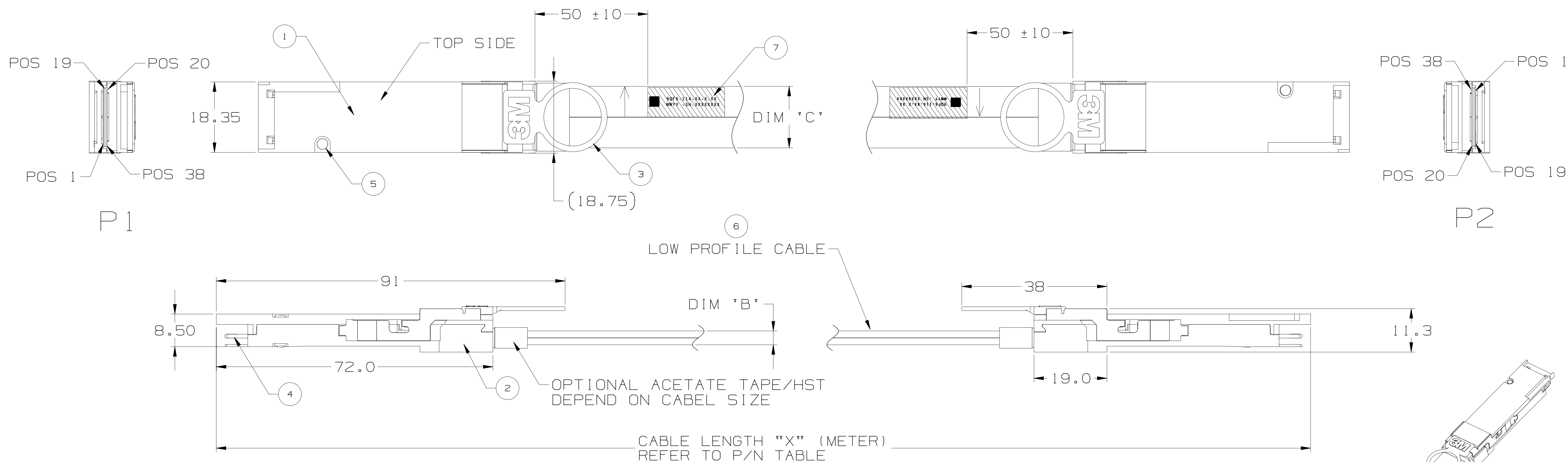



3M™ 100G QSFP28 Direct Attach Copper Cable Assemblies, 9Q Series
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WIRING LIST			
P1 END		P2 END	
POS	SIGNAL	POS	SIGNAL
1	GND (TX)	20	GND (RX)
2	TX2n	21	RX2n
3	TX2P	22	RX2p
4	GND (TX)	23	GND (RX)
5	TX4n	24	RX4n
6	TX4P	25	RX4p
7	GND (TX)	26	GND (RX)
13	GND (RX)	32	GND (TX)
14	RX3p	33	TX3p
15	RX3n	34	TX3n
16	GND (RX)	35	GND (TX)
17	RX1p	36	TX1p
18	RX1n	37	TX1n
19	GND (RX)	38	GND (TX)
20	GND (RX)	1	GND (TX)
21	RX2n	2	TX2n
22	RX2p	3	TX2P
23	GND (RX)	4	GND (TX)
24	RX4n	5	TX4n
25	RX4p	6	TX4P
26	GND (RX)	7	GND (TX)
32	GND (TX)	13	GND (RX)
33	TX3p	14	RX3p
34	TX3n	15	RX3n
35	GND (TX)	16	GND (RX)
36	TX1p	17	RX1p
37	TX1n	18	RX1n
38	GND (TX)	19	GND (RX)

LOW SPEED SIGNALS P1 & P2	
POS	SIGNAL
8	ModSelL
9	ResetL
10	VccRx
11	SCL
12	SDA
27	ModPrsL
28	IntL
29	VccTx
30	VccI
31	LPMode


 9QXX-114-XX-X.XX
 WWYY - SN:XXXXXXXX
 STANDARD PRODUCT LABEL DESCRIPTION
 (CUSTOM AVAILABLE UPON REQUEST)

BALLOON ITEM	DESCRIPTION	QTY
7	PRODUCT LABEL	2
6	3M™ LOW PROFILE TWIN AXIAL CABLE	4
5	RIVET	2
4	PADDLE CARD	2
3	LATCH WITH PULL TAB	2
2	BOTTOM SHELL	2
1	UPPER SHELL	2

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DIVISION		DIVISION CODE		TITLE		
EMSD				3M™ 100G QSFP28 Direct Attach Copper Cable Assemblies, 9Q Series		
DO NOT SCALE DRAWING		SCALE	TOLERANCES EXCEPT AS NOTED		MILLIMETERS	
		2/1	INCHES		0 ±.1	
THIRD ANGLE PROJECTION		INTERPRET PER ASME Y14.5 - 2009		MILLIMETERS		0 ±.2
MAX SURFACE ROUGHNESS		ALL SURFACES		MILLIMETERS		.00 ±.10
125		✓ MARKED ONLY		ANGLES		±0.5°
A 0074404				JUN 22, 2017		YL YL
NEW RELEASED						
DRFT		DATE		DATE		
Yunlong		MAR 02, 2017		E CHEN		MAR 02, 2017
CHKD		DATE		DATE		
Yunlong		MAR 02, 2017		S BANDHU		MAR 02, 2017
3M Center St. Paul, MN 55144				© 3M COPYRIGHT 2017		
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CAGE NUMBER		DRAWING NO.		REV.		
D 78-5100-2672-3		A		1 OF 2		

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3M™ 100G QSFP28 Direct Attach Copper Cable Assemblies, 9Q Series
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NOTES:

1. ORDERING INFORMATION:

9QXX-114-XX-X,XX

ASSEMBLY LENGTH X IN METERS SEE TABLE 1

EEPROM MEMORY MAP

22= IEEE Std 802.3b_J-2014 100GBASE-CR4

XX= CUSTOMIZATION(SEE 3M SALES REP)

AWG

0= 30AWG (only for below and 2 meters)

6= 26AWG (only for 2 meters and above)

CABLE TYPE

H= 26AWG (PVC) WITH OUTER COPPER SHIELD

J= 30AWG (PVC) WITH OUTER COPPER SHIELD

K= 26AWG (PVC) WITH OUTER COPPER SHIELD (UL RATE -CL2)

2. REFER TO TABLE 1 FOR CABLE LENGTH, WIDTH, THICKNESS AND WIRE AWG

3. PCB PINOUT DESIGNED TO SFF8436 SPECIFICATION

4. CABLE ASSEMBLY DESIGNED TO SFF 8661 & IEEE 802.3b_J SPECIFICATION

5. JACKET DETAIL: BLACK COLOR PVC, OTHER COLOR OPTION CONTACT 3M SALES REP.

6. BULK CABLE MEET UL TEMPERATURE RATING -20C TO +80C

7. UNLESS OTHERWISE NOTED,REFERENCES TO INDUSTRY SPECIFICATIONS ARE INTENDED TO INDICATE SUBSTANTIAL COMPLIANCE TO THE MATERIAL ELEMENTS OF THE SPECIFICATION. SUCH REFERENCES SHOULD NOT BE CONTRUED AS A GUARANTEE OF COMPLIANCE TO ALL REQUIREMENTS IN A GIVEN SPECIFICATION.

8. PRODUCT SPECIFICATION REFER TO 3M DOCUMENT: 78-5102-0262-1

9. CABLE RETURN LOSS PERFORMANCE IS VALID FOR CABLE ASSEMBLIES OF A MINIMUM OF 1.00 METER IN LENGTH. CABLE ASSEMBLIES LESS THAN 1.00 METER IN LENGTH MAY NOT ACHIEVE THE RETURN LOSS PERFORMANCE IN IEEE802.3b_J. CABLE RETURN LOSS PERFORMANCE IS SUBJECT TO CHANGE WITH DIFFERENT CABLE ASSEMBLY LENGTHS. END USER WILL NEED TO DETERMINE WHETHER THIS PRODUCT IS SUITABLE FOR THEIR INTENDED APPLICATION.

10.FOR CUSTOM LENGTHS CONTACT A 3M SALES REPRESENTATIVE

Regulatory: For regulatory information about this product, visit 3M.com/regs or contact your 3M representative.

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3M Electronics Materials Solutions Division
 6801 River Place Blvd.
 Austin, TX 78726-9000
 1-800-225-5373
 www.3M.com/interconnect

TABLE 1

ORDERING INFORMATION	ASSY LENGTH="X" (m)	CABLE SIZE	WITH COPPER SHIELD	LENGTH TOLERANCE (mm)	B NOMINAL (mm)	C NOMINAL (mm)
9QJ0-114-22-0.50	0.50	30AWG	YES	+10/-0	(2.8)	(15.0)
9QJ0-114-22-1.00	1.00	30AWG	YES	+50/-0		
9QJ0-114-22-2.00	2.00	30AWG	YES			
9QH6-114-22-2.00	2.00	26AWG	YES		(3.8)	(16.0)
9QH6-114-22-3.00	3.00	26AWG	YES			
9QH6-114-22-4.00	4.00	26AWG	YES	+50/0	(6.0)	(18.5)
9QK6-114-22-2.50	2.50	26AWG	YES			
9QK6-114-22-3.50	3.50	26AWG	YES			

DESIGN REFERENCE		NEXT ASSEMBLY		REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
A 0074404						JUN 22, 2017 NEW RELEASED		YL	YL
DRFT		Yunlong		DATE	MAR 02, 2017		DRFT	MAR 02, 2017	
APPR		E CHEN		DATE	MAR 02, 2017		APPR	S BANDHU	
CHKD		Yunlong		DATE	MAR 02, 2017		CHKD	MAR 02, 2017	
DIVISION		DIVISION CODE		3M Center		© 3M COPYRIGHT 2017			
EMSD				St. Paul, MN 55144		This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.			
DO NOT SCALE DRAWING		SCALE 2/1		TOLERANCES EXCEPT AS NOTED		3M™ 100G QSFP28 Direct Attach Copper Cable Assemblies, 9Q Series			
THIRD ANGLE PROJECTION		INCHES		MILLIMETERS		CAGE NUMBER D 78-5100-2672-3			
INTERPRET PER ASME Y14.5 - 2009		0 ± 1		0 ± 0.1		DRAWING NO. 78-5100-2672-3			
MAX SURFACE ROUGHNESS 125		0 ± 0.1		0 ± 0.1		REV. A			
ALL SURFACES MARKED ONLY		0 ± 0.1		0 ± 0.1		MODEL			
		ANGLES ±0.5°				DET. 1515 YES NO SHT 2 OF 2			

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