status bits. Until the module reset interrupt is completed, please note that during hot plugging, the module will issue this information to complete the reset interrupt without resetting.
- 3. This pin is active "high," indicating that the module is running under a low-power module.
- 4. IntL is the output pin, which is the open collector output and must be pulled up to the Vcc on the motherboard. When it is "low," it indicates that the module may malfunction. The host uses a 2-wire serial interface to identify the interrupt source.
- 5. The circuit ground is internally isolated from the chassis ground.

## **Electrical Pad Layout**



# **Mechanical Specifications**



All Dimensions are  $\pm 0.2$ mm Unless Otherwise Specified. Unit: mm

#### **About ProLabs**

Our experience comes as standard; for over 15 years ProLabs has delivered optical connectivity solutions that give our customers freedom and choice through our ability to provide seamless interoperability. At the heart of our company is the ability to provide state-of-the-art optical transport and connectivity solutions that are compatible with over 90 optical switching and transport platforms.

### **Complete Portfolio of Network Solutions**

ProLabs is focused on innovations in optical transport and connectivity. The combination of our knowledge of optics and networking equipment enables ProLabs to be your single source for optical transport and connectivity solutions from 100Mb to 400G while providing innovative solutions that increase network efficiency. We provide the optical connectivity expertise that is compatible with and enhances your switching and transport equipment.

### **Trusted Partner**

Customer service is our number one value. ProLabs has invested in people, labs and manufacturing capacity to ensure that you get immediate answers to your questions and compatible product when needed. With Engineering and Manufacturing offices in the U.K. and U.S. augmented by field offices throughout the U.S., U.K. and Asia, ProLabs is able to be our customers best advocate 24 hours a day.















### **Contact Information**

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