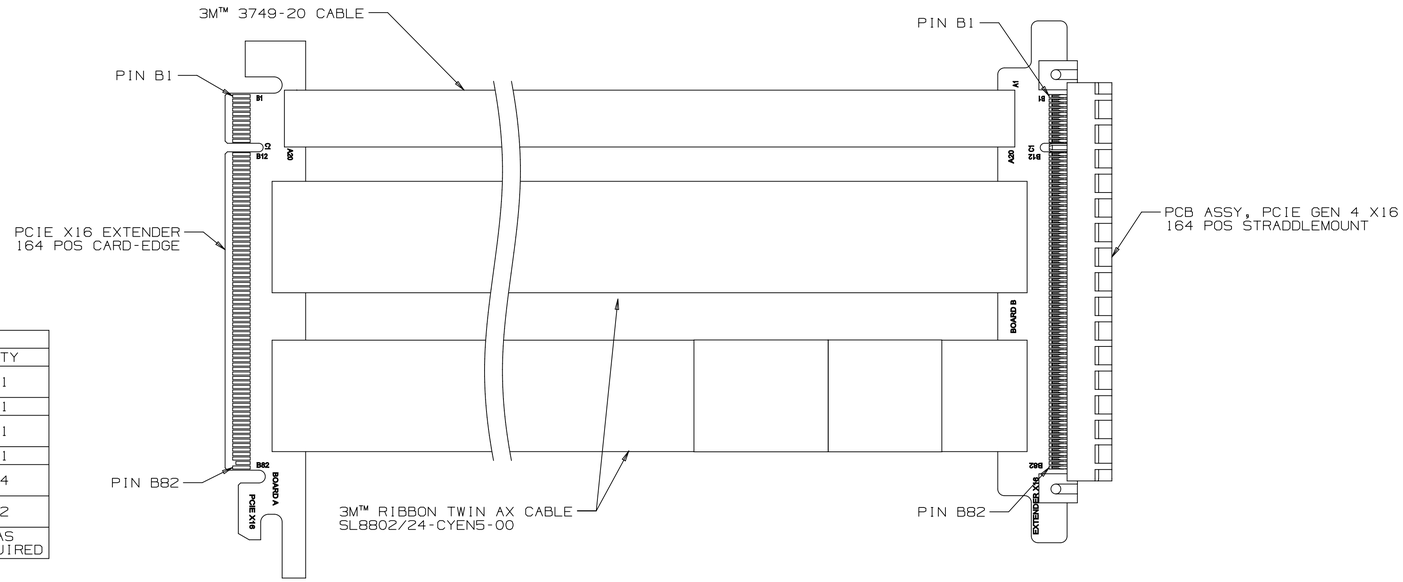
3M™ PCIe GEN 4 X16 EXTENDER TWIN AXIAL CABLE ASSEMBLY



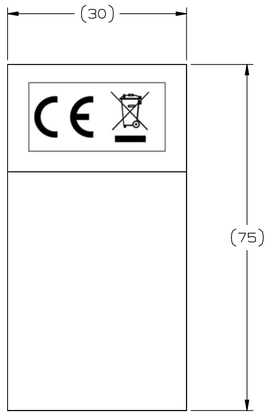
BILL OF MATERIALS			
	ITEM	DESCRIPTION	QTY
1.0	PBA	PCB ASSY, PCIE GEN 4 X16 (164 POS) STRADDLEMOUNT	1
1.1	PCB	PCIE GEN 4 X16 (164 POS) STRADDLEMOUNT	1
1.2	CONN	CONNECTOR, PCIE X16 164 POSITION, FEMALE SOCKET GEN5 STRADDLEMOUNT	1
2.0	PCB	PCIE X16 EXTENDER (164 POS) CARD-EDGE	1
3.0	CABLE	RIBBON TWIN AX CABLE 3M P/N: SL8802/24-CYEN5-00	4
4.0	CABLE	RIBBON CABLE, 20 POSITION 3M P/N: 3749-20	2
5.0	STRAIN RELIEF	ADHESIVE	AS REQUIRED

NOTES	
1	DIMENSIONS ARE IN MILLIMETERS.
2	3M™ RIBBON TWINAX DESCRIPTION: 31 AWG, SILVER PLATED SIGNAL WIRE
3	REGULATORY INFORMATION: VISIT 3M.com/regs
4	THIS CABLE CONSTRUCTION HAS A THIN ALUMINUM INNER LAYER EXPOSED AT EACH EDGE. USERS SHOULD ASSESS WHETHER THE EXPOSED EDGE PRESENTS A SHORTING RISK IN THEIR SPECIFIC APPLICATION. INSULATING TAPE MAY BE APPLIED AT THE CABLE ASSEMBLY LEVEL, AS NEEDED, TO COVER THE EXPOSED EDGE IN RISK AREAS.
5	APPLICABLE SPECIFICATIONS: PRODUCT SPECIFICATION NUMBERS: TWIN AX CABLE: PS-0284
6	ORDER BY APPLICABLE 3M PART NUMBER: 8KCE-0953-XXXX XXXX = DIM 'A' IN MILLIMETERS (1000 = 1 METER) 150 MM MINIMUM LENGTH.
7	FLAMMABILITY RATING: TWINAX/AUX RIBBONS: HORIZONTAL PCBS: UL94V-0
8	PADDLECARD FINGER GOLD THICKNESS: 0.76 µm [30 µ"] MIN ELECTROLYTIC HARD GOLD OVER 1.27 µm [50 µ"] MIN ELECTROLYTIC NICKEL.

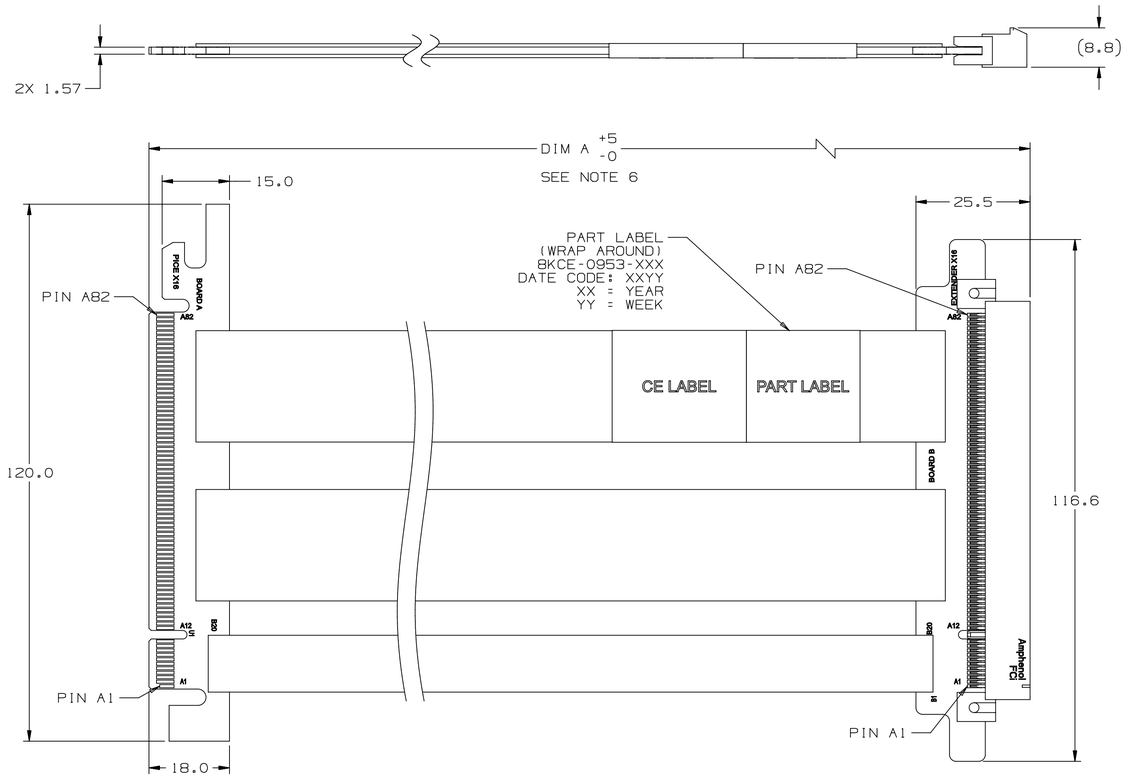
ORDERING INFORMATION

8KCE-0953-XXXX

LENGTH IN MILLIMETERS



CE WEEE LABEL



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REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
D	123692	MAY 28,2025 ADD CE LABEL	JNC	MML
C	0116790	JUN 18,2024 REVISED NOTES 2, 3, 5, 7	BJW	ML
B	0102671	FEB 14,2022 ITEM 1.2 REMOVED P/Ns	LDS	MML
A	0100323	OCT 07,2021 WORK REQUEST 13075 INITIAL RELEASE	LDS	MML

DESIGN REFERENCE: NEXT ASSEMBLY
ACCESS CODES
DIVISION
DIVISION CODE: DEPP
DO NOT SCALE DRAWING
SCALE
TOLERANCES EXCEPT AS NOTED
INCHES: .0 ± / .00 ± / .000 ± / .0000 ±
THIRD ANGLE PROJECTION
INTERPRET PER ASME Y14.5 - 2018
MILLIMETERS: 0 ±1 / .0 ±.5 / .00 ±.05 / .000 ±.005
MAX SURFACE ROUGHNESS
ALL SURFACES
MARKED ONLY
ANGLES ±

DRFT: L SCHMIDT — DATE: MAR 28,2021 — MFG — DATE
CHKD: M LETTANG — DATE: JUN 18,2021 — APPVL — DATE

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TITLE: 8KCE-0953-XXXX, CABLE ASSY, PCIE X16 BY PCIE X16 EXTENDER

CAGE NUMBER | SIZE: D | DRAWING NO.: 78-5100-2721-8 | REV.: D

MODEL

DET. LISTS ☐ YES ☒ NO | SHT 1 OF 3

78-5100-2721-8 D
DRAWING NUMBER REVISION

3M™ PCIe GEN 4 X16 EXTENDER TWIN AXIAL CABLE ASSEMBLY

3M 3749-20 Cable	
Wire #	Pin Attachment #
01	Ground Layer
02	B01 - B03
03	B01 - B03
04	B01 - B03
05	B01 - B03
06	B01 - B03
07	B01 - B03
08	Ground Layer
09	B05 Single Ended
10	B06 Single Ended
11	Ground Layer
12	B08
13	B08
14	B09 Single Ended
15	B10
16	B10
17	Ground Layer
18	B11 Single Ended
19	Ground Layer
20	B12 Single Ended

3M SL8802 Cable	
Wire #	Pin Attachment
drain	Ground Layer
pr_01	B14 Differential Pr
pr_01	B15 Differential Pr
pr_02	B17 Single Ended
pr_02	Ground Layer
pr_03	B19 Differential Pr
pr_03	B20 Differential Pr
pr_04	B23 Differential Pr
pr_04	B24 Differential Pr
drain	Ground Layer
pr_05	B27 Differential Pr
pr_05	B28 Differential Pr
pr_06	B30 Single Ended
pr_06	B31 Single Ended
pr_07	B33 Differential Pr
pr_07	B34 Differential Pr
drain	Ground Layer
pr_08	B37 Differential Pr
pr_08	B38 Differential Pr
pr_09	B41 Differential Pr
pr_09	B42 Differential Pr
pr_10	B45 Differential Pr
pr_10	B46 Differential Pr
pr_11	B48 Single Ended
pr_11	Ground Layer
drain	Ground Layer

3M SL8802 Cable	
Wire #	Pin Attachment #
drain	Ground Layer
pr_01	B50 Differential Pr
pr_01	B51 Differential Pr
pr_02	Ground Layer
pr_02	Ground Layer
pr_03	B54 Differential Pr
pr_03	B55 Differential Pr
pr_04	B58 Differential Pr
pr_04	B59 Differential Pr
drain	Ground Layer
pr_05	B62 Differential Pr
pr_05	B63 Differential Pr
pr_06	B66 Differential Pr
pr_06	B67 Differential Pr
pr_07	B70 Differential Pr
pr_07	B71 Differential Pr
drain	Ground Layer
pr_08	B74 Differential Pr
pr_08	B75 Differential Pr
pr_09	Ground Layer
pr_09	Ground Layer
pr_10	B78 Differential Pr
pr_10	B79 Differential Pr
pr_11	B81 Single Ended
pr_11	B82 Single Ended
drain	Ground Layer

PCIe X16 Extender/Jumper Assembly Pin-Out Side-B

Pin #	Side B Description	Name	Pin #
B01	+12 volt power	+12v	B01
B02	+12 volt power	+12v	B02
B03	Reserved	RSVD	B03
B04	Ground	GND	B04
B05	SMBus clock	SMCLK	B05
B06	SMBus data	SMDAT	B06
B07	Ground	GND	B07
B08	+3.3 volt power	+3.3v	B08
B09	+TRST#	JTAG1	B09
B10	3.3v volt power	3.3Vaux	B10
B11	Link Reactivation	WAKE#	B11
	Mechanical Key		
B12	Clock Request Signal	CLKREQ#	B12
B13	Ground	GND	B13
B14	Transmitter Lane 0,	HSOp(0)	B14
B15	Differential pair	HSOn(0)	B15
B16	Ground	GND	B16
B17	Hotplug detect	PRSNT#2	B17
B18	Ground	GND	B18
B19	Transmitter Lane 1,	HSOp(1)	B19
B20	Differential pair	HSOn(1)	B20
B21	Ground	GND	B21
B22	Ground	GND	B22
B23	Transmitter Lane 2,	HSOp(2)	B23
B24	Differential pair	HSOn(2)	B24
B25	Ground	GND	B25
B26	Ground	GND	B26
B27	Transmitter Lane 3,	HSOp(3)	B27
B28	Differential pair	HSOn(3)	B28
B29	Ground	GND	B29
B30	Emergency Pwr Reduct	PWRBRK#	B30
B31	Hot plug detect	PRSNT#2	B31
B32	Ground	GND	B32
B33	Transmitter Lane 4,	HSOp(4)	B33
B34	Differential pair	HSOn(4)	B34
B35	Ground	GND	B35
B36	Ground	GND	B36
B37	Transmitter Lane 5,	HSOp(5)	B37
B38	Differential pair	HSOn(5)	B38
B39	Ground	GND	B39
B40	Ground	GND	B40
B41	Transmitter Lane 6,	HSOp(6)	B41
B42	Differential pair	HSOn(6)	B42
B43	Ground	GND	B43
B44	Ground	GND	B44
B45	Transmitter Lane 7,	HSOp(7)	B45
B46	Differential pair	HSOn(7)	B46
B47	Ground	GND	B47
B48	Hot plug detect	PRSNT#2	B48
B49	Ground	GND	B49
B50	Transmitter Lane 8,	HSOp(8)	B50
B51	Differential pair	HSOn(8)	B51
B52	Ground	GND	B52
B53	Ground	GND	B53
B54	Transmitter Lane 9,	HSOp(9)	B54
B55	Differential pair	HSOn(9)	B55
B56	Ground	GND	B56
B57	Ground	GND	B57
B58	Transmitter Lane 10,	HSOp(10)	B58
B59	Differential pair	HSOn(10)	B59
B60	Ground	GND	B60
B61	Ground	GND	B61
B62	Transmitter Lane 11,	HSOp(11)	B62
B63	Differential pair	HSOn(11)	B63
B64	Ground	GND	B64
B65	Ground	GND	B65
B66	Transmitter Lane 12,	HSOp(12)	B66
B67	Differential pair	HSOn(12)	B67
B68	Ground	GND	B68
B69	Ground	GND	B69
B70	Transmitter Lane 13,	HSOp(13)	B70
B71	Differential pair	HSOn(13)	B71
B72	Ground	GND	B72
B73	Ground	GND	B73
B74	Transmitter Lane 14,	HSOp(14)	B74
B75	Differential pair	HSOn(14)	B75
B76	Ground	GND	B76
B77	Ground	GND	B77
B78	Transmitter Lane 15,	HSOp(15)	B78
B79	Differential pair	HSOn(15)	B79
B80	Ground	GND	B80
B81	Hot plug present detect	PRSNT#2	B81
B82	Hot Plug Detect	RSVD#2	B82

PCIe X16 Extender/Jumper Assembly Pin-Out Side-A

Pin #	Side A Description	Name	Pin #
A01	Hot plug presence detect	PRSNT#1	A01
A02	+12 volt power	+12v	A02
A03	+12 volt power	+12v	A03
A04	Ground	GND	A04
A05	TCK	JTAG2	A05
A06	TDI	JTAG3	A06
A07	TDO	JTAG4	A07
A08	TMS	JTAG5	A08
A09	+3.3 volt power	+3.3v	A09
A10	+3.3 volt power	+3.3v	A10
A11	Power Good	PWRGD	A11
	Mechanical Key		
A12	Ground	GND	A12
A13	Reference Clock	REFCLK+	A13
A14	Differential pair	REFCLK-	A14
A15	Ground	GND	A15
A16	Receiver Lane 0,	HSIp(0)	A16
A17	Differential pair	HSIn(0)	A17
A18	Ground	GND	A18
A19	Reserved	RSVD	A19
A20	Ground	GND	A20
A21	Receiver Lane 1,	HSIp(1)	A21
A22	Differential pair	HSIn(1)	A22
A23	Ground	GND	A23
A24	Ground	GND	A24
A25	Receiver Lane 2,	HSIp(2)	A25
A26	Differential pair	HSIn(2)	A26
A27	Ground	GND	A27
A28	Ground	GND	A28
A29	Receiver Lane 3,	HSIp(3)	A29
A30	Differential pair	HSIn(3)	A30
A31	Ground	GND	A31
A32	Reserved	RSVD	A32
A33	Reserved	RSVD	A33
A34	Ground	GND	A34
A35	Receiver Lane 4,	HSIp(4)	A35
A36	Differential pair	HSIn(4)	A36
A37	Ground	GND	A37
A38	Ground	GND	A38
A39	Receiver Lane 5,	HSIp(5)	A39
A40	Differential pair	HSIn(5)	A40
A41	Ground	GND	A41
A42	Ground	GND	A42
A43	Receiver Lane 6,	HSIp(6)	A43
A44	Differential pair	HSIn(6)	A44
A45	Ground	GND	A45
A46	Ground	GND	A46
A47	Receiver Lane 7,	HSIp(7)	A47
A48	Differential pair	HSIn(7)	A48
A49	Ground	GND	A49
A50	Reserved	RSVD	A50
A51	Ground	GND	A51
A52	Receiver Lane 8,	HSIp(8)	A52
A53	Differential pair	HSIn(8)	A53
A54	Ground	GND	A54
A55	Ground	GND	A55
A56	Receiver Lane 9,	HSIp(9)	A56
A57	Differential pair	HSIn(9)	A57
A58	Ground	GND	A58
A59	Ground	GND	A59
A60	Receiver Lane 10,	HSIp(10)	A60
A61	Differential pair	HSIn(10)	A61
A62	Ground	GND	A62
A63	Ground	GND	A63
A64	Receiver Lane 11,	HSIp(11)	A64
A65	Differential pair	HSIn(11)	A65
A66	Ground	GND	A66
A67	Ground	GND	A67
A68	Receiver Lane 12,	HSIp(12)	A68
A69	Differential pair	HSIn(12)	A69
A70	Ground	GND	A70
A71	Ground	GND	A71
A72	Receiver Lane 13,	HSIp(13)	A72
A73	Differential pair	HSIn(13)	A73
A74	Ground	GND	A74
A75	Ground	GND	A75
A76	Receiver Lane 14,	HSIp(14)	A76
A77	Differential pair	HSIn(14)	A77
A78	Ground	GND	A78
A79	Ground	GND	A79
A80	Receiver Lane 15,	HSIp(15)	A80
A81	Differential pair	HSIn(15)	A81
A82	Ground	GND	A82

3M 3749-20 Cable	
Pin Attachment #	Wire #
Ground Layer	01
A01 Single Ended	02
Ground Layer	03
A02 - A03	04
A02 - A03	05
A02 - A03	06
A02 - A03	07
Ground Layer	08
A05 Single Ended	09
A06 Single Ended	10
A07 Single Ended	11
A08 Single Ended	12
Ground Layer	13
A09 - A10	14
A09 - A10	15
A09 - A10	16
A09 - A10	17
Ground Layer	18
Ground Layer	19
A11 Single Ended	20

3M SL8802 Cable	
Pin Attachment #	Wire #
Ground Layer	drain
A13 Single Ended	pr_01
A14 Single Ended	pr_01
A16 Differential Pr	pr_02
A17 Differential Pr	pr_02
Ground Layer	pr_03
A19 Single Ended	pr_03
A21 Differential Pr	pr_04
A22 Differential Pr	pr_04
Ground Layer	drain
A25 Differential Pr	pr_05
A26 Differential Pr	pr_05
A29 Differential Pr	pr_06
A30 Differential Pr	pr_06
A32 Single Ended	pr_07
A33 Single Ended	pr_07
Ground Layer	drain
A35 Differential Pr	pr_08
A36 Differential Pr	pr_08
A39 Differential Pr	pr_09
A40 Differential Pr	pr_09
A43 Differential Pr	pr_10
A44 Differential Pr	pr_10
A47 Differential Pr	pr_11
A48 Differential Pr	pr_11
Ground Layer	drain

3M SL8802 Cable	
Pin Attachment #	Wire #
Ground Layer	drain
A33 Single Ended	pr_01
Ground Layer	pr_01
A52 Differential Pr	pr_02
A53 Differential Pr	pr_02
Ground Layer	pr_03
Ground Layer	pr_03
A56 Differential Pr	pr_04
A57 Differential Pr	pr_04
Ground Layer	drain
A60 Differential Pr	pr_05
A61 Differential Pr	pr_05
A64 Differential Pr	pr_06
A65 Differential Pr	pr_06
A68 Differential Pr	pr_07
A69 Differential Pr	pr_07
Ground Layer	drain
A72 Differential Pr	pr_08
A73 Differential Pr	pr_08
A76 Differential Pr	pr_09
A77 Differential Pr	pr_09
Ground Layer	pr_10
Ground Layer	pr_10
A80 Differential Pr	pr_11
A81 Differential Pr	pr_11
Ground Layer	drain

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

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REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
D	123692	MAY 28,2025 ADD CE LABEL	JNC	MML
C	0116790	JUN 18,2024 REVISED NOTES 2, 3, 5, 7	BJW	ML
B	0102671	FEB 14,2022 ITEM 1.2 REMOVED P/Ns	LDS	MML
A	0100323	OCT 07,2021 WORK REQUEST 13075 INITIAL RELEASE	LDS	MML

DESIGN REFERENCE | NEXT ASSEMBLY | ACCESS CODES | DIVISION | DIVISION CODE DEPP

DRFT L SCHMIDT — DATE MAR 28,2021 — MFG — DATE
CHKD M LETTANG — DATE JUN 18,2021 — APPVL — DATE

DO NOT SCALE DRAWING | SCALE | TOLERANCES EXCEPT AS NOTED | INCHES .0 ± .00 ± .000 ± .0000 ± | MILLIMETERS 0 ± 1 .0 ± .5 .00 ± .05 .000 ± .005 | ANGLES ± | THIRD ANGLE PROJECTION | INTERPRET PER ASME Y14.5 - 2018 | MAX SURFACE ROUGHNESS ☐ ALL SURFACES ☐ MARKED ONLY

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TITLE: 8KCE-0953-XXXX, CABLE ASSY, PCIE X16 BY PCIE X16 EXTENDER

CAGE NUMBER | SIZE D | DRAWING NO. 78-5100-2721-8 | REV. D

MODEL | DET. LISTS ☐ YES ☒ NO | SHT 2 OF 3

78-5100-2721-8 D REVISION

3M™ PCIe GEN 4 X16 EXTENDER TWIN AXIAL CABLE ASSEMBLY

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INTERPRET PER ASME Y14.5 - 2018
MAX SURFACE ROUGHNESS ☐ ALL SURFACES ☐ MARKED ONLY
ANGLES ±

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TITLE: 8KCE-0953-XXXX, CABLE ASSY, PCIE X16 BY PCIE X16 EXTENDER

CAGE NUMBER | SIZE D | DRAWING NO. 78-5100-2721-8 | REV. D
MODEL
DET. LISTS ☐ YES ☒ NO | SHT 3 OF 3

78-5100-2721-8 DRAWING NUMBER | D REVISION