3M™ TWIN AXIAL PCI EXPRESS X16 MALE-TO-MALE CABLE ASSEMBLY

PIN B1
PIN A1
2X CABLE PART NO: 3749-20
PCIE X16 EXTENDER PCB
PART NO. 78-9101-6804-2
PCIE X16 EXTENDER PCB
INVERSE
PART NO. 78-9101-8788-5
PIN B82
PIN A82
4X CABLE PART NO: SL8802/22-18DN5-00

SIDE B

SIDE B
SIDE A
2X 1.57 ±0.16
ADHESIVE ENCAPSULANT
APPLIED TO CABLE ENDS
SIDE A
SIDE B
ADHESIVE ENCAPSULANT
APPLIED TO CABLE ENDS

DIM A +5 -0
SEE NOTE 6

PART LABEL
3M LOGO
3M PART NUMBER
DATE CODE: XXYY
XX = YEAR
YY = WEEK

PIN A82
9.0
38
9.0
PIN B82

93.1   84.3
84.3   93.1

PIN A1
15.5
SIDE A
19.5
PIN B1

BILL OF MATERIALS

	ITEM	DESCRIPTION	QTY
1.0	PCB	PCIE X16 EXTENDER (164 POS) CARD-EDGE INVERSE 3M P/N: 78-9101-8788-5	1
2.0	PCB	PCIE X16 EXTENDER (164 POS) CARD-EDGE 3M P/N: 78-9101-6804-2	1
3.0	CABLE	RIBBON TWIN AX CABLE 3M P/N: SL8802/22-18DN5-00	4
4.0	CABLE	RIBBON CABLE, 20 POSITION 3M P/N: 3749-20	2
5.0	STRAIN RELIEF	ADHESIVE	AS REQUIRED

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REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
D	84237	APR 23,2019 REVISED PART LABEL	LDS	TS
C	77002	DEC 14,2017 PIN DEFINITION A50 WAS A33, ZONE B4, SH2; ADDED SH3 WARRANTY INFO	AD	LS
B	48418	JUN 19,2013 ADDED SIDE A & SIDE B INDICATORS	LDS	TS
A	46893	MAR 27,2013 WORK REQUEST 11618 INITIAL RELEASE	LDS	TS

3M 3749-20 Cable

Wire #	Pin Attachment #
01	Ground Layer
02	B01 - B02
03	B01 - B02
04	B01 - B02
05	B01 - B02
06	B01 - B02
07	B01 - B02
08	Ground Layer
09	B05
10	B06
11	Ground Layer
12	B08
13	B08
14	B09
15	B10
16	B10
17	Ground Layer
18	B11
19	Ground Layer
20	B12

3M SL8802 Cable

Wire #	Pin Attachment
GND	Ground Layer
pr_01	B14
pr_01	B15
pr_02	B17
pr_02	Ground Layer
pr_03	B19
pr_03	B20
pr_04	B23
pr_04	B24
GND	Ground Layer
pr_05	B27
pr_05	B28
pr_06	B30
pr_06	B31
pr_07	B33
pr_07	B34
GND	Ground Layer
pr_08	B37
pr_08	B38
pr_09	B41
pr_09	B42
pr_10	B45
pr_10	B46
pr_11	B48
pr_11	Ground Layer
GND	Ground Layer

3M SL8802 Cable

Wire #	Pin Attachment #
GND	Ground Layer
pr_01	B50
pr_01	B51
pr_02	Ground Layer
pr_02	Ground Layer
pr_03	B54
pr_03	B55
pr_04	B58
pr_04	B59
GND	Ground Layer
pr_05	B62
pr_05	B63
pr_06	B66
pr_06	B67
pr_07	B70
pr_07	B71
GND	Ground Layer
pr_08	B74
pr_08	B75
pr_09	Ground Layer
pr_09	Ground Layer
pr_10	B78
pr_10	B79
pr_11	B81
pr_11	B82
GND	Ground Layer

PCI-Express X16 Pin-Out

Pin #	Side B Description	Side A Description	Pin #
B01	+12 volt power	Hot plug presence detect	A01
B02	+12 volt power	+12 volt power	A02
B03	+12 volt power	+12 volt power	A03
B04	Ground	Ground	A04
B05	SMBus clock	TCK	A05
B06	SMBus data	TDI	A06
B07	Ground	TDO	A07
B08	+3.3 volt power	TMS	A08
B09	+TRST#	+3.3 volt power	A09
B10	3.3v volt power	+3.3 volt power	A10
B11	Link Reactivation	Power Good	A11
		Mechanical Key	
B12	Reserved	Ground	A12
B13	Ground	Reference Clock	A13
B14	Transmitter Lane 0,	Differential pair	A14
B15	Differential pair	Ground	A15
B16	Ground	Receiver Lane 0,	A16
B17	Hotplug detect	Differential pair	A17
B18	Ground	Ground	A18
B19	Transmitter Lane 1,	Reserved	A19
B20	Differential pair	Ground	A20
B21	Ground	Receiver Lane 1,	A21
B22	Ground	Differential pair	A22
B23	Transmitter Lane 2,	Ground	A23
B24	Differential pair	Ground	A24
B25	Ground	Receiver Lane 2,	A25
B26	Ground	Differential pair	A26
B27	Transmitter Lane 3,	Ground	A27
B28	Differential pair	Ground	A28
B29	Ground	Receiver Lane 3,	A29
B30	Reserved	Differential pair	A30
B31	Hot plug detect	Ground	A31
B32	Ground	Reserved	A32
B33	Transmitter Lane 4,	Reserved	A33
B34	Differential pair	Ground	A34
B35	Ground	Receiver Lane 4,	A35
B36	Ground	Differential pair	A36
B37	Transmitter Lane 5,	Ground	A37
B38	Differential pair	Ground	A38
B39	Ground	Receiver Lane 5,	A39
B40	Ground	Differential pair	A40
B41	Transmitter Lane 6,	Ground	A41
B42	Differential pair	Ground	A42
B43	Ground	Receiver Lane 6,	A43
B44	Ground	Differential pair	A44
B45	Transmitter Lane 7,	Ground	A45
B46	Differential pair	Ground	A46
B47	Ground	Receiver Lane 7,	A47
B48	Hot plug detect	Differential pair	A48
B49	Ground	Ground	A49
B50	Transmitter Lane 8,	Reserved	A50
B51	Differential pair	Ground	A51
B52	Ground	Receiver Lane 8,	A52
B53	Ground	Differential pair	A53
B54	Transmitter Lane 9,	Ground	A54
B55	Differential pair	Ground	A55
B56	Ground	Receiver Lane 9,	A56
B57	Ground	Differential pair	A57
B58	Transmitter Lane 10,	Ground	A58
B59	Differential pair	Ground	A59
B60	Ground	Receiver Lane 10,	A60
B61	Ground	Differential pair	A61
B62	Transmitter Lane 11,	Ground	A62
B63	Differential pair	Ground	A63
B64	Ground	Receiver Lane 11,	A64
B65	Ground	Differential pair	A65
B66	Transmitter Lane 12,	Ground	A66
B67	Differential pair	Ground	A67
B68	Ground	Receiver Lane 12,	A68
B69	Ground	Differential pair	A69
B70	Transmitter Lane 13,	Ground	A70
B71	Differential pair	Ground	A71
B72	Ground	Receiver Lane 13,	A72
B73	Ground	Differential pair	A73
B74	Transmitter Lane 14,	Ground	A74
B75	Differential pair	Ground	A75
B76	Ground	Receiver Lane 14,	A76
B77	Ground	Differential pair	A77
B78	Transmitter Lane 15,	Ground	A78
B79	Differential pair	Ground	A79
B80	Ground	Receiver Lane 15,	A80
B81	Hot plug present detect	Differential pair	A81
B82	Hot Plug Detect	Ground	A82

3M 3749-20 Cable

Pin Attachment #	Wire #
Ground Layer	01
A01	02
Ground Layer	03
A02 - A03	04
A02 - A03	05
A02 - A03	06
A02 - A03	07
Ground Layer	08
A05	09
A06	10
A07	11
A08	12
Ground Layer	13
A09 - A10	14
A09 - A10	15
A09 - A10	16
A09 - A10	17
Ground Layer	18
Ground Layer	19
A11	20

3M SL8802 Cable

Pin Attachment #	Wire #
Ground Layer	GND
A13	pr_01
A14	pr_01
A16	pr_02
A17	pr_02
Ground Layer	pr_03
A19	pr_03
A21	pr_04
A22	pr_04
Ground Layer	GND
A25	pr_05
A26	pr_05
A29	pr_06
A30	pr_06
A32	pr_07
A33	pr_07
Ground Layer	GND
A35	pr_08
A36	pr_08
A39	pr_09
A40	pr_09
A43	pr_10
A44	pr_10
A47	pr_11
A48	pr_11
Ground Layer	GND

3M SL8802 Cable

Pin Attachment #	Wire #
Ground Layer	GND
A50	pr_01
Ground Layer	pr_01
A52	pr_02
A53	pr_02
Ground Layer	pr_03
Ground Layer	pr_03
A56	pr_04
A57	pr_04
Ground Layer	GND
A60	pr_05
A61	pr_05
A64	pr_06
A65	pr_06
A68	pr_07
A69	pr_07
Ground Layer	GND
A72	pr_08
A73	pr_08
A76	pr_09
A77	pr_09
Ground Layer	pr_10
Ground Layer	pr_10
A80	pr_11
A81	pr_11
Ground Layer	GND

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THIS IS A FEED THROUGH ASSEMBLY. THE PIN ASSIGNMENTS REMAIN THE SAME ON BOTH ENDS.

78-5100-2586-5 D

TITLE: 8KC5-0742-XXXX, CABLE ASSY, MALE PCIE X16 TO MALE PCIE X16

CAGE NUMBER | SIZE D | DRAWING NO. 78-5100-2586-5 | REV. D

DET LISTS ☐ YES ☒ NO   SHT 2 OF 3

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

78-5100-2586-5 | D
DRAWING NUMBER | REVISION

Imaged: Central Standard Time 5/15/2019 -- UTC Offset (hrs) 6

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DESIGN REFERENCE   NEXT ASSEMBLY

ACCESS CODES

DIVISION   DIVISION CODE

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	DRFT L SCHMIDT	DATE MAR 27,2013	MFG	DATE
	CHKD	DATE	APPV T SUNIGA	DATE MAR 28,2013

DO NOT SCALE DRAWING

SCALE
1
1

TOLERANCES EXCEPT AS NOTED

INCHES
.0
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MILLIMETERS
0   ± 1
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.00 ± .05
.000 ± .005

THIRD ANGLE PROJECTION

INTERPRET PER
ASME Y14.5 - 2009

MAX SURFACE ROUGHNESS

125 ☐ ALL SURFACES
     ☒ MARKED ONLY

ANGLES ± 1°

TITLE
8KC5-0742-XXXX, CABLE ASSY, MALE PCIE X16 TO MALE PCIE X16

CAGE NUMBER	SIZE D	DRAWING NO. 78-5100-2586-5	REV. D

MODEL

DET
LISTS ☐ YES ☒ NO | SHT 3 OF 3