

Amphenol
FCI

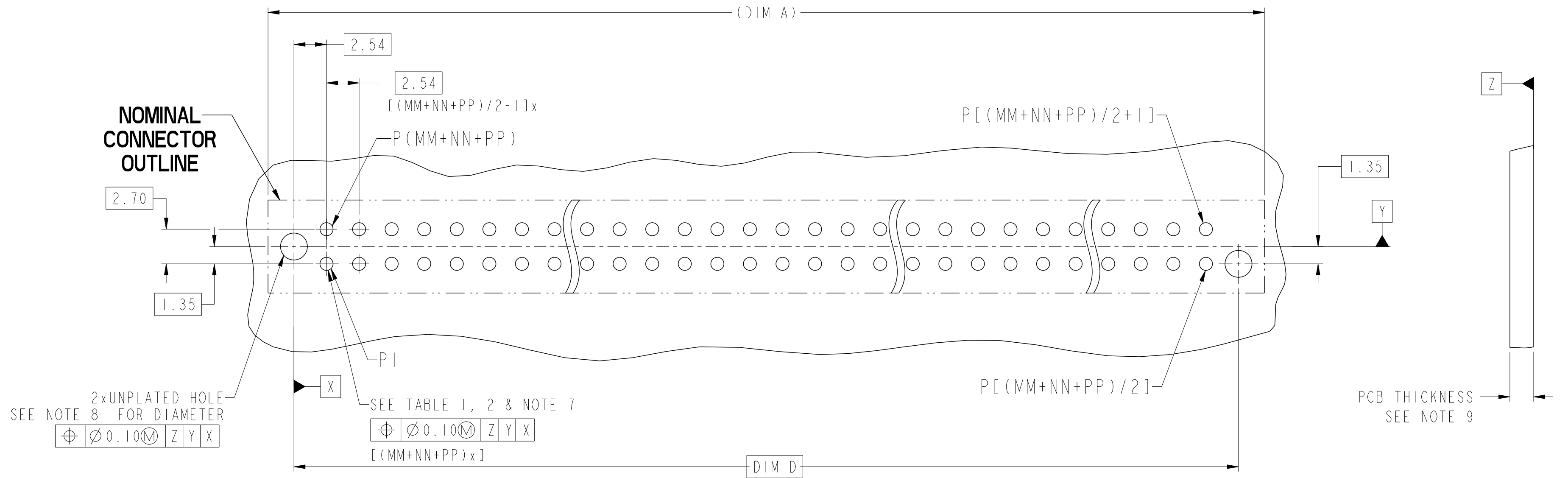
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| | | | | | | | | | | |
|---------------|---------------------------------------|------|----------------|--------------|------------|------------------------|--------------|----------|-----------|----------|
| spec ref | - | dr | Hai-Ling Liu | 2015/10/19 | projection | MM | size | A2 | scale | 4:1 |
| tolerance std | - | eng | Sunny2 Liu | 2016/07/22 | | ←→ | ecn no | - | rel level | Released |
| ASME Y14.5 | TOLERANCES UNLESS OTHERWISE SPECIFIED | chr | Terris Liu | 2016/07/22 | | | | | | |
| surface | linear | appr | Pei-Ming Zheng | 2016/07/22 | | | | | | |
| ASME Y14.5 | angular | 0° | ±2° | Amphenol FCI | title | HPCE VT REC | dwg no | 10137351 | rev | A |
| | | | | cat. no. | - | Product - Customer Drw | sheet 1 of 4 | | | |

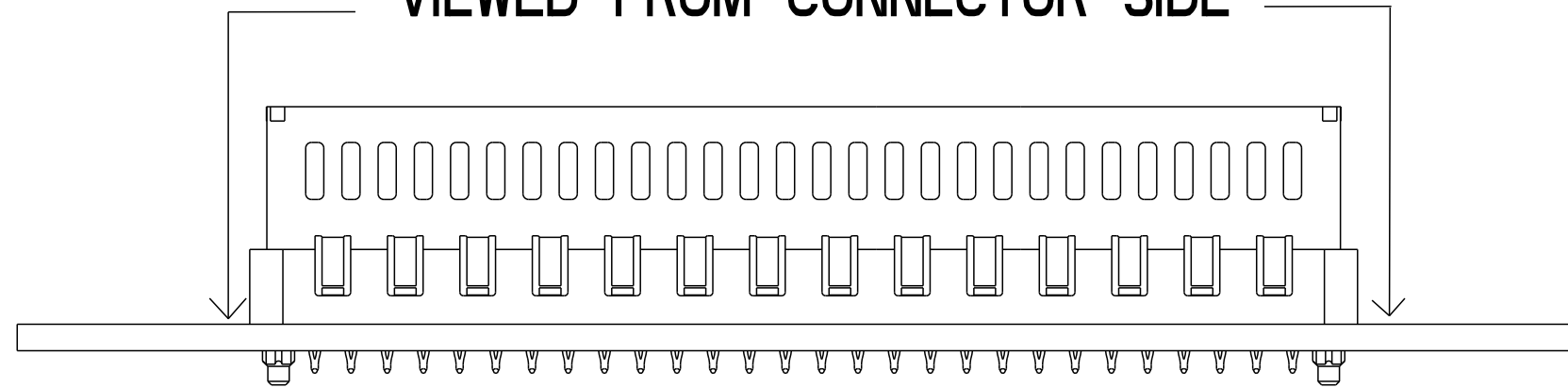
PDS: Rev :A

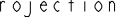

STATUS:Released

Printed: Jul 22, 2016



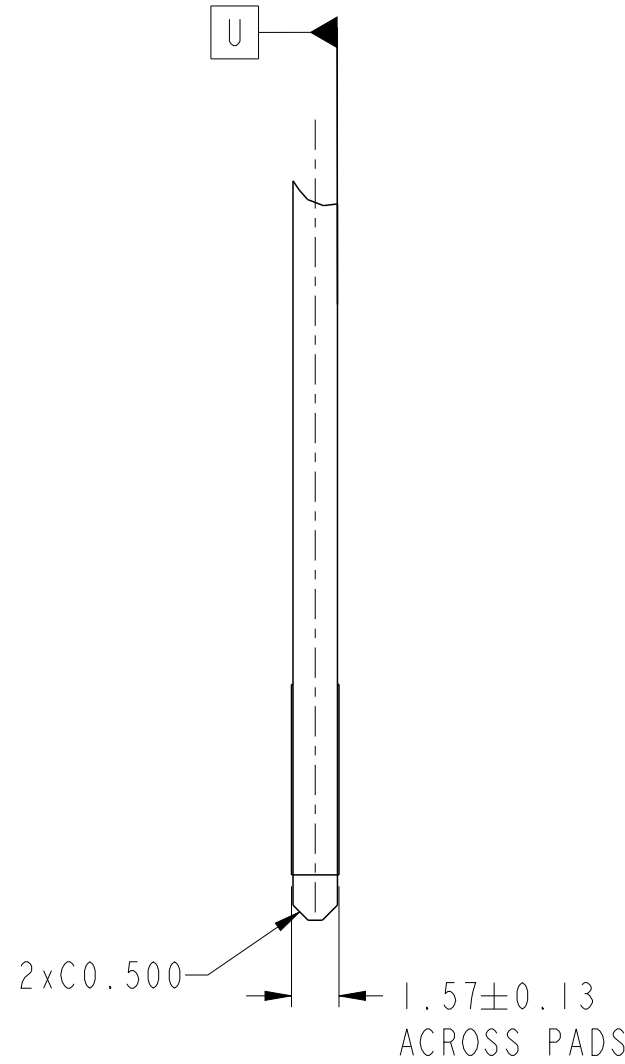
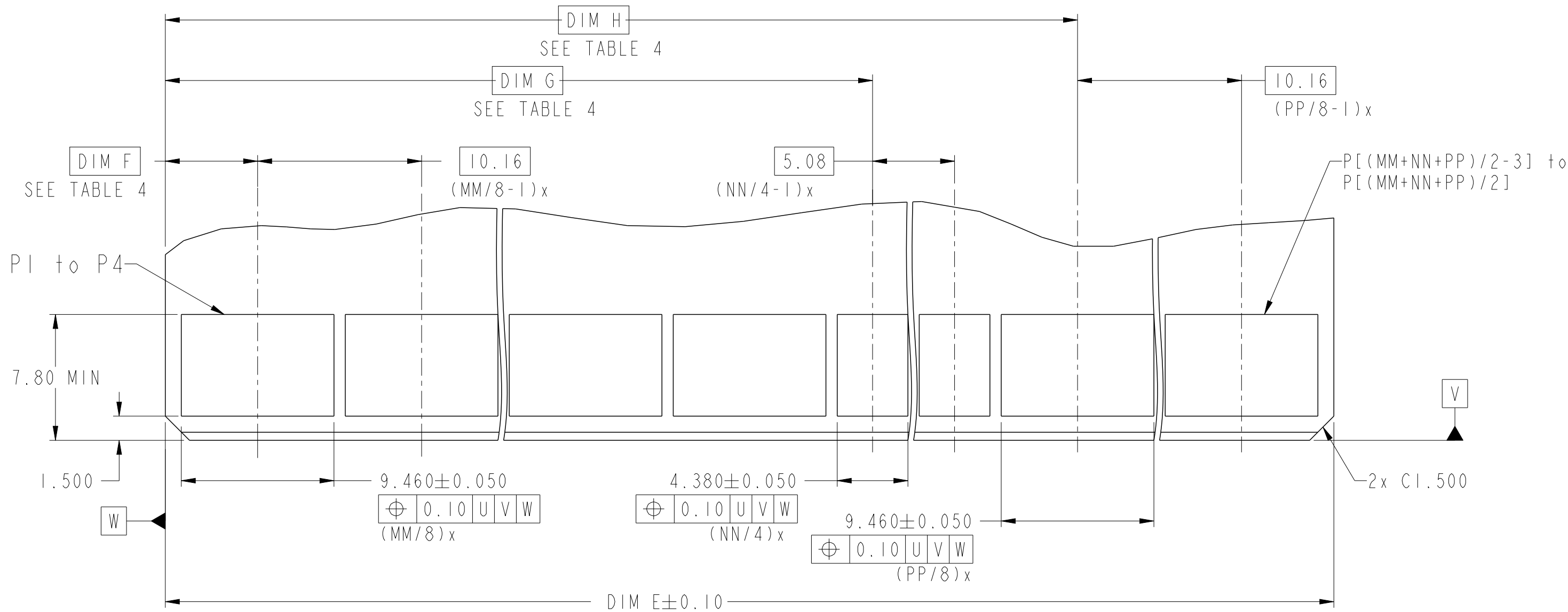
RECOMMENDED PCB LAYOUT VIEWED FROM CONNECTOR SIDE



| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|--|---------------------------------------|--|---------|--|-----------------|--|------------|--|-------------|--|---|--|---|--|----------|--|--------|--|----------------|--|----------|--|------------|--|----------------|--|
| spec ref | | - | | dr | | Hai-Ling Liu | | 2015/10/19 | | projection | |  | |  | | MM | | size | | A2 | | scale | | 4:1 | | | |
| tolerance std | | - | | eng | | Sunny2 Liu | | 2016/07/22 | | | | | | | | | | ecn no | | - | | Released | | | | | |
| ASME Y14.5 | | TOLERANCES UNLESS OTHERWISE SPECIFIED | | chr | | Terris Liu | | 2016/07/22 | | | | | | | | | | appr | | Pei-Ming Zheng | | | | 2016/07/22 | | product family | |
| surface | | ✓ | | linear | | Amphenol FCI | | title | | HPCE VT REC | | ALL P CONFIG - UNIVERSAL DRAWING | | dwg no | | 10137351 | | rev | | A | | | | | | | |
| | | | | 0.X | | | | | | | | | | | | | | | | | | ±0.5 | | | | | |
| | | | | 0.XX | | | | | | | | | | | | | | | | | | ±0.25 | | | | | |
| ASME Y14.5 | | | | angular | | 0° | | ±2° | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| CONTACT TYPE | TOP LAYER DESCRIPTION | TABLE 1 (HPCE / SOLDER TAILS) PLATED THROUGH-HOLE REQUIREMENTS | | | | |
|--------------|-----------------------|---|------------------|--------------------|---------------|------------------------|
| | | DRILLED HOLE DIAMETER | COPPER THICKNESS | TIN-LEAD THICKNESS | TIN THICKNESS | FINISHED HOLE DIAMETER |
| POWER | TIN-LEAD | 1.10-1.16 (1.15 DRILL) | 0.025 - 0.050 | 0.005 - 0.015 | -- | 0.94 - 1.10 |
| | IMMERSION TIN | 1.10-1.16 (1.15 DRILL) | 0.025 - 0.050 | -- | 0.9 - 1.5um | 0.94 - 1.10 |
| | COPPER | 1.10-1.16 (1.15 DRILL) | 0.025 - 0.050 | -- | -- | 0.94 - 1.10 |

| CONTACT TYPE | TOP LAYER DESCRIPTION | TABLE 2 (HPCE / PRESS-FIT TAILS) PLATED THROUGH-HOLE REQUIREMENTS | | | | |
|--------------|-----------------------|--|------------------|--------------------|---------------|------------------------|
| | | DRILLED HOLE DIAMETER | COPPER THICKNESS | TIN-LEAD THICKNESS | TIN THICKNESS | FINISHED HOLE DIAMETER |
| POWER | TIN-LEAD | 0.81-0.86 (0.85 DRILL) | 0.025 - 0.050 | 0.005 - 0.015 | -- | 0.65 - 0.80 |
| | IMMERSION TIN | 0.81-0.86 (0.85 DRILL) | 0.025 - 0.050 | -- | 0.9 - 1.5um | 0.70 - 0.80 |
| | COPPER | 0.81-0.86 (0.85 DRILL) | 0.025 - 0.050 | -- | -- | 0.70 - 0.80 |



RECOMMENDED MATING BOARD
FOOTPRINT

| | | | | | | | | | | | | | | | | | |
|-----------------|--|---------|--|---------------------------------------|--|------------------------|--|--------------|--|-------------------|--|-----------------|--|--------------------|--|------------------|--|
| spec ref - | | | | dr Hai-Ling Liu | | 2015/10/19 | | projection | | MM | | size A2 | | scale 4:1 | | | |
| tolerance std - | | | | eng Sunny2 Liu | | 2016/07/22 | | | | | | ecn no - | | rel level Released | | | |
| ASME Y14.5 | | | | TOLERANCES UNLESS OTHERWISE SPECIFIED | | chr Terris Liu | | | | | | | | | | 2016/07/22 | |
| | | | | appr Pei-Ming Zheng | | 2016/07/22 | | | | | | | | | | product family - | |
| surface - | | linear | | 0.X | | ±0.5 | | Amphenol FCI | | title HPCE VT REC | | dwg no 10137351 | | rev A | | | |
| | | | | 0.XX | | ±0.25 | | | | | | | | | | | |
| ASME Y14.5 | | | | 0.XXX | | ±0.10 | | | | | | | | | | | |
| | | angular | | 0° | | ±2° | | | | | | | | | | | |
| | | | | cat. no. - | | Product - Customer Drw | | | | | | sheet 3 of 4 | | | | | |

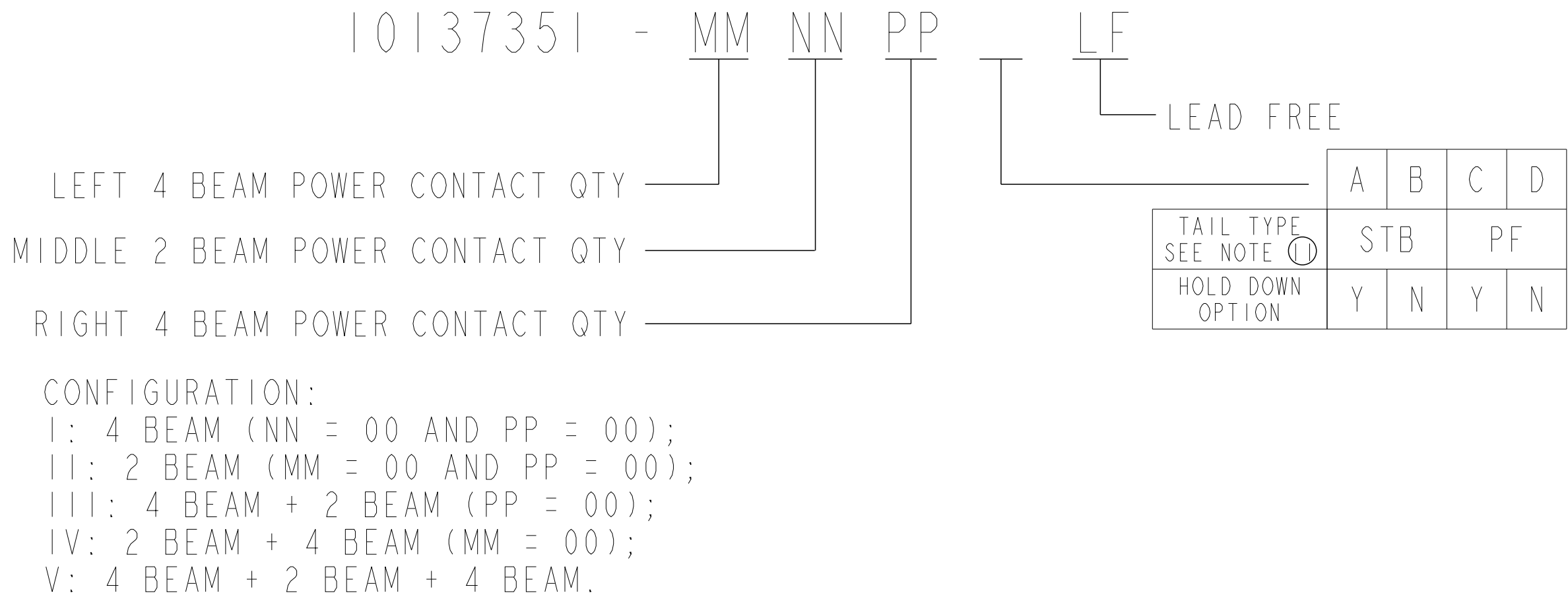
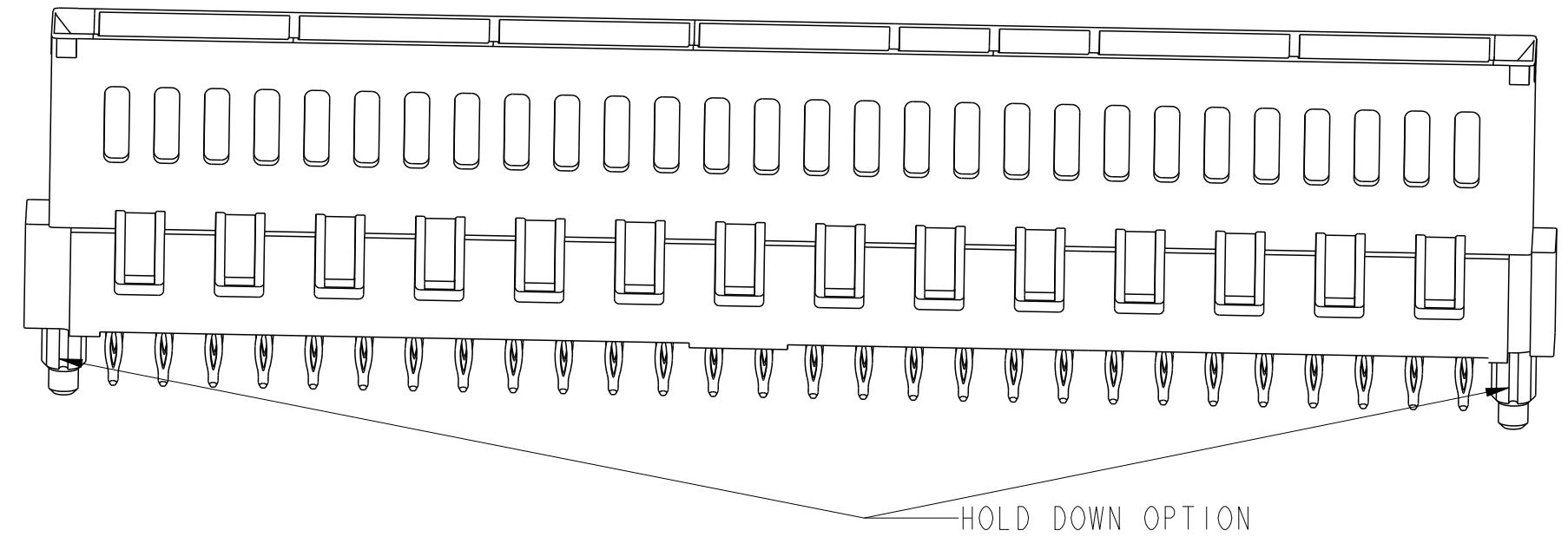
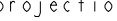




TABLE 3: HPCE STANDARD VERT REC P CONFIG

| DIM | TABLE 4: LENGTH FORMULAS | |
|---------|---|--|
| DIM A ⑩ | $(MM + NN + PP) / 2 \times 2.54 + 6.58$ | |
| DIM B | DIM A - 5.00 | |
| DIM C | DIM A - 2.34 | |
| DIM D | DIM A - 4.04 | |
| DIM E | DIM A - 5.30 | |
| DIM F | CONFIG. I | 5.72 |
| | CONFIG. II | - |
| | CONFIG. III | 5.72 |
| | CONFIG. IV | - |
| | CONFIG. V | 5.72 |
| DIM G | CONFIG. I | - |
| | CONFIG. II | 3.18 |
| | CONFIG. III | $(MM / 8 - 1) \times 10.16 + 13.34$ |
| | CONFIG. IV | 3.18 |
| | CONFIG. V | $(MM / 8 - 1) \times 10.16 + 13.34$ |
| DIM H | CONFIG. I | - |
| | CONFIG. II | - |
| | CONFIG. III | - |
| | CONFIG. IV | $(NN / 4 - 1) \times 5.08 + 10.80$ |
| | CONFIG. V | $(MM / 8 - 1) \times 10.16 + (NN / 4 - 1) \times 5.08 + 20.96$ |

- NOTES:
- CONNECTOR MATERIALS:
HOUSING: HIGH TEMPERATURE THERMAL PLASTIC, BLACK
UL 94V-0 COMPLIANT
CONTACTS: HIGH PERFORMANCE COPPER ALLOY.
 - CONTACT FINISH REF. GS-12-604 SECTION 5.2.
 - PRODUCT SPECIFICATION: GS-12-604.
 - APPLICATION SPECIFICATION: GS-20-128.
 - PRODUCT MARKING ON HOUSING IN AREA SHOWN MEETS AFCI SPECIFICATION GS-24-007.
 - PACKAGING MEETS FCI SPECIFICATION GS-14-937.
 - ALL HOLE SIZES ARE FINISHED HOLE SIZES.
 - MOUNTING HOLES ARE UNPLATED
 $\varnothing 2.40 \pm 0.1$ FOR PRESS-FIT TAILS
 $\varnothing 2.18 \pm 0.03$ FOR SOLDER TAILS
 - STB= SOLDER TO BOARD, 2.36mm PCB THICKNESS
PF= PRESS FIT, 1.57mm MINIMUM PCB THICKNESS
 - MAXIMUM OVERALL LENGTH IS 100mm
 - PRESS FIT APPLICATION TOOLING DRAWING: 10119453



| | | | | | | | | | | | | | |
|---------------|---|---------|----------------|------------|---|---|-------------|----|-----------|----------|--|-----|---|
| spec ref | - | dr | Hai-Ling Liu | 2015/10/19 |  |  | size | A2 | scale | 4:1 | | | |
| tolerance std | - | eng | Sunny2 Liu | 2016/07/22 | | | ecn no | - | rel level | Released | | | |
| ASME Y14.5 | TOLERANCES UNLESS OTHERWISE SPECIFIED | chr | Terris Liu | 2016/07/22 | | | | | | | | | |
| | | appr | Pei-Ming Zheng | 2016/07/22 | product family | | HPCE | | | | | | |
| surface |  | linear | 0.X | ±0.5 | Amphenol FCI | title | HPCE VT REC | | dwg no | 10137351 | | rev | A |
| | | | 0.XX | ±0.25 | | | | | | | | | |
| ASME Y14.5 | | angular | 0° | ±2° | | | | | | | | | |

Mouser Electronics

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