



BALLOON ITEM	DESCRIPTION	QTY
7	PRODUCT LABEL	2
6	3M™ LOW PROFILE TWIN AXIAL CABLE	1
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
DO NOT SCALE DRAWING	SCALE 2/1
THIRD ANGLE PROJECTION	
INTERPRET PER ASME Y14.5 - 1994	
MAX SURFACE ROUGHNESS 125	
<input checked="" type="checkbox"/> ALL SURFACES	
<input checked="" type="checkbox"/> MARKED ONLY	

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
C 0040930		JUN 11, 2012 PG 2 OF 2 LOC A8 ADD NOTES 12 & 13 PG 1 OF 2 LOC B6 MODIFY PART NUMBER PG 2 OF 2 LOC B8 DELETE 'PRELIMINARY' PG 2 OF 2 LOC D4 MODIFY PART NUMBER PG 2 OF 2 LOC D7 ADD EEPROM MAP PG 2 OF 2 LOC C4 ADD WIRING SIGNAL LISTS	OKC	RL
B 0037834		DEC 16, 2011 PG 2 OF 2 LOC C1 DIMENSION C CHANGED TO 15.5. PG 2 OF 2 LOC D4 ORDERING NUMBERS MODIFIED. PG 2 OF 2 LOC D7 ORDERING INFORMATION MODIFIED. PG 1 OF 2 LOC A6 LABEL SERIAL NUMBER FORMAT CHANGED.	OKC	RL
A 0035856		SEP 12, 2011 NEW RELEASE	OKC	RL

DESIGNER	DATE	DRFT	CHKD
OH KIM CHYE	SEP 09, 2011		
CHKD	DATE	APPL	DATE
ROY LIM	SEP 09, 2011		

TITLE	CAGE NUMBER	SIZE	DRAWING NO.	REV.
3M DIRECT ATTACH COPPER QSFP+ CABLE ASSEMBLY CUSTOMER DWG	D	78-5100-2439-7	C	

NOTES:

1. ORDERING INFORMATION:

9QXX-111-XX-X.XX B
ASSEMBLY LENGTH X IN METERS SEE TABLE 1.

EEPROM MEMORY MAP B C

- 11= DDR INFINIBAND
- 12= QDR INFINIBAND; 40GBASE-CR4
- 13= FDR INFINIBAND(SEE 3M SALES REP)
- XX= CUSTOMIZATION(SEE 3M SALES REP)

AWG

- 0= 30 AWG
- 8= 28 AWG(SEE 3M SALES REP) C

CABLE TYPE

- A= 30AWG(PVC)
- B= 28AWG(PVC)(SEE 3M SALES REP) C

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

3. MODULE PCB PINOUT PER SFF8436 SPECIFICATION

4. SFF 8436 QSFP+ MODULE HOUSING: ZINC ALLOY WITH NICKEL PLATING

5. JACKET: BLACK PVC .015" NOMINAL THICKNESS

6. CABLE UL FLAMMABILITY RATING: UL VW-1

7. CABLE UL TEMPERATURE RATING -20C TO +80C

C 8. FOLDING BEND RADIUS 2.5mm

9. SEE REGULATORY INFORMATION APPENDIX (RIA) AT 3Mconnectors.com FOR RoHS COMPLIANCE INFORMATION (RIA E1 and C1 apply)

10. PRELIMINARY STANDARD PRODUCT SPECIFICATION: 78-5102-0097-1 A

B 11. FOR CUSTOM LENGTHS CONTACT A 3M SALES REPRESENTATIVE

C 12. * THESE ARE ON THE INFINIBAND PF-20 INTEGRATOR'S LIST FOR DDR & QDR

C 13. ** THESE ARE ON THE INFINIBAND PF-20 INTEGRATOR'S LIST FOR DDR ONLY

TABLE 1

ORDERING INFORMATION	ASSY LENGTH=X (m)	TOLERANCE (mm)	B NOMINAL (mm)	C NOMINAL (mm)
9QA0-111-12-0.50 *	0.50	+10 / - 0	1.95	15.5 B
9QA0-111-12-0.75	0.75			
9QA0-111-12-1.00 *	1.00	+50 / - 0		
9QA0-111-12-1.10	1.10			
9QA0-111-12-1.50	1.50			
9QA0-111-12-2.00 *	2.00			
9QA0-111-12-2.50	2.50			
9QA0-111-12-3.00 *	3.00			
9QA0-111-11-3.50 **	3.50	+80 / - 0		
9QA0-111-XX-3.50				
9QA0-111-11-4.00 **	4.00			
9QA0-111-XX-4.00				
9QA0-111-11-5.00 **	5.00			
9QA0-111-XX-5.00				

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

DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		01		SEP 09,2011		
DIVISION		DIVISION CODE		DATE		
ESD				SEP 09,2011		
DO NOT SCALE DRAWING	SCALE 2/1	TOLERANCES EXCEPT AS NOTED				
THIRD ANGLE PROJECTION		INCHES		© 3M 2012. All Rights Reserved. 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.		
INTERPRET PER ASME Y14.5 - 1994		MILLIMETERS		TITLE 3M DIRECT ATTACH COPPER QSFP+ CABLE ASSEMBLY CUSTOMER DWG		
MAX SURFACE ROUGHNESS 125		<input type="checkbox"/> ALL SURFACES <input checked="" type="checkbox"/> MARKED ONLY		CAGE NUMBER D 78-5100-2439-7		REV. C
		ANGLES ±0.5°		MODEL SHT 2 OF 2		

78-5100-2439-7 06-12-2012 18:02 78-5100-2439-7-s1dasm.prt