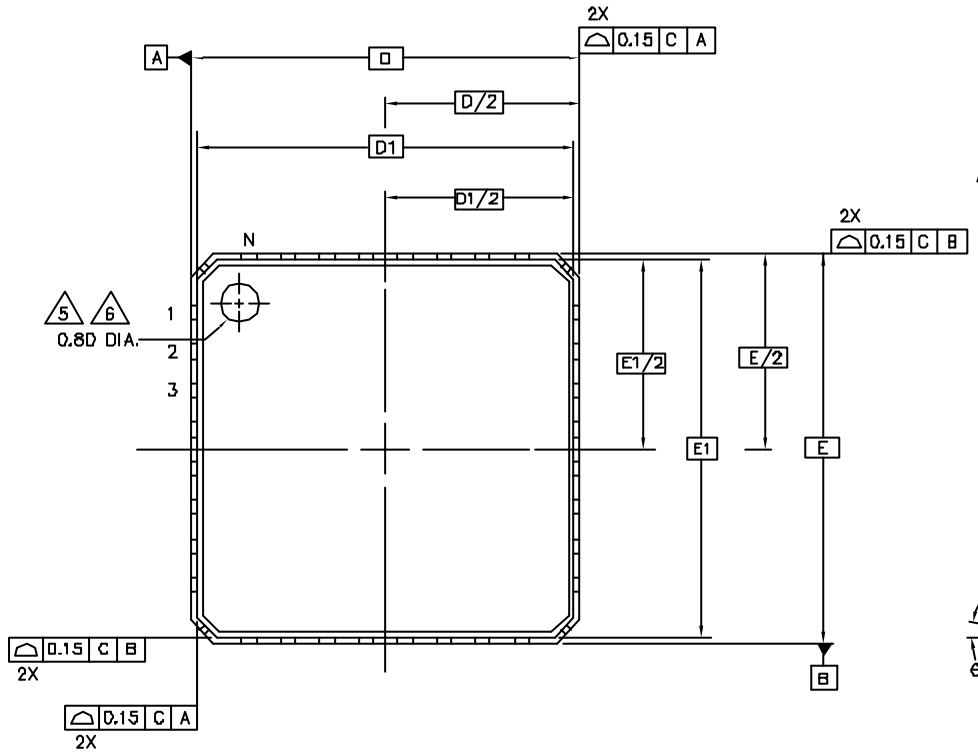
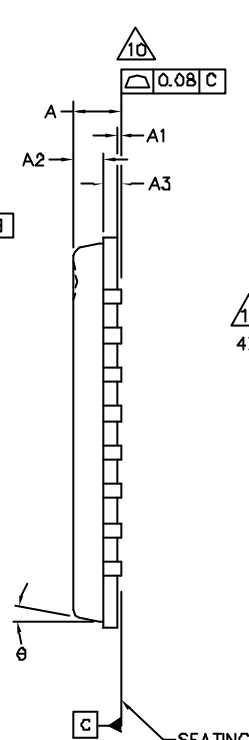


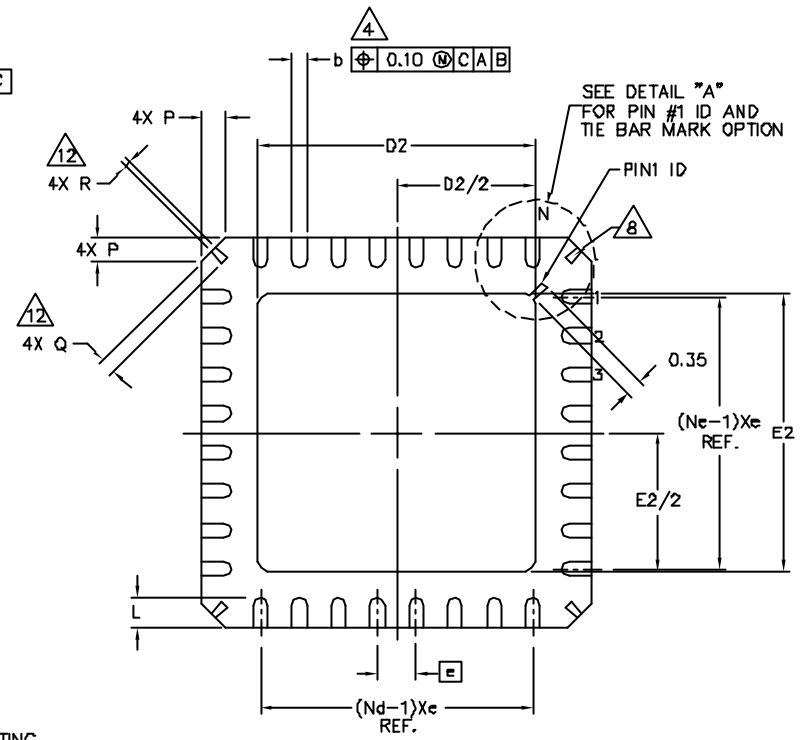
# NORMAL MATRIX LEADFRAME



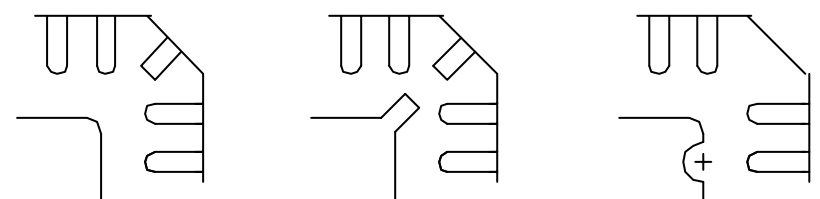
TOP VIEW



SIDE VIEW



BOTTOM VIEW



STANDARD

DETAIL "A" - PIN #1 ID AND TIE BAR MARK OPTION

|   |       |        |  |
|---|-------|--------|--|
| PACKAGE OUTLINE, MLF, B X B mm BODY               |       |        |  |
| A3  | 45274 | 08     |  |
| PRINTING IS SCALED TO FIT<br>DO NOT SCALE DRAWING |       | 2 OF 4 |  |

| SYMBOL | PITCH VARIATION A            |      |      | NOTE | SYMBOL | PITCH VARIATION B            |      |      | NOTE | SYMBOL | PITCH VARIATION C                |      |      | NOTE | SYMBOL | PITCH VARIATION D                |      |      | NOTE |
|--------|------------------------------|------|------|------|--------|------------------------------|------|------|------|--------|----------------------------------|------|------|------|--------|----------------------------------|------|------|------|
|        | MIN.                         | NOM. | MAX. |      |        | MIN.                         | NOM. | MAX. |      |        | MIN.                             | NOM. | MAX. |      |        | MIN.                             | NOM. | MAX. |      |
| ⊗      | 0.80 BSC                     |      |      |      | ⊗      | 0.65 BSC                     |      |      |      | ⊗      | 0.50 BSC                         |      |      |      | ⊗      | 0.50 BSC                         |      |      |      |
| N      | 32                           |      |      | 3    | N      | 40                           |      |      | 3    | N      | 52                               |      |      | 3    | N      | 56                               |      |      | 3    |
| Nd     | 8                            |      |      | 3    | Nd     | 10                           |      |      | 3    | Nd     | 13                               |      |      | 3    | Nd     | 14                               |      |      | 3    |
| Ne     | 8                            |      |      | 3    | Ne     | 10                           |      |      | 3    | Ne     | 13                               |      |      | 3    | Ne     | 14                               |      |      | 3    |
| L      | 0.50                         | 0.60 | 0.75 |      | L      | 0.50                         | 0.60 | 0.75 |      | L      | 0.50                             | 0.60 | 0.75 |      | L      | 0.30                             | 0.40 | 0.50 |      |
| b      | 0.28                         | 0.33 | 0.40 | 4    | b      | 0.23                         | 0.28 | 0.35 | 4    | b      | 0.18                             | 0.23 | 0.30 | 4    | b      | 0.18                             | 0.23 | 0.30 | 4    |
| Q      | 0.30                         | 0.40 | 0.65 | 12   | Q      | 0.30                         | 0.40 | 0.65 | 12   | Q      | 0.30                             | 0.40 | 0.65 | 12   | Q      | 0.00                             | 0.20 | 0.45 | 12   |
| D2     | SEE EXPOSED PAD VARIATION: A |      |      |      | D2     | SEE EXPOSED PAD VARIATION: A |      |      |      | D2     | SEE EXPOSED PAD VARIATION: A,B,C |      |      |      | D2     | SEE EXPOSED PAD VARIATION: A,E,F |      |      |      |
| E2     | SEE EXPOSED PAD VARIATION: A |      |      |      | E2     | SEE EXPOSED PAD VARIATION: A |      |      |      | E2     | SEE EXPOSED PAD VARIATION: A,B,C |      |      |      | E2     | SEE EXPOSED PAD VARIATION: A,E,F |      |      |      |

\* NOT DESIGNED YET  
 \*\* DESIGNED BUT NOT TOOLED UP  
 \*\*\* APPLIES TO MIXED RING PAD DESIGN ONLY

| SYMBOLS                |   | D2   |      |      | E2   |      |      | NOTE |
|------------------------|---|------|------|------|------|------|------|------|
|                        |   | MIN  | NOM  | MAX  | MIN  | NOM  | MAX  |      |
| EXPOSED PAD VARIATIONS | A | 5.95 | 6.10 | 6.25 | 5.95 | 6.10 | 6.25 |      |
|                        | B | 5.55 | 5.70 | 5.85 | 5.55 | 5.70 | 5.85 |      |
|                        | C | 4.15 | 4.30 | 4.45 | 4.15 | 4.30 | 4.45 |      |
|                        | D | 4.25 | 4.40 | 4.55 | 4.25 | 4.40 | 4.55 |      |
|                        | E | 4.25 | 4.40 | 4.55 | 4.95 | 5.10 | 5.25 |      |
|                        | F | 6.15 | 6.30 | 6.45 | 6.15 | 6.30 | 6.45 |      |

EXAMPLE; WE CAN CALL VARIATION "AA" FOR 32 TERMINAL MLF2 WITH 6.10 mm X 6.10 mm NOMINAL EXPOSED PAD DIMENSION. THE FORMER ONE IN VARIATION IS FOR PITCH VARIATION AND THE LETTER ONE IS FOR EXPOSED PAD VARIATION.

| SYMBOL | COMMON DIMENSIONS |      |      | NOTE |
|--------|-------------------|------|------|------|
|        | MIN.              | NOM. | MAX. |      |
| A      | -                 | 0.85 | 0.90 |      |
| A1     | 0.00              | 0.01 | 0.05 | 11   |
| A2     | -                 | 0.65 | 0.80 |      |
| A3     | 0.20 REF.         |      |      |      |
| D      | 8.00 BSC          |      |      |      |
| D1     | 7.75 BSC          |      |      |      |
| E      | 8.00 BSC          |      |      |      |
| E1     | 7.75 BSC          |      |      |      |
| θ      | 12°               |      |      |      |
| P      | 0.24              | 0.42 | 0.60 |      |
| R      | 0.13              | 0.17 | 0.23 | 12   |

|                                      |   |      |        |
|--------------------------------------|---|------|--------|
| FILE                                 |   |      |        |
| PACKAGE OUTLINE, MLF2, 8 X 8 mm BODY |   |      |        |
| SIZE                                 | DWG NUMBER  | DATE | NO DB  |
| A3                                   | 45274   |      |        |
| SCALE                                | PRINTING IS SCALED TO FIT<br>DO NOT SCALE DRAWING |      | SHEET  |
| NONE                                 |   |      | 3 OF 4 |