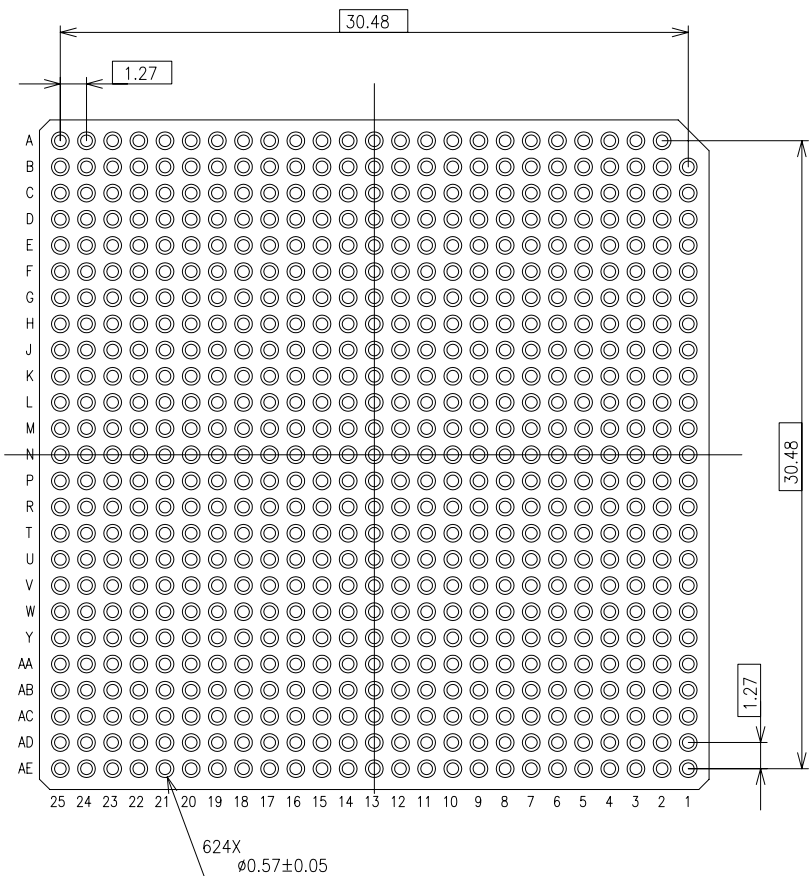
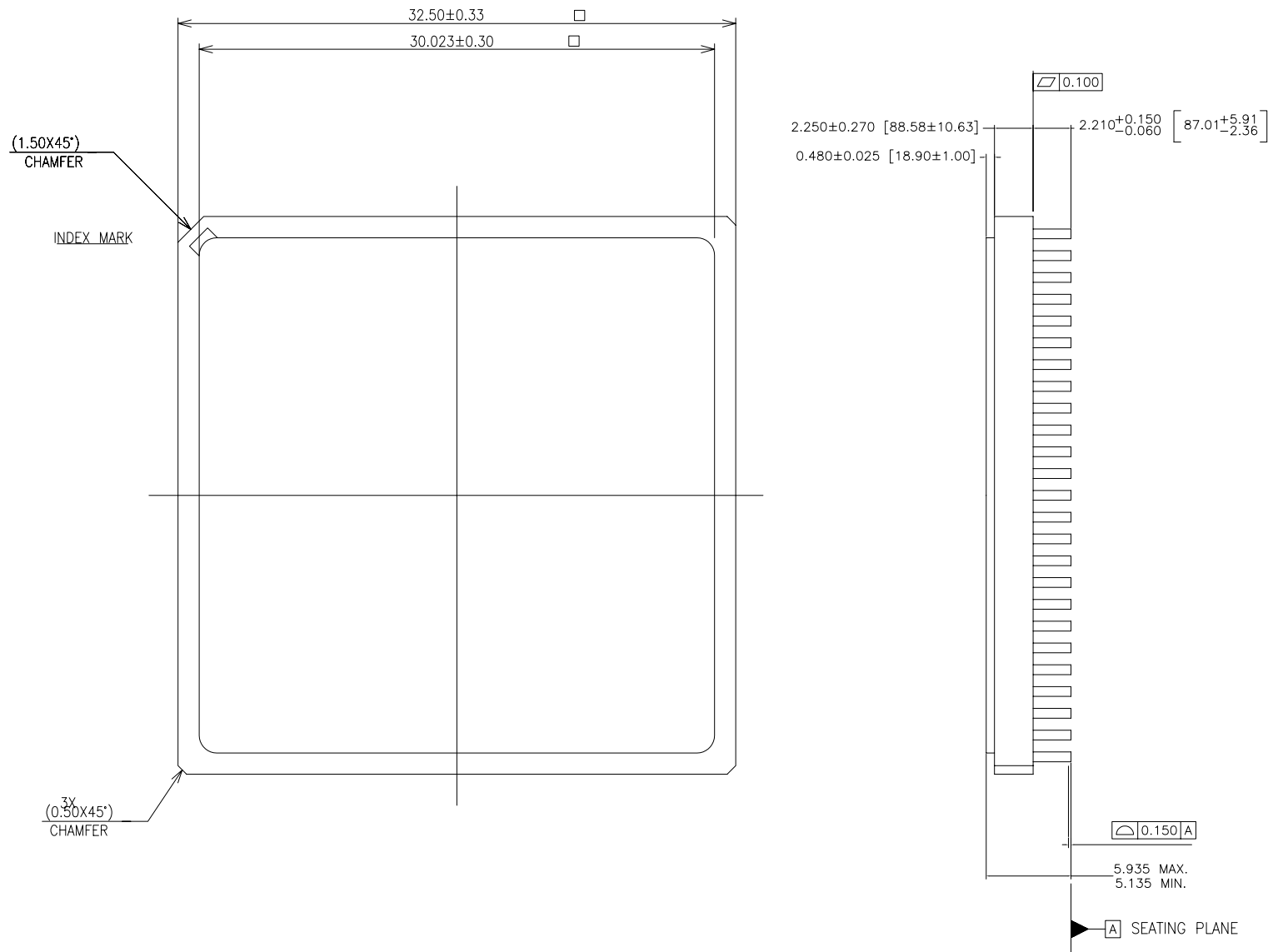


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WRITTEN PERMISSION OF ACTEL.

| ECN NO. | REV. | DESCRIPTION OF CHANGE                                                                               | EFFECTIVE DATE | ORIGINATOR |
|---------|------|-----------------------------------------------------------------------------------------------------|----------------|------------|
| 2005522 | 5    | Edit part number summary and add column dimension tolerance                                         | 08/12/2005     | Lijie Zhao |
| 2007519 | 6    | Remove sheet 1st and sheet 2nd (total sheets is 6 instead of 8)                                     | 09/06/2007     | Lijie Zhao |
| 2009662 | 7    | Add 1st and sheet 2nd (total sheets is 8 instead of 6)<br>Column material: 80Pb/20Sn with Cu Ribbon | 09/06/2007     | Lijie Zhao |



## Part Number summary

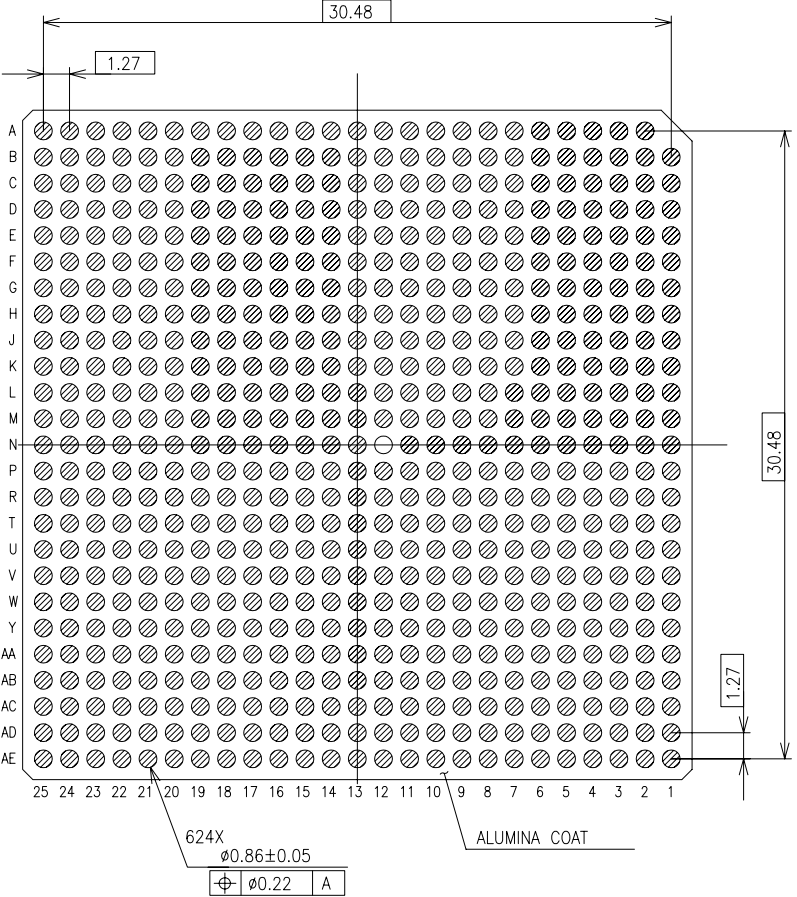
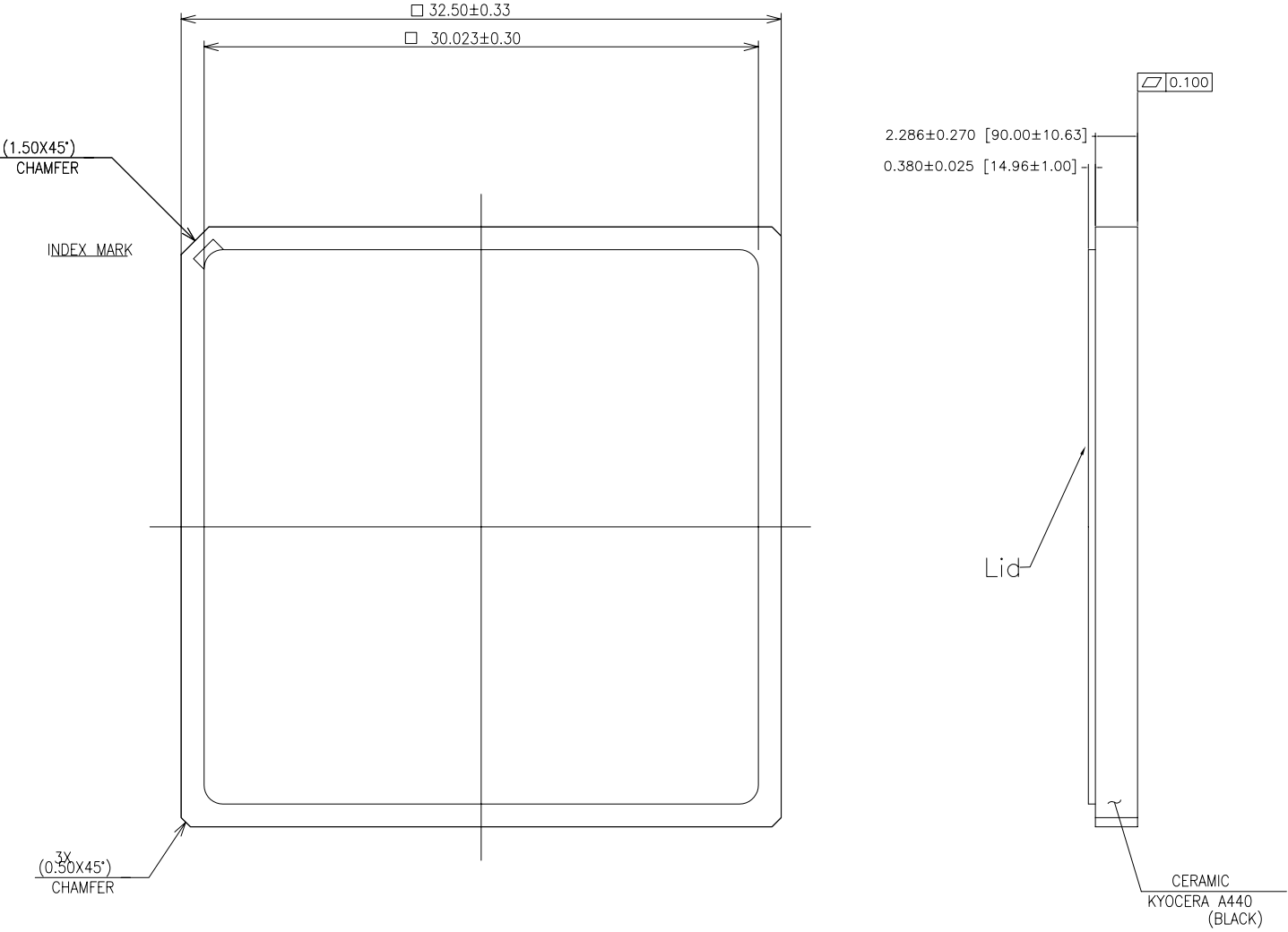
| Actel Part Number   | Kyocera Part number | Description                                    |
|---------------------|---------------------|------------------------------------------------|
| YPKG-62CG-7973DC    | KD-NA5111           | Blank LG624<br>(Refer page 3 to 8 for details) |
| LG624 Daisy Chain-1 |                     | Assembled LG624                                |
| CG624 Daisy Chain-1 |                     | Assembled CG624                                |

SOLDER COLUMN MATERIAL:  
Pb80/Sn20 with Cu ribbon

|                                                                            |                                                                                                     |                                                                                                                                                                |                                                                                 |                                                        |                                     |              |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------|--------------|
| GENERAL TOLERANCE<br><br>X.XX ± 0.20<br><br><br>Unless Otherwise Specified | PROJECTION<br> |  ACTEL CORPORATION<br>2061 STIERLIN COURT<br>MOUNTAIN VIEW, CA 94043-4655 |                                                                                 |                                                        |                                     |              |
|                                                                            | APPROVALS                                                                                           | DATE                                                                                                                                                           | TITLE<br><br>CG624 32.5x32.5mm, 1.27mm pitch<br><br>Daisy Chain Package Drawing |                                                        |                                     |              |
|                                                                            | DRAWN<br>Erwin Quiobo                                                                               | 1/26/2005                                                                                                                                                      |                                                                                 |                                                        |                                     |              |
| DIMENSIONS:<br><br>Millimeters (mm)                                        | CHECKED                                                                                             |                                                                                                                                                                |                                                                                 | VENDOR NAME:<br><br>Kycera                             | ACTEL DWG. NUMBER<br><br>1-21-11031 | REV<br><br>7 |
|                                                                            | ENG'R                                                                                               |                                                                                                                                                                | SIZE<br>B                                                                       | Actel Package Part Number<br>Refer Part Nubmer Summary | VENDOR DWG. NUMBER<br><br>KD-NA5111 | REV<br><br>0 |
|                                                                            | RELEASED                                                                                            |                                                                                                                                                                |                                                                                 |                                                        | SCALE: NONE                         | SHEET 1 OF 8 |

ACTEL CONFIDENTIAL

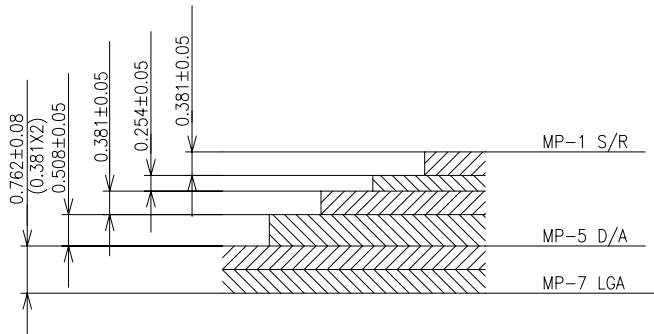
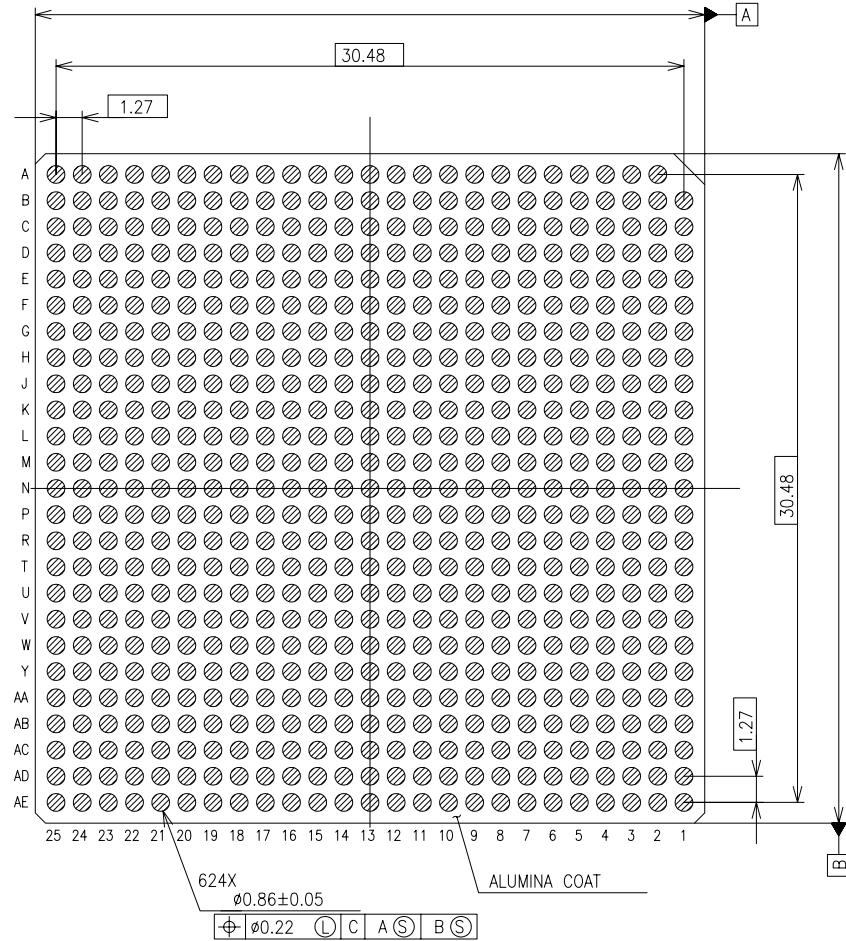
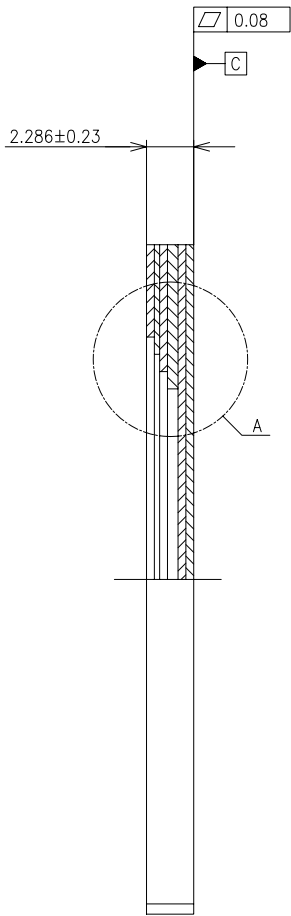
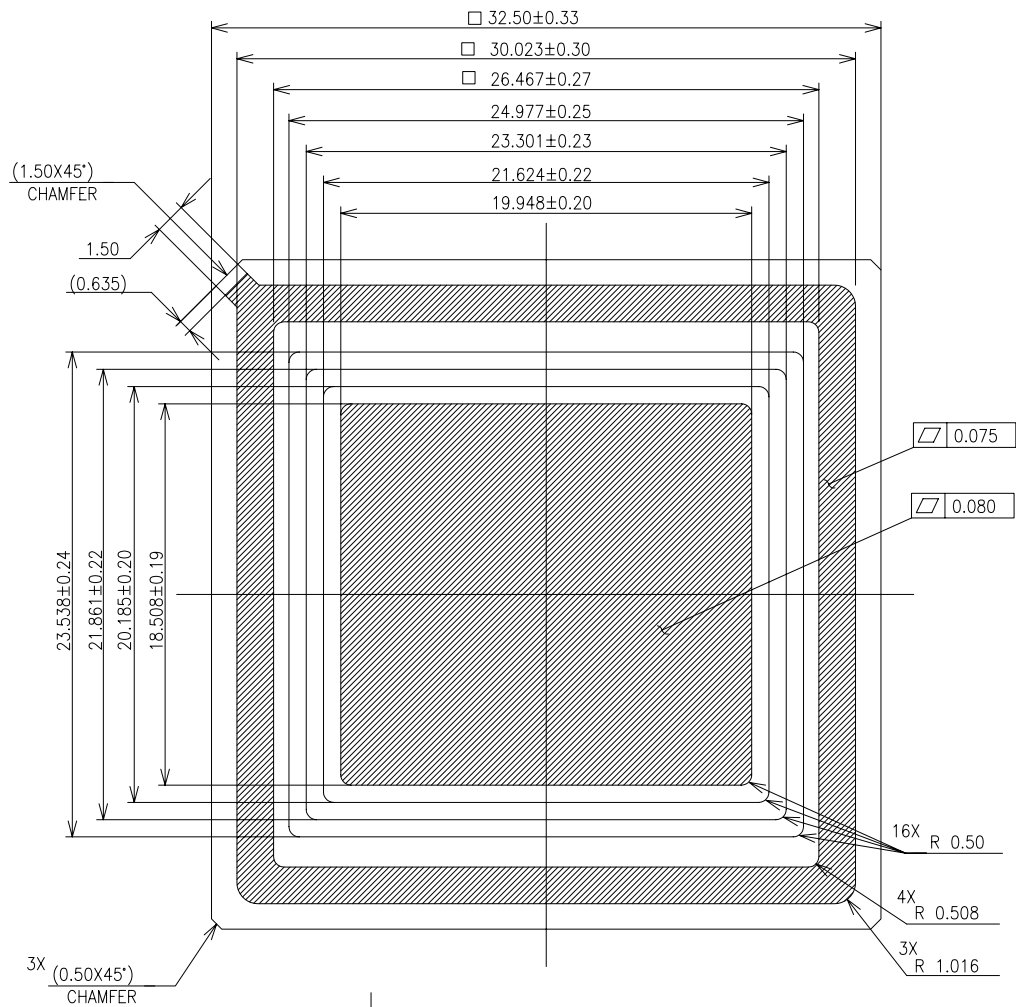
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LG624 outline drawing

|             |                                 |              |
|-------------|---------------------------------|--------------|
|             | ACTEL DWG. NUMBER<br>1-21-11031 | REV<br>7     |
| SIZE<br>B   | VENDOR DWG. NUMBER<br>KD-NA5111 | REV<br>0     |
| SCALE: NONE |                                 | SHEET 2 OF 8 |

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DETAIL A

NOTES:

1. PLATING:

TOP : ELECTROLESS Ni 3.20~8.89 MICRON.  
TOP : ELECTROLESS Au 2.50 MICRON MIN.  
BOTTOM : ELECTROLESS Ni 3.20~8.89 MICRON.  
BOTTOM : ELECTROLESS Au 0.03~0.10 MICRON.

2. SEAL AREA TO BE METALLIZED.

3. DIE ATTACH AREA TO BE METALLIZED.

4. SEAL AREA AND DIE ATTACH AREA TO BE FLOATING FROM ANY PADS.

|             |                                 |              |
|-------------|---------------------------------|--------------|
|             | ACTEL DWG. NUMBER<br>1-21-11031 | REV<br>7     |
| SIZE<br>B   | VENDOR DWG. NUMBER<br>KD-NA5111 | REV<br>0     |
| SCALE: NONE |                                 | SHEET 3 OF 8 |

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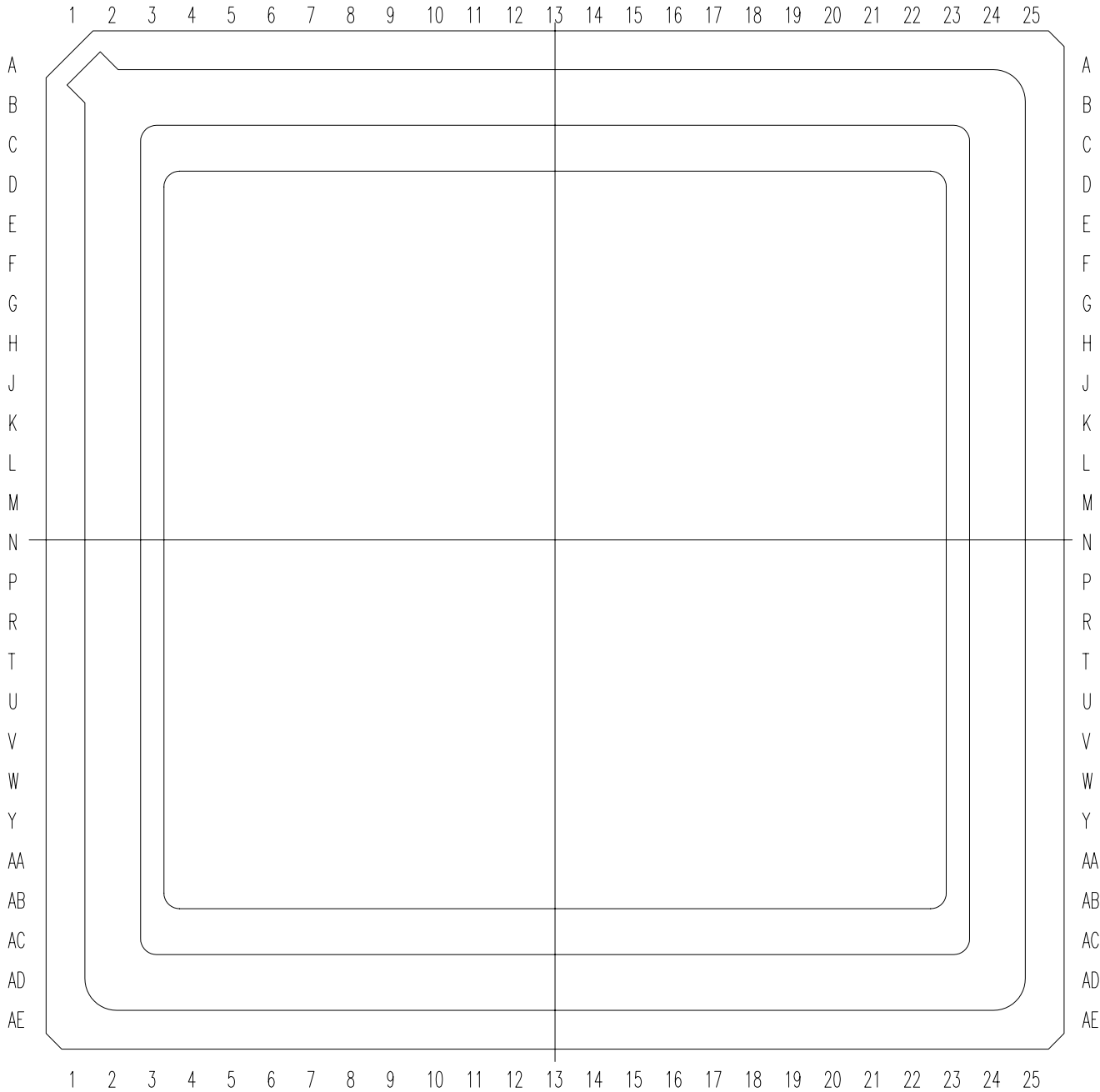
## CONNECTION TABLE

|         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| LGA No. | LGA No. | LGA No. | LGA No. | LGA No. | LGA No. | LGA No. | LGA No. | LGA No. | LGA No. | LGA No. | LGA No. | LGA No. | LGA No. | LGA No. | LGA No. | LGA No. | LGA No. |
| A2      | A3      | AC6     | AC7     | B8      | B9      | E12     | E13     | H14     | H15     | L18     | L19     | P20     | P21     | U24     | U25     |         |         |
| A4      | A5      | AC8     | AC9     | B10     | B11     | E14     | E15     | H16     | H17     | L20     | L21     | P22     | P23     | V1      | W1      |         |         |
| A6      | A7      | AC10    | AC11    | B12     | B13     | E16     | E17     | H18     | H19     | L22     | L23     | P24     | P25     | V2      | V3      |         |         |
| A8      | A9      | AC12    | AC13    | B14     | B15     | E18     | E19     | H20     | H21     | L24     | L25     | R2      | R3      | V4      | V5      |         |         |
| A10     | A11     | AC14    | AC15    | B16     | B17     | E20     | E21     | H22     | H23     | M1      | N1      | R4      | R5      | V6      | V7      |         |         |
| A12     | A13     | AC16    | AC17    | B18     | B19     | E22     | E23     | H24     | H25     | M2      | M3      | R6      | R7      | V8      | V9      |         |         |
| A15     | A14     | AC18    | AC19    | B20     | B21     | E24     | E25     | J2      | J3      | M4      | M5      | R8      | R9      | V10     | V11     |         |         |
| A17     | A16     | AC20    | AC21    | B22     | B23     | F1      | G1      | J4      | J5      | M6      | M7      | R10     | R11     | V12     | V13     |         |         |
| A19     | A18     | AC23    | AC22    | B24     | B25     | F2      | F3      | J6      | J7      | M8      | M9      | R12     | R13     | V14     | V15     |         |         |
| A20     | A21     | AC24    | AC25    | C2      | C3      | F4      | F5      | J8      | J9      | M10     | M11     | R14     | R15     | V16     | V17     |         |         |
| A22     | A23     | AD1     | AE1     | C4      | C5      | F6      | F7      | J10     | J11     | M12     | M13     | R16     | R17     | V18     | V19     |         |         |
| A24     | A25     | AD2     | AD3     | C6      | C7      | F8      | F9      | J12     | J13     | M14     | M15     | R18     | R19     | V20     | V21     |         |         |
| AA2     | AA3     | AD4     | AD5     | C8      | C9      | F10     | F11     | J14     | J15     | M16     | M17     | R20     | R21     | V22     | V23     |         |         |
| AA4     | AA5     | AD6     | AD7     | C10     | C11     | F12     | F13     | J16     | J17     | M18     | M19     | R22     | R23     | V24     | V25     |         |         |
| AA6     | AA7     | AD8     | AD9     | C12     | C13     | F14     | F15     | J18     | J19     | M20     | M21     | R24     | R25     | W2      | W3      |         |         |
| AA8     | AA9     | AD10    | AD11    | C14     | C15     | F16     | F17     | J20     | J21     | M22     | M23     | T1      | U1      | W4      | W5      |         |         |
| AA10    | AA11    | AD13    | AD12    | C16     | C17     | F18     | F19     | J22     | J23     | M24     | M25     | T2      | T3      | W6      | W7      |         |         |
| AA12    | AA13    | AD14    | AD15    | C18     | C19     | F20     | F21     | J24     | J25     | N2      | N3      | T4      | T5      | W8      | W9      |         |         |
| AA14    | AA15    | AD16    | AD17    | C20     | C21     | F22     | F23     | K1      | L1      | N4      | N5      | T6      | T7      | W10     | W11     |         |         |
| AA16    | AA17    | AD18    | AD19    | C22     | C23     | F24     | F25     | K2      | K3      | N6      | N7      | T8      | T9      | W12     | W13     |         |         |
| AA18    | AA19    | AD20    | AD21    | C24     | C25     | G2      | G3      | K4      | K5      | N8      | N9      | T10     | T11     | W14     | W15     |         |         |
| AA20    | AA21    | AD22    | AD23    | D1      | E1      | G4      | G5      | K6      | K7      | N10     | N11     | T12     | T13     | W16     | W17     |         |         |
| AA22    | AA23    | AD24    | AD25    | D2      | D3      | G6      | G7      | K8      | K9      | N12     | N13     | T14     | T15     | W18     | W19     |         |         |
| AA24    | AA25    | AE2     | AE3     | D4      | D5      | G8      | G9      | K10     | K11     | N14     | N15     | T16     | T17     | W20     | W21     |         |         |
| AB1     | AC1     | AE4     | AE5     | D6      | D7      | G10     | G11     | K12     | K13     | N16     | N17     | T18     | T19     | W22     | W23     |         |         |
| AB2     | AB3     | AE6     | AE7     | D8      | D9      | G12     | G13     | K14     | K15     | N18     | N19     | T20     | T21     | W24     | W25     |         |         |
| AB4     | AB5     | AE8     | AE9     | D10     | D11     | G14     | G15     | K16     | K17     | N20     | N21     | T22     | T23     | Y1      | AA1     |         |         |
| AB6     | AB7     | AE10    | AE11    | D12     | D13     | G16     | G17     | K18     | K19     | N22     | N23     | T24     | T25     | Y2      | Y3      |         |         |
| AB8     | AB9     | AE12    | AE13    | D14     | D15     | G18     | G19     | K20     | K21     | N24     | N25     | U2      | U3      | Y4      | Y5      |         |         |
| AB10    | AB11    | AE14    | AE15    | D16     | D17     | G20     | G21     | K22     | K23     | P1      | R1      | U4      | U5      | Y6      | Y7      |         |         |
| AB12    | AB13    | AE16    | AE17    | D18     | D19     | G22     | G23     | K24     | K25     | P2      | P3      | U6      | U7      | Y8      | Y9      |         |         |
| AB14    | AB15    | AE18    | AE19    | D20     | D21     | G24     | G25     | L2      | L3      | P4      | P5      | U8      | U9      | Y10     | Y11     |         |         |
| AB16    | AB17    | AE20    | AE21    | D22     | D23     | H1      | J1      | L4      | L5      | P6      | P7      | U10     | U11     | Y12     | Y13     |         |         |
| AB18    | AB19    | AE22    | AE23    | D24     | D25     | H2      | H3      | L6      | L7      | P8      | P9      | U12     | U13     | Y14     | Y15     |         |         |
| AB20    | AB21    | AE24    | AE25    | E2      | E3      | H4      | H5      | L8      | L9      | P10     | P11     | U14     | U15     | Y16     | Y17     |         |         |
| AB23    | AB22    | B1      | C1      | E4      | E5      | H6      | H7      | L10     | L11     | P12     | P13     | U16     | U17     | Y18     | Y19     |         |         |
| AB24    | AB25    | B2      | B3      | E6      | E7      | H8      | H9      | L12     | L13     | P14     | P15     | U18     | U19     | Y20     | Y21     |         |         |
| AC2     | AC3     | B4      | B5      | E8      | E9      | H10     | H11     | L14     | L15     | P16     | P17     | U20     | U21     | Y22     | Y23     |         |         |
| AC4     | AC5     | B6      | B7      | E10     | E11     | H12     | H13     | L16     | L17     | P18     | P19     | U22     | U23     | Y24     | Y25     |         |         |

|     |    |
|-----|----|
| S/R | NC |
| D/A | NC |

|             |                                 |              |
|-------------|---------------------------------|--------------|
| SIZE<br>B   | ACTEL DWG. NUMBER<br>1-21-11031 | REV<br>7     |
|             | VENDOR DWG. NUMBER<br>KD-NA5111 | REV<br>0     |
| SCALE: NONE |                                 | SHEET 4 OF 8 |

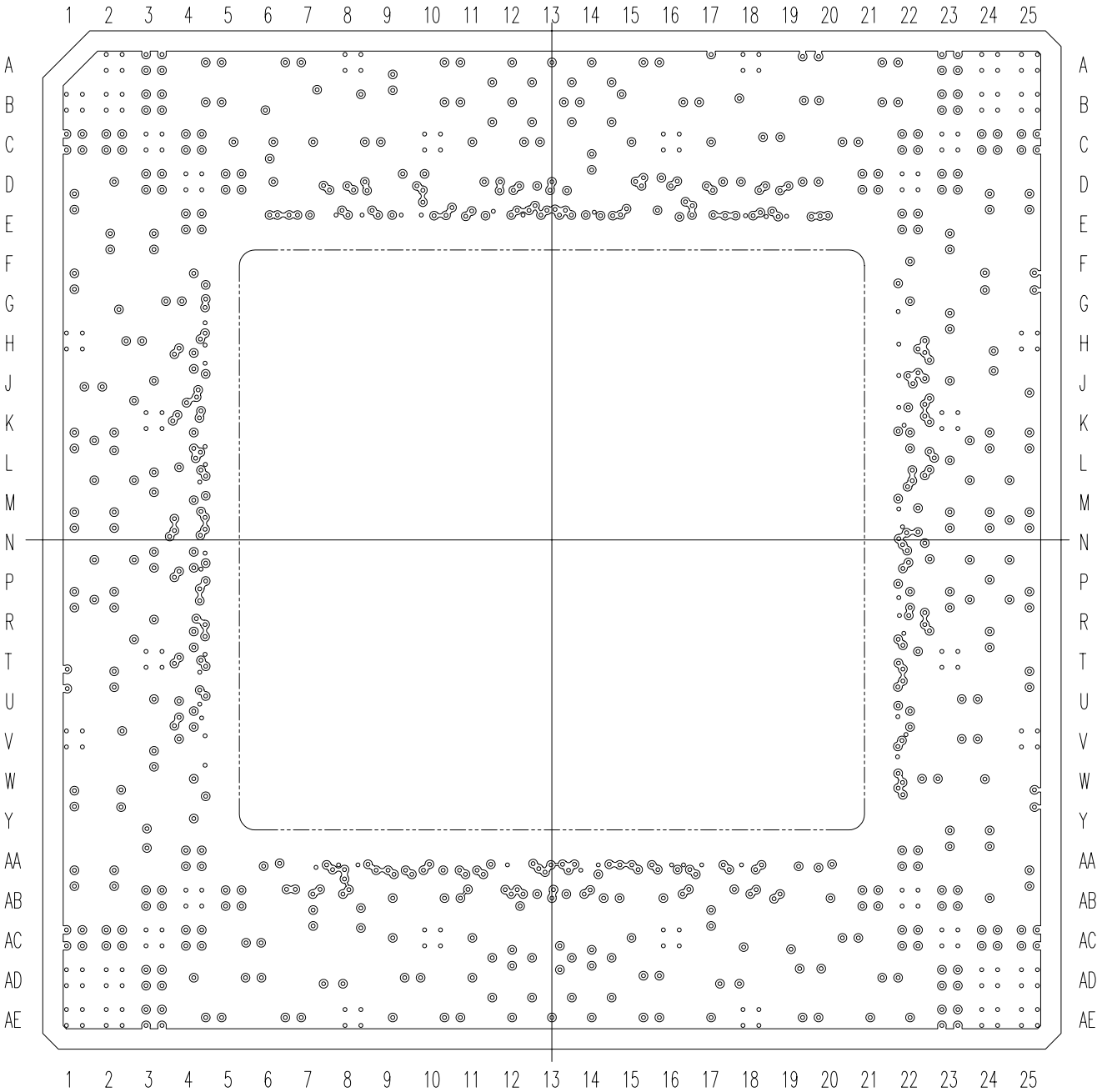
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MP-1  
S/R

|             |                                 |              |
|-------------|---------------------------------|--------------|
| SIZE<br>B   | ACTEL DWG. NUMBER<br>1-21-11031 | REV<br>7     |
|             | VENDOR DWG. NUMBER<br>KD-NA5111 | REV<br>0     |
| SCALE: NONE |                                 | SHEET 5 OF 8 |

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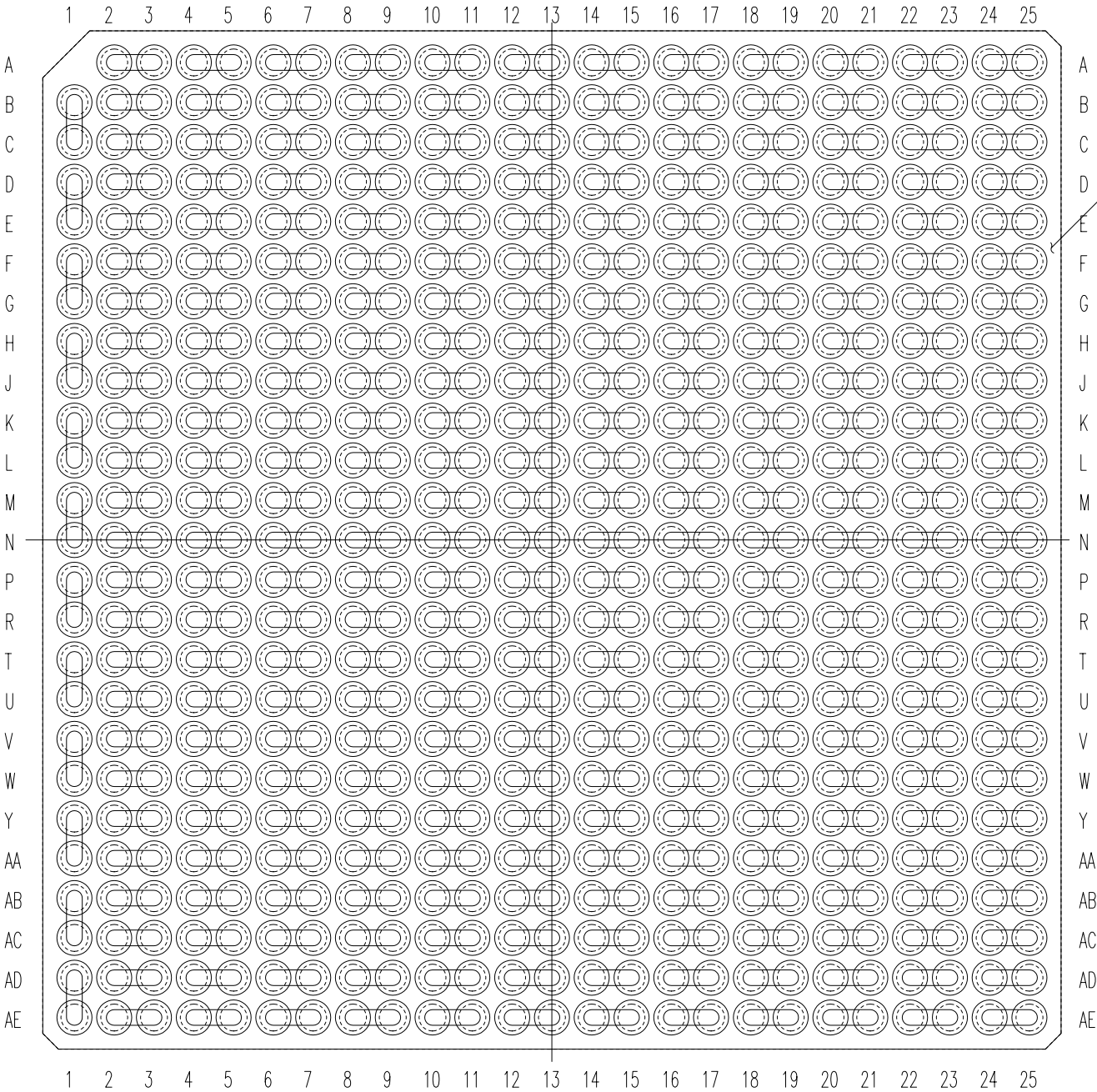


MP-5  
GND

|             |                                 |              |
|-------------|---------------------------------|--------------|
| SIZE<br>B   | ACTEL DWG. NUMBER<br>1-21-11031 | REV<br>7     |
|             | VENDOR DWG. NUMBER<br>KD-NA5111 | REV<br>0     |
| SCALE: NONE |                                 | SHEET 6 OF 8 |



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|             |                                 |              |
|-------------|---------------------------------|--------------|
| SIZE<br>B   | ACTEL DWG. NUMBER<br>1-21-11031 | REV<br>7     |
|             | VENDOR DWG. NUMBER<br>KD-NA5111 | REV<br>0     |
| SCALE: NONE |                                 | SHEET 7 OF 8 |

