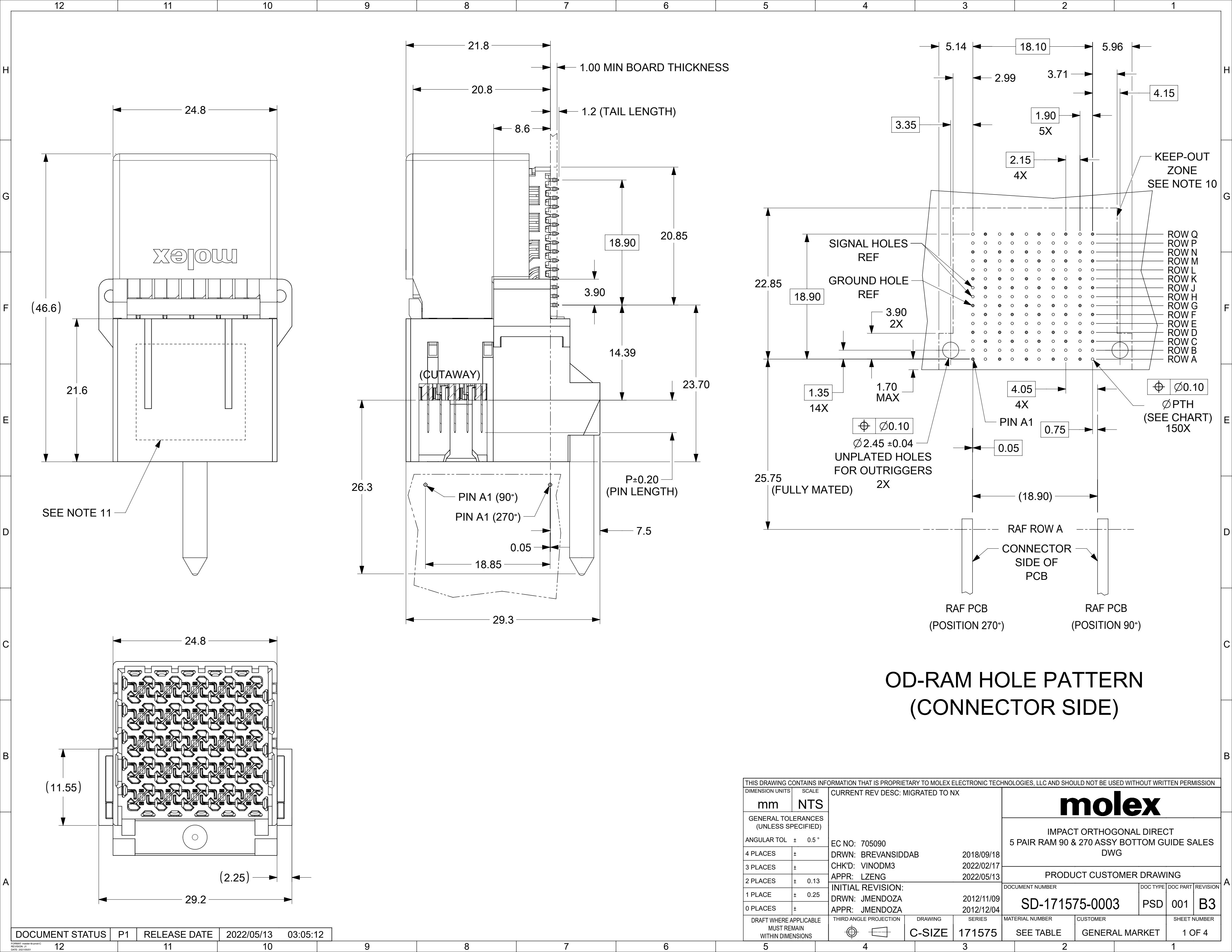
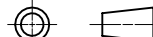
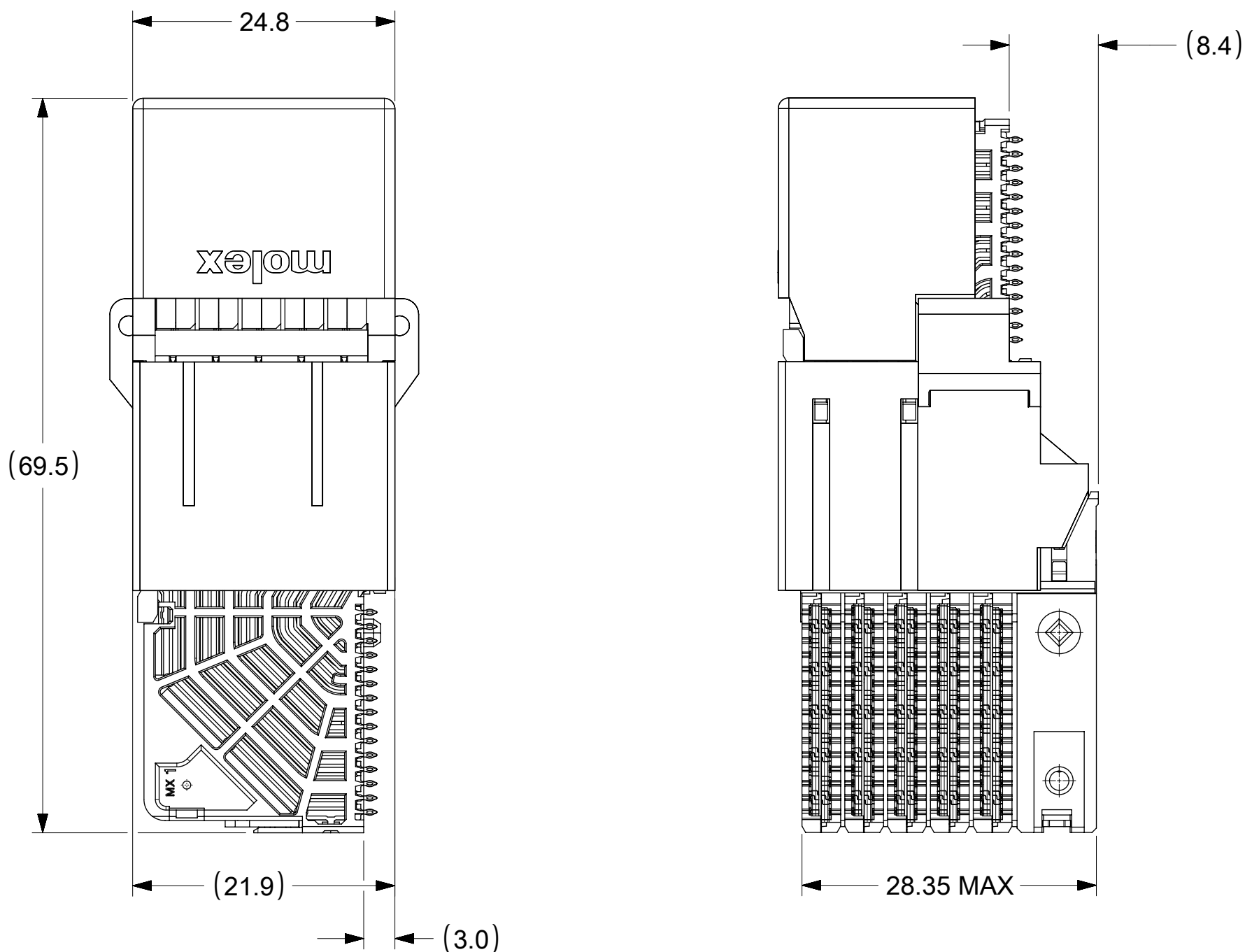




OD-RAM HOLE PATTERN  
(CONNECTOR SIDE)

|                                                                                                                                               |  |                                                                                                                                    |  |                                  |  |                    |  |                                                                                                                                |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------|--|--------------------|--|--------------------------------------------------------------------------------------------------------------------------------|--|
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |                                                                                                                                    |  |                                  |  |                    |  |                                                                                                                                |  |
| DIMENSION UNITS                                                                                                                               |  | SCALE                                                                                                                              |  | CURRENT REV DESC: MIGRATED TO NX |  |                    |  | <div>molex</div> <div>IMPACT ORTHOGONAL DIRECT</div> <div>5 PAIR RAM 90 &amp; 270 ASSY BOTTOM GUIDE SALES</div> <div>DWG</div> |  |
| mm                                                                                                                                            |  | NTS                                                                                                                                |  |                                  |  |                    |  |                                                                                                                                |  |
| GENERAL TOLERANCES (UNLESS SPECIFIED)                                                                                                         |  |                                                                                                                                    |  |                                  |  |                    |  |                                                                                                                                |  |
| ANGULAR TOL                                                                                                                                   |  | ± 0.5 °                                                                                                                            |  |                                  |  |                    |  |                                                                                                                                |  |
| 4 PLACES                                                                                                                                      |  | ±                                                                                                                                  |  | EC NO: 705090                    |  | DRWN: BREVANSIDDAB |  | 2018/09/18                                                                                                                     |  |
| 3 PLACES                                                                                                                                      |  | ±                                                                                                                                  |  | CHK'D: VINODM3                   |  | APPR: LZENG        |  | 2022/02/17                                                                                                                     |  |
| 2 PLACES                                                                                                                                      |  | ± 0.13                                                                                                                             |  | INITIAL REVISION:                |  | 2012/11/09         |  | DOCUMENT NUMBER                                                                                                                |  |
| 1 PLACE                                                                                                                                       |  | ± 0.25                                                                                                                             |  | DRWN: JMENDOZA                   |  | 2012/12/04         |  | SD-171575-0003                                                                                                                 |  |
| 0 PLACES                                                                                                                                      |  | ±                                                                                                                                  |  | APPR: JMENDOZA                   |  |                    |  | DOC TYPE                                                                                                                       |  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                                                    |  | <div>THIRD ANGLE PROJECTION</div> <div></div> |  | DRAWING                          |  | SERIES             |  | SHEET NUMBER                                                                                                                   |  |
|                                                                                                                                               |  |                                                                                                                                    |  |                                  |  |                    |  | 1 OF 4                                                                                                                         |  |
|                                                                                                                                               |  |                                                                                                                                    |  |                                  |  |                    |  |                                                                                                                                |  |
|                                                                                                                                               |  |                                                                                                                                    |  | C-SIZE                           |  | 171575             |  | MATERIAL NUMBER                                                                                                                |  |
|                                                                                                                                               |  |                                                                                                                                    |  |                                  |  |                    |  | SEE TABLE                                                                                                                      |  |
|                                                                                                                                               |  |                                                                                                                                    |  |                                  |  |                    |  | CUSTOMER                                                                                                                       |  |
|                                                                                                                                               |  |                                                                                                                                    |  |                                  |  |                    |  | GENERAL MARKET                                                                                                                 |  |

|                 |    |              |            |          |
|-----------------|----|--------------|------------|----------|
| DOCUMENT STATUS | P1 | RELEASE DATE | 2022/05/13 | 03:05:12 |
|-----------------|----|--------------|------------|----------|



## MATED DIMENSIONS

(POSITION 90° SHOWN)

- NOTES:
1. MATERIALS: HOUSING - LIQUID CRYSTAL POLYMER (LCP)  
GLASS-FILLED, UL94V-0  
TERMINALS - HIGH PERFORMANCE COPPER ALLOY
  2. FINISH: 30μ MIN GOLD IN CONTACT AREA.  
SELECTIVE TIN ON PCB TAILS.  
NICKEL OVERALL.
  3. REFER TO MOLEX PRODUCT SPECIFICATION PS-76060-999  
FOR PERFORMANCE SPECIFICATIONS AND ADDITIONAL PCB INFORMATION.
  4. THIS PART CONFORMS TO CLASS B REQUIREMENTS OF  
COSMETIC SPEC PS-45499-002.
  5. PACKAGE PER: PK-70873-8023.
  6. SEE SHEETS 3 AND 4 FOR ORTHOGONAL PIN MAPPING.
  7. REFER TO SHEET 3 AND 4 FOR THE MATING RECEPTACLES.
  8. REFER TO MOLEX ROUTING GUIDE AS-76850-990 FOR ADDITIONAL PCB LAYOUT  
AND ROUTING RECOMMENDATIONS.
  9. CONNECTORS ARE SUPPLIED WITH TWO 2-32 THREAD FORMING  
SCREWS.
  - 10.THESE DIMENSIONS REPRESENT THE AREA NEEDED TO ACCOMODATE CONNECTOR  
INSERTION AND REPAIR ON THE PC BOARD. THIS IS REFERED TO AS THE  
"CONNECTOR KEEP OUT ZONE" AND DOES NOT REPRESENT THE ACTUAL PERIMETER  
OF THE CONNECTOR.
  - 11.MARKING: LOCATED APPROXIMATELY AS SHOWN, ON THE BOTTOM OR TOP OF  
HOUSING. PART NUMBER AND DATE CODE.

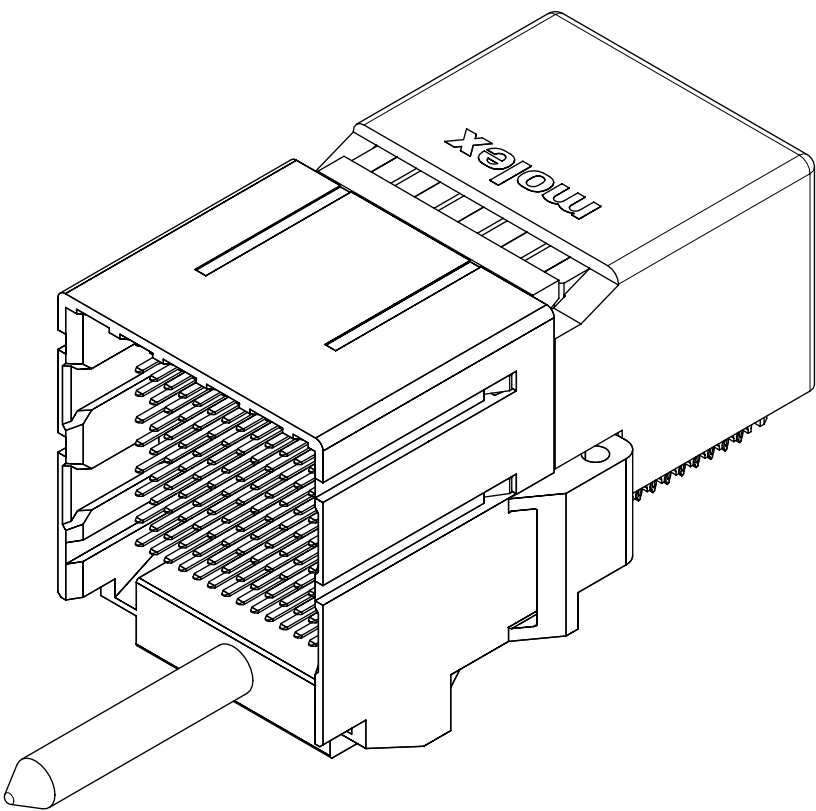
**171575-91\*\***

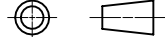
MODULE TYPE  
9 = BOTTOM GUIDED, TIN

# OF COLUMNS  
1 = 10 COLUMN

PIN LENGTH (P)  
4 = 4.90 (0.46 PTH)  
5 = 5.50 (0.46 PTH)  
7 = 4.90 (0.39 PTH)  
8 = 5.50 (0.39 PTH)

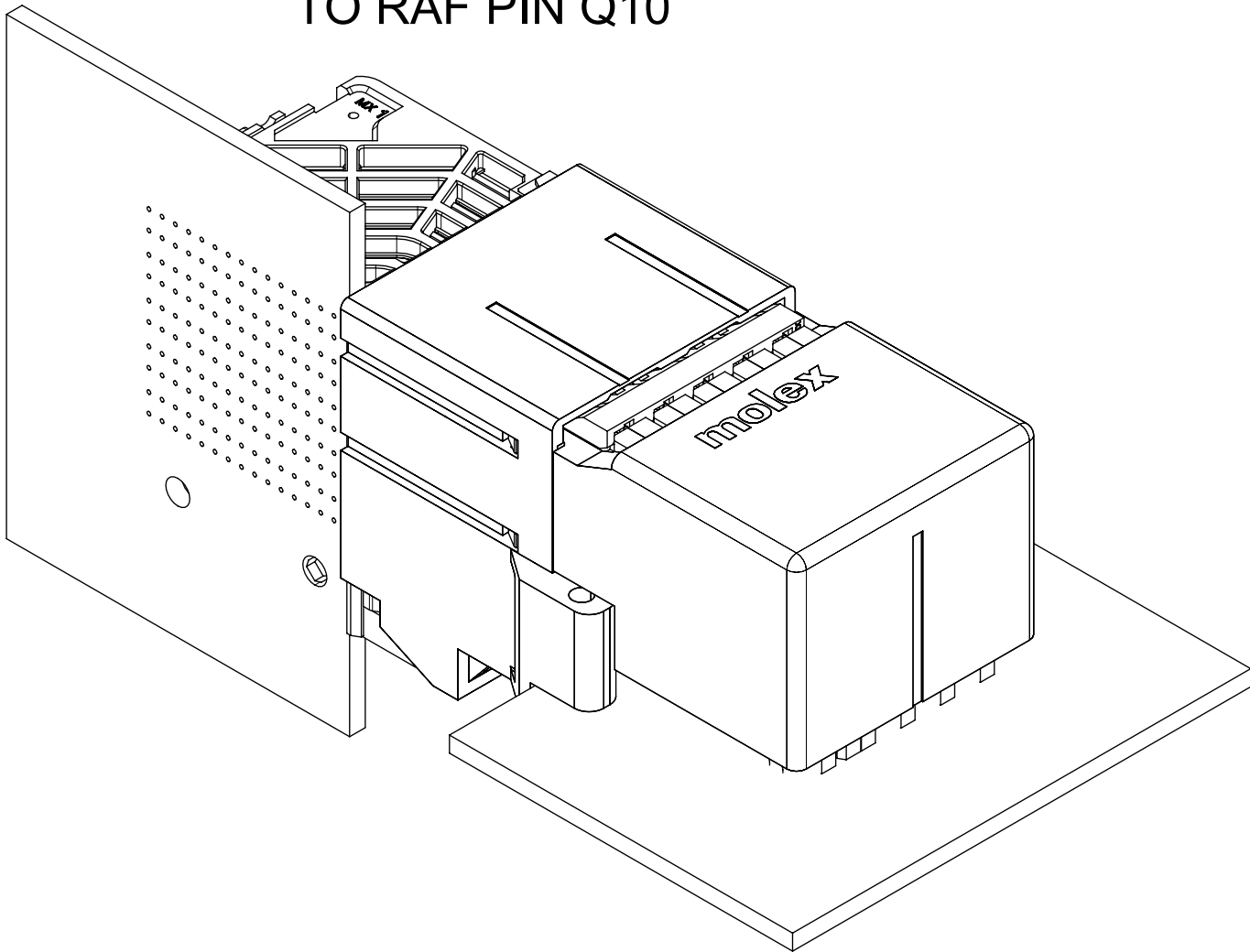
MATE POSITION  
0 = 90 DEGREE  
3 = 270 DEGREE



| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  |        |  |                                                                                                                                                                                                                                  |  |         |  |                                                                                                    |  |                 |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--|--------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------|--|----------------------------------------------------------------------------------------------------|--|-----------------|--|
| DIMENSION UNITS                                                                                                                               |  | SCALE  |  | CURRENT REV DESC: MIGRATED TO NX<br><br>EC NO: 705090<br>DRWN: BREVANSIDDAB 2018/09/18<br>CHK'D: VINODM3 2022/02/17<br>APPR: LZENG 2022/05/13<br><br>INITIAL REVISION:<br>DRWN: JMENDOZA 2012/11/09<br>APPR: JMENDOZA 2012/12/04 |  |         |  | <div>molex</div><br>IMPACT ORTHOGONAL DIRECT<br>5 PAIR RAM 90 & 270 ASSY BOTTOM GUIDE SALES<br>DWG |  |                 |  |
| mm                                                                                                                                            |  | NTS    |  |                                                                                                                                                                                                                                  |  |         |  |                                                                                                    |  |                 |  |
| GENERAL TOLERANCES<br>(UNLESS SPECIFIED)                                                                                                      |  |        |  |                                                                                                                                                                                                                                  |  |         |  |                                                                                                    |  |                 |  |
| ANGULAR TOL ± 0.5 °                                                                                                                           |  |        |  |                                                                                                                                                                                                                                  |  |         |  |                                                                                                    |  |                 |  |
| 4 PLACES                                                                                                                                      |  | ±      |  |                                                                                                                                                                                                                                  |  |         |  |                                                                                                    |  |                 |  |
| 3 PLACES                                                                                                                                      |  | ±      |  |                                                                                                                                                                                                                                  |  |         |  |                                                                                                    |  |                 |  |
| 2 PLACES                                                                                                                                      |  | ± 0.13 |  |                                                                                                                                                                                                                                  |  |         |  |                                                                                                    |  |                 |  |
| 1 PLACE                                                                                                                                       |  | ± 0.25 |  |                                                                                                                                                                                                                                  |  |         |  |                                                                                                    |  |                 |  |
| 0 PLACES                                                                                                                                      |  | ±      |  |                                                                                                                                                                                                                                  |  |         |  |                                                                                                    |  |                 |  |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                                                                                    |  |        |  | THIRD ANGLE PROJECTION                                                                                                                                                                                                           |  | DRAWING |  | SERIES                                                                                             |  | DOCUMENT NUMBER |  |
|                                                                                                                                               |  |        |  |                                                                                                                                             |  | C-SIZE  |  | 171575                                                                                             |  | SD-171575-0003  |  |
|                                                                                                                                               |  |        |  |                                                                                                                                                                                                                                  |  |         |  | MATERIAL NUMBER                                                                                    |  | CUSTOMER        |  |
|                                                                                                                                               |  |        |  |                                                                                                                                                                                                                                  |  |         |  | SEE TABLE                                                                                          |  | GENERAL MARKET  |  |
|                                                                                                                                               |  |        |  |                                                                                                                                                                                                                                  |  |         |  |                                                                                                    |  | SHEET NUMBER    |  |
|                                                                                                                                               |  |        |  |                                                                                                                                                                                                                                  |  |         |  |                                                                                                    |  | 2 OF 4          |  |
|                                                                                                                                               |  |        |  |                                                                                                                                                                                                                                  |  |         |  |                                                                                                    |  | B3              |  |
|                                                                                                                                               |  |        |  |                                                                                                                                                                                                                                  |  |         |  |                                                                                                    |  | PSD 001         |  |

# ORTHO POSITION 90°

OD-RAM PIN A1 MAPS  
TO RAF PIN Q10



REFER TO MOLEX SALES DRAWING SD - 76990-004  
FOR MATING RECEPTACLES.

## ORTHO PIN MAPPING

### OPTION 90 (NEAR SIDE - FAR SIDE)

|        |        |        |        |        |        |        |        |        |         |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| A1-Q10 | A2-P10 | A3-M10 | A4-L10 | A5-J10 | A6-H10 | A7-F10 | A8-E10 | A9-C10 | A10-B10 |
| B1-Q9  | B2-N10 | B3-M9  | B4-K10 | B5-J9  | B6-G10 | B7-F9  | B8-D10 | B9-C9  | B10-A10 |
| C1-P9  | C2-N9  | C3-L9  | C4-K9  | C5-H9  | C6-G9  | C7-E9  | C8-D9  | C9-B9  | C10-A9  |
| D1-Q8  | D2-P8  | D3-M8  | D4-L8  | D5-J8  | D6-H8  | D7-F8  | D8-E8  | D9-C8  | D10-B8  |
| E1-Q7  | E2-N8  | E3-M7  | E4-K8  | E5-J7  | E6-G8  | E7-F7  | E8-D8  | E9-C7  | E10-A8  |
| F1-P7  | F2-N7  | F3-L7  | F4-K7  | F5-H7  | F6-G7  | F7-E7  | F8-D7  | F9-B7  | F10-A7  |
| G1-Q6  | G2-P6  | G3-M6  | G4-L6  | G5-J6  | G6-H6  | G7-F6  | G8-E6  | G9-C6  | G10-B6  |
| H1-Q5  | H2-N6  | H3-M5  | H4-K6  | H5-J5  | H6-G6  | H7-F5  | H8-D6  | H9-C5  | H10-A6  |
| J1-P5  | J2-N5  | J3-L5  | J4-K5  | J5-H5  | J6-G5  | J7-E5  | J8-D5  | J9-B5  | J10-A5  |
| K1-Q4  | K2-P4  | K3-M4  | K4-L4  | K5-J4  | K6-H4  | K7-F4  | K8-E4  | K9-C4  | K10-B4  |
| L1-Q3  | L2-N4  | L3-M3  | L4-K4  | L5-J3  | L6-G4  | L7-F3  | L8-D4  | L9-C3  | L10-A4  |
| M1-P3  | M2-N3  | M3-L3  | M4-K3  | M5-H3  | M6-G3  | M7-E3  | M8-D3  | M9-B3  | M10-A3  |
| N1-Q2  | N2-P2  | N3-M2  | N4-L2  | N5-J2  | N6-H2  | N7-F2  | N8-E2  | N9-C2  | N10-B2  |
| P1-Q1  | P2-N2  | P3-M1  | P4-K2  | P5-J1  | P6-G2  | P7-F1  | P8-D2  | P9-C1  | P10-A2  |
| Q1-P1  | Q2-N1  | Q3-L1  | Q4-K1  | Q5-H1  | Q6-G1  | Q7-E1  | Q8-D1  | Q9-B1  | Q10-A1  |

NOTE: PINOUTS SHOWN IN BALLOONS ARE GROUNDS.  
GROUND PATHS ARE NOT DISCRETE CIRCUITS.

| MATERIAL NUMBER | # OF COLUMNS | # OF DIFF PAIR | MATE POSITION | DIM P | PTH Ø     |
|-----------------|--------------|----------------|---------------|-------|-----------|
| 171575-9104     | 10           | 50             | 90            | 4.90  | 0.46±0.05 |
| 171575-9105     | 10           | 50             | 90            | 5.50  | 0.46±0.05 |
| 171575-9107     | 10           | 50             | 90            | 4.90  | 0.39±0.05 |
| 171575-9108     | 10           | 50             | 90            | 5.50  | 0.39±0.05 |

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

|                                                      |         |                                                                                                                                                                                                                                            |         |        |                 |          |          |          |
|------------------------------------------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------|-----------------|----------|----------|----------|
| DIMENSION UNITS                                      | SCALE   | CURRENT REV DESC: MIGRATED TO NX                                                                                                                                                                                                           |         |        |                 |          |          |          |
| mm                                                   | NTS     |                                                                                                                                                                                                                                            |         |        |                 |          |          |          |
| GENERAL TOLERANCES (UNLESS SPECIFIED)                |         | <div>EC NO: 705090</div> <div>DRWN: BREVANSIDDAB2018/09/18</div> <div>CHK'D: VINODM32022/02/17</div> <div>APPR: LZENG2022/05/13</div> <div>INITIAL REVISION:</div> <div>DRWN: JMENDOZA2012/11/09</div> <div>APPR: JMENDOZA2012/12/04</div> |         |        |                 |          |          |          |
| ANGULAR TOL                                          | ± 0.5 ° |                                                                                                                                                                                                                                            |         |        |                 |          |          |          |
| 4 PLACES                                             | ±       |                                                                                                                                                                                                                                            |         |        |                 |          |          |          |
| 3 PLACES                                             | ±       |                                                                                                                                                                                                                                            |         |        |                 |          |          |          |
| 2 PLACES                                             | ± 0.13  |                                                                                                                                                                                                                                            |         |        |                 |          |          |          |
| 1 PLACE                                              | ± 0.25  |                                                                                                                                                                                                                                            |         |        |                 |          |          |          |
| 0 PLACES                                             | ±       |                                                                                                                                                                                                                                            |         |        |                 |          |          |          |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |         | THIRD ANGLE PROJECTION                                                                                                                                                                                                                     | DRAWING | SERIES | DOCUMENT NUMBER | DOC TYPE | DOC PART | REVISION |
|                                                      |         |                                                                                                                                                                                                                                            | C-SIZE  | 171575 | SD-171575-0003  | PSD      | 001      | B3       |

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IMPACT ORTHOGONAL DIRECT  
5 PAIR RAM 90 & 270 ASSY BOTTOM GUIDE SALES  
DWG

PRODUCT CUSTOMER DRAWING

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

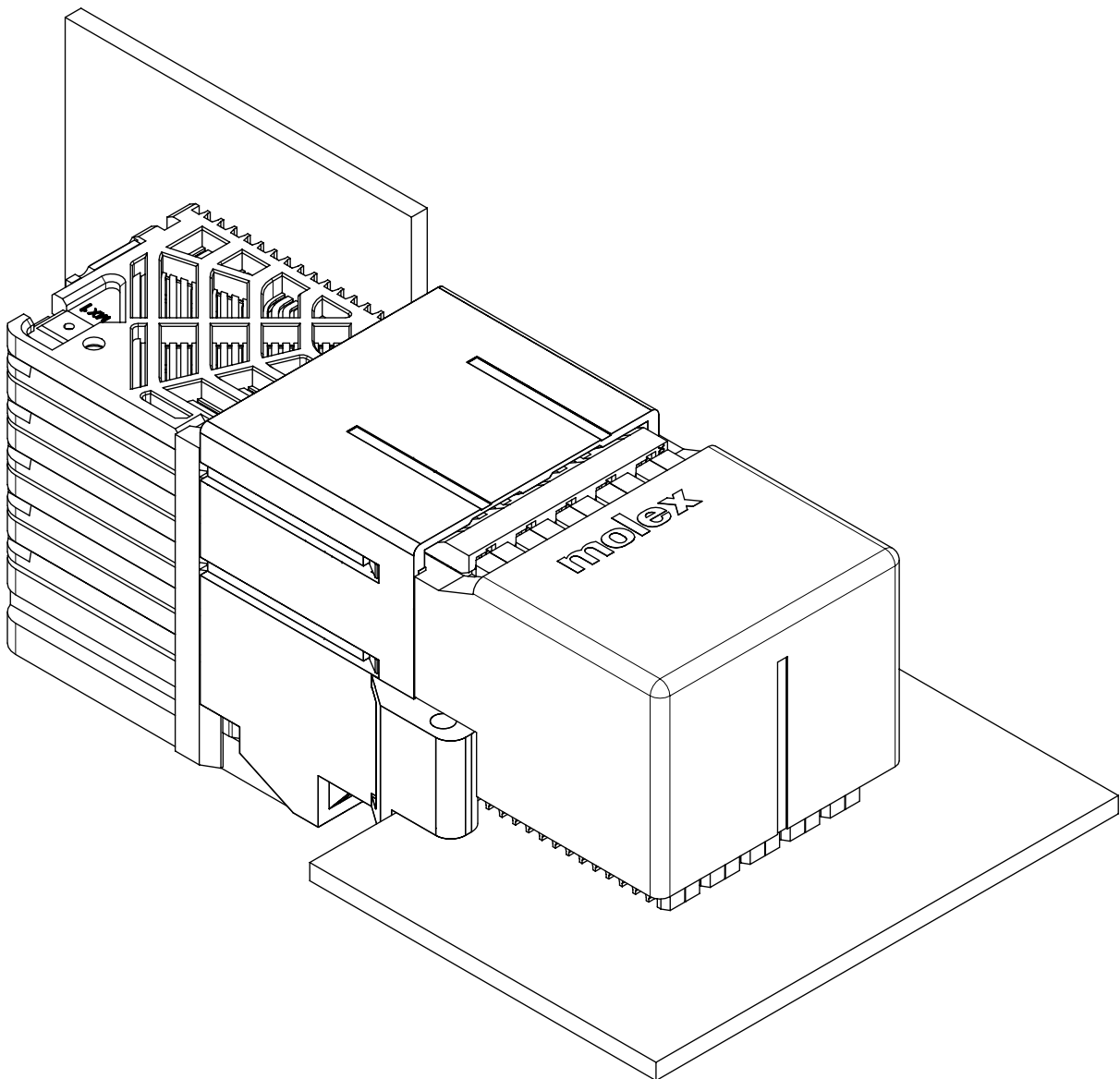
SEE TABLE

GENERAL MARKET

3 OF 4



ORTHO POSITION 270°  
OD-RAM PIN A1 MAPS  
TO RAF PIN A1



REFER TO MOLEX SALES DRAWING SD - 76990-002  
FOR MATING RECEPTACLES.

| ORTHO PIN MAPPING                 |        |        |        |        |        |        |        |        |         |
|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| OPTION 270 (NEAR SIDE - FAR SIDE) |        |        |        |        |        |        |        |        |         |
| A1-A1                             | A2-B1  | A3-D1  | A4-E1  | A5-G1  | A6-H1  | A7-K1  | A8-L1  | A9-N1  | A10-P1  |
| B1-A2                             | B2-C1  | B3-D2  | B4-F1  | B5-G2  | B6-J1  | B7-K2  | B8-M1  | B9-N2  | B10-Q1  |
| C1-B2                             | C2-C2  | C3-E2  | C4-F2  | C5-H2  | C6-J2  | C7-L2  | C8-M2  | C9-P2  | C10-Q2  |
| D1-A3                             | D2-B3  | D3-D3  | D4-E3  | D5-G3  | D6-H3  | D7-K3  | D8-L3  | D9-N3  | D10-P3  |
| E1-A4                             | E2-C3  | E3-D4  | E4-F3  | E5-G4  | E6-J3  | E7-K4  | E8-M3  | E9-N4  | E10-Q3  |
| F1-B4                             | F2-C4  | F3-E4  | F4-F4  | F5-H4  | F6-J4  | F7-L4  | F8-M4  | F9-P4  | F10-Q4  |
| G1-A5                             | G2-B5  | G3-D5  | G4-E5  | G5-G5  | G6-H5  | G7-K5  | G8-L5  | G9-N5  | G10-P5  |
| H1-A6                             | H2-C5  | H3-D6  | H4-F5  | H5-G6  | H6-J5  | H7-K6  | H8-M5  | H9-N6  | H10-Q5  |
| J1-B6                             | J2-C6  | J3-E6  | J4-F6  | J5-H6  | J6-J6  | J7-L6  | J8-M6  | J9-P6  | J10-Q6  |
| K1-A7                             | K2-B7  | K3-D7  | K4-E7  | K5-G7  | K6-H7  | K7-K7  | K8-L7  | K9-N7  | K10-P7  |
| L1-A8                             | L2-C7  | L3-D8  | L4-F7  | L5-G8  | L6-J7  | L7-K8  | L8-M7  | L9-N8  | L10-Q7  |
| M1-B8                             | M2-C8  | M3-E8  | M4-F8  | M5-H8  | M6-J8  | M7-L8  | M8-M8  | M9-P8  | M10-Q8  |
| N1-A9                             | N2-B9  | N3-D9  | N4-E9  | N5-G9  | N6-H9  | N7-K9  | N8-L9  | N9-N9  | N10-P9  |
| P1-A10                            | P2-C9  | P3-D10 | P4-F9  | P5-G10 | P6-J9  | P7-K10 | P8-M9  | P9-N10 | P10-Q9  |
| Q1-B10                            | Q2-C10 | Q3-E10 | Q4-F10 | Q5-H10 | Q6-J10 | Q7-L10 | Q8-M10 | Q9-P10 | Q10-Q10 |

NOTE: PINOUTS SHOWN IN BALLOONS ARE GROUNDS.  
GROUND PATHS ARE NOT DISCRETE CIRCUITS.

| MATERIAL NUMBER | # OF COLUMNS | # OF DIFF PAIR | MATE POSITION | DIM P | PTH Ø     |
|-----------------|--------------|----------------|---------------|-------|-----------|
| 171575-9134     | 10           | 50             | 270           | 4.90  | 0.46±0.05 |
| 171575-9135     | 10           | 50             | 270           | 5.50  | 0.46±0.05 |
| 171575-9137     | 10           | 50             | 270           | 4.90  | 0.39±0.05 |
| 171575-9138     | 10           | 50             | 270           | 5.50  | 0.39±0.05 |

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|                                                      |        |                                  |  |
|------------------------------------------------------|--------|----------------------------------|--|
| DIMENSION UNITS                                      | SCALE  | CURRENT REV DESC: MIGRATED TO NX |  |
| mm                                                   | NTS    |                                  |  |
| GENERAL TOLERANCES (UNLESS SPECIFIED)                |        |                                  |  |
| ANGULAR TOL                                          | ± 0.5° |                                  |  |
| 4 PLACES                                             | ±      |                                  |  |
| 3 PLACES                                             | ±      |                                  |  |
| 2 PLACES                                             | ± 0.13 |                                  |  |
| 1 PLACE                                              | ± 0.25 |                                  |  |
| 0 PLACES                                             | ±      |                                  |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |        | THIRD ANGLE PROJECTION           |  |

|                    |            |         |        |
|--------------------|------------|---------|--------|
| EC NO: 705090      |            |         |        |
| DRWN: BREVANSIDDAB | 2018/09/18 |         |        |
| CHK'D: VINODM3     | 2022/02/17 |         |        |
| APPR: LZENG        | 2022/05/13 |         |        |
| INITIAL REVISION:  |            |         |        |
| DRWN: JMENDOZA     | 2012/11/09 |         |        |
| APPR: JMENDOZA     | 2012/12/04 |         |        |
|                    |            | DRAWING | SERIES |
|                    |            | C-SIZE  | 171575 |

|                 |  |                |          |              |
|-----------------|--|----------------|----------|--------------|
| DOCUMENT NUMBER |  | DOC TYPE       | DOC PART | REVISION     |
| SD-171575-0003  |  | PSD            | 001      | B3           |
| MATERIAL NUMBER |  | CUSTOMER       |          | SHEET NUMBER |
| SEE TABLE       |  | GENERAL MARKET |          | 4 OF 4       |

moLEX

IMPACT ORTHOGONAL DIRECT  
5 PAIR RAM 90 & 270 ASSY BOTTOM GUIDE SALES  
DWG

PRODUCT CUSTOMER DRAWING