

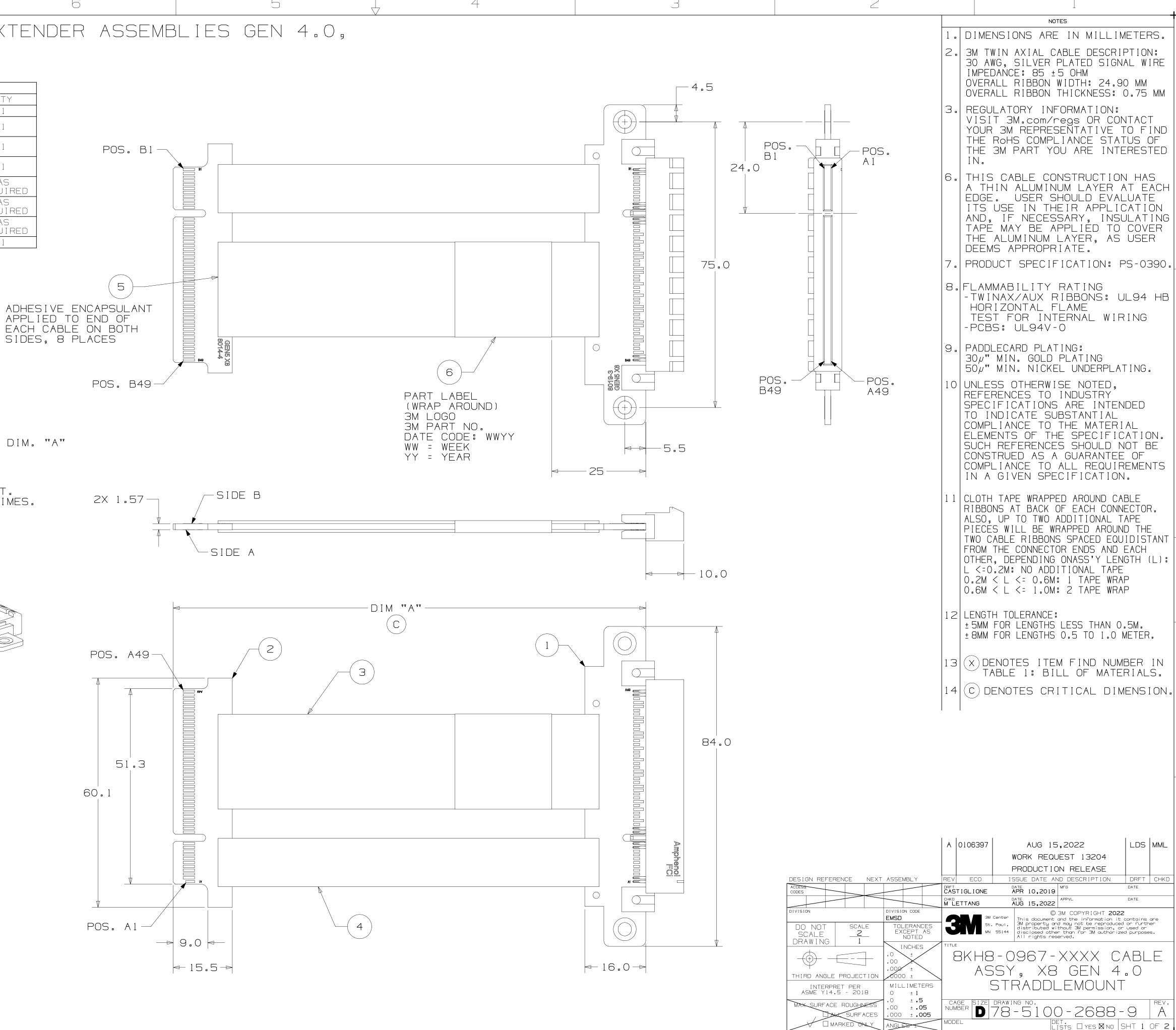
| | | BILL OF MATERIALS | |
|-----|------------------|---|----------------|
| | ITEM | DESCRIPTION | QTY |
| 1.0 | PBA | PCB ASSY, PADDLECARD, PCIE X8 | 1 |
| 1.1 | РСВ | PCIE X8 (98 POS) STRADDLEMOUNT 3M P/N: 78-9102-8019-3 | 1 |
| 1.2 | CONN | CONNECTOR, PCIE (98 POS) STRADDLEMOUNT. X8 GEN 5 | 1 |
| 2.0 | РСВ | PCIE X8 EXTENDER (98 POS) CARD-EDGE 3M P/N: 78-9102-8014-4 | 1 |
| 3.0 | CABLE | RIBBON TWINAX CABLE 3M P/N: SL8802/22-15FN5-00 | AS REQUIRED |
| 4.0 | CABLE | RIBBON CABLE, 20 POSITION 3M P/N: HF447-20 | AS REQUIRED |
| 5.0 | STRAIN Relief | ADHESIVE | AS REQUIRED |
| 6.0 | LABEL | SEE ASSEMBLY PART DETAIL | 1 |

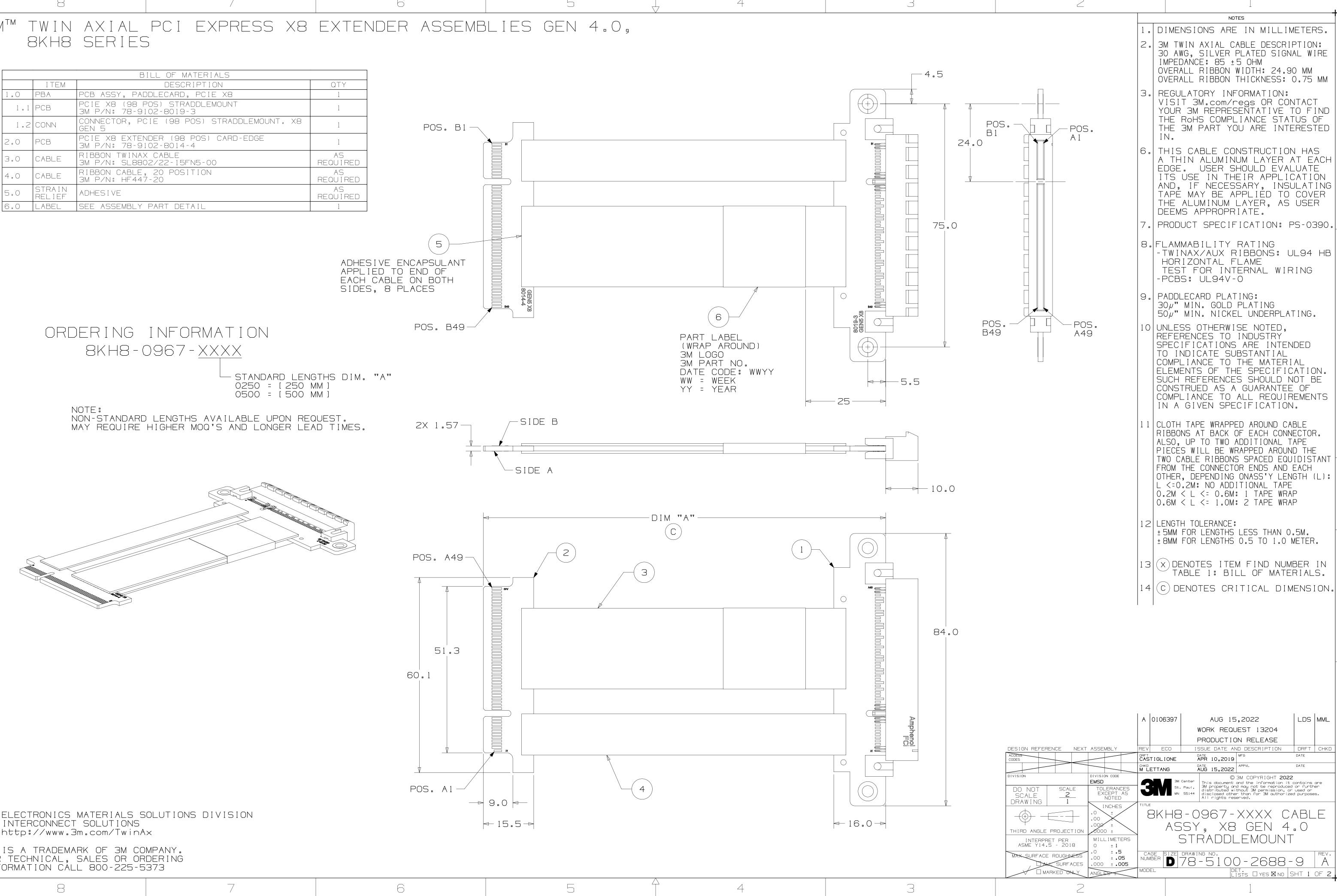
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| | NOTES | ╋╴ |
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| 1. | DIMENSIONS ARE IN MILLIMETERS. | |
| 2. | 3M TWIN AXIAL CABLE DESCRIPTION: 30 AWG, SILVER PLATED SIGNAL WIRE IMPEDANCE: 85 ±5 OHM OVERALL RIBBON WIDTH: 24.90 MM | |
| | OVERALL RIBBON THICKNESS: 0.75 MM | |
| 3 | REGULATORY INFORMATION: VISIT 3M.com/regs OR CONTACT YOUR 3M REPRESENTATIVE TO FIND THE ROHS COMPLIANCE STATUS OF THE 3M PART YOU ARE INTERESTED IN. | |
| 6. | A THIN ALUMINUM LAYER AT EACH EDGE. USER SHOULD EVALUATE ITS USE IN THEIR APPLICATION AND, IF NECESSARY, INSULATING TAPE MAY BE APPLIED TO COVER THE ALUMINUM LAYER, AS USER DEEMS APPROPRIATE. | |
| 7. | PRODUCT SPECIFICATION: PS-0390. | |
| 8. | FLAMMABILITY RATING -TWINAX/AUX RIBBONS: UL94 HB HORIZONTAL FLAME TEST FOR INTERNAL WIRING -PCBS: UL94V-0 | |
| 9. | PADDLECARD PLATING: 30µ" MIN. GOLD PLATING 50µ" MIN. NICKEL UNDERPLATING. | |
| 10 | 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 CONSTRUED AS A GUARANTEE OF COMPLIANCE TO ALL REQUIREMENTS IN A GIVEN SPECIFICATION. | |
| 1 1 | CLOTH TAPE WRAPPED AROUND CABLE RIBBONS AT BACK OF EACH CONNECTOR. ALSO, UP TO TWO ADDITIONAL TAPE PIECES WILL BE WRAPPED AROUND THE TWO CABLE RIBBONS SPACED EQUIDISTANT FROM THE CONNECTOR ENDS AND EACH OTHER, DEPENDING ONASS'Y LENGTH (L): L <=0.2M: NO ADDITIONAL TAPE 0.2M < L <= 0.6M: 1 TAPE WRAP 0.6M < L <= 1.0M: 2 TAPE WRAP | 5100-2688-9 A |
| 12 | LENGTH TOLERANCE: ±5MM FOR LENGTHS LESS THAN 0.5M. ±8MM FOR LENGTHS 0.5 TO 1.0 METER. | 78-5 |
| 13 | X DENOTES ITEM FIND NUMBER IN TABLE 1: BILL OF MATERIALS. | |
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3M™ TWIN AXIAL PCI EXPRESS X8 EXTENDER ASSEMBLIES GEN 4.0, 8KH8 SERIES

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| Edgecard pin # | Side B Description | Name | CEM pin # | Edgecard pin # | Side A Description | Name | CEM pin # |
|-------------------|----------------------------------|---|------------|-------------------|------------------------------------|---------|------------|
| B01 | +12 volt power | +12v | B01 | A01 | Presence detect | PRSNT#1 | A01 |
| B02 | +12 volt power | +12v | B02 | A02 | +12 volt power | +12v | A02 |
| B03 | +12 volt power | +12v | B03 | A03 | +12 volt power | +12v | A03 |
| B04 | Ground | GND | B04 | A04 | Ground | GND | A04 |
| B05 | SMBus clock | SMCLK | B05 | A05 | ТСК | JTAG2 | A05 |
| B06 | SMBus data | SMDAT | B06 | A06 | TDI | JTAG3 | A06 |
| B07 | Ground | GND | B07 | A07 | ТОО | JTAG4 | A07 |
| B08 | +3.3 volt power | +3.3v | B08 | A08 | тмѕ | JTAG5 | A08 |
| B09 | +TRST# | JTAG1 | B09 | A09 | +3.3 volt power | +3.3v | A09 |
| B10 | 3.3v auxiliary power | 3.3Vaux | B10 | A10 | +3.3 volt power | +3.3v | A10 |
| B11 | Link Reactivation | WAKE# | B11 | A11 | Fundamental reset | PERST# | A11 |
| | Mechanical Key | | | | Mechanical Key | | |
| B12 | Clock Request Signal | CLKREQ# | B12 | A12 | Ground | GND | A12 |
| B13 | Ground | GND | B13 | A13 | Reference Clock, Differential | REFCLK+ | A13 |
| B14 | Transmitter Lane 0, Differential | PETp(0) | B14 | A14 | pair | REFCLK- | A14 |
| B15 | 4 ' | PETn(0) | B15 | A15 | Ground | GND | A14 |
| B16 | pair Ground | GND | B16 | A16 | | | A16 |
| B10 B17 | Presence detect | PRSNT2# | B10 B17 | A10 A17 | Receiver Lane 0, Differential pair | | A10 |
| B17 B18 | Ground | GND | B17 B18 | A17 A18 | Ground | GND | A17 A18 |
| | | | | | | | |
| B19 | Transmitter Lane 1, Differential | PETp(1) | B19 | A19 | Manufacturer Test Mode | | A19 |
| B20 | pair | PETn(1) | B20 | A20 | Ground | | A20 |
| B21 | Ground | GND | B21 | A21 | Receiver Lane 1, Differential pair | PERp(1) | A21 |
| B22 | Ground | | B22 | A22 | | | A22 |
| B23 | Transmitter Lane 2, Differential | PETp(2) | B23 | A23 | Ground | GND | A23 |
| B24 | pair | PETn(2) | B24 | A24 | Ground | GND | A24 |
| B25 | Ground | GND | B25 | A25 | Receiver Lane 2, Differential pair | PERp(2) | A25 |
| B26 | Ground | GND | B26 | A26 | | | A26 |
| B27 | Transmitter Lane 3, Differential | PETp(3) | B27 | A27 | Ground | GND | A27 |
| B28 | pair | PETn(3) | B28 | A28 | Ground | GND | A28 |
| B29 | Ground | GND | B29 | A29 | - Receiver Lane 3, Differential pa | PERp(3) | A29 |
| B30 | Emergency Pwr Reduct | PWRBRK# | | A30 | | | A30 |
| B31 | Presence detect | PRSNT2# | B31 | A31 | Ground | GND | A31 |
| B32 | Ground | GND | B32 | A32 | Reserved | RSVD | A32 |
| B33 | Transmitter Lane 4, Differential | PETp(4) | B33 | A33 | Reserved | RSVD | A33 |
| B34 | pair | PETn(4) | B34 | A34 | Ground | GND | A34 |
| B35 | Ground | GND | B35 | A35 | Receiver Lane 4, Differential pair | PERp(4) | A35 |
| B36 | Ground | GND | B36 | | | | A36 |
| B37 | Transmitter Lane 5, Differential | PETp(5) | B37 | A37 | Ground | GND | A37 |
| B38 | pair | PETn(5) | B38 | A38 | Ground | GND | A38 |
| B39 | Ground | GND | B39 | A39 | Receiver Lane 5, Differential pair | PERp(5) | A39 |
| B40 | Ground | GND | B40 | | | | A40 |
| B41 | Transmitter Lane 6, Differential | PETp(6) | B41 | A41 | Ground | GND | A41 |
| B42 | pair | PETn(6) | B42 | A42 | Ground | GND | A42 |
| B43 | Ground | round GND B43 A43 Becoiver Lane 6 Differential pair | | PERp(6) | A43 | | |
| B44 | Ground | GND | B44 | A44 | Receiver Lane 6, Differential pair | PERn(6) | A44 |
| B45 | Transmitter Lane 7, Differential | PETp(7) | B45 | A45 | Ground | GND | A45 |
| B46 | pair | PETn(7) | B46 | A46 | Ground | GND | A46 |
| B47 | Ground | GND | B47 | A47 | Bacaivar Lana 7 Differential pair | PERp(7) | A47 |
| B48 | Presence detect | PRSNT2# | B48 | A48 | Receiver Lane 7, Differential pair | PERn(7) | A48 |
| B49 | Ground | GND | B49 | A49 | Ground | GND | A49 |

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ALL GROUNDS ARE TIED TOGETHER IN PCBS

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Regulatory: For regulatory inform or contact your 3M representative

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