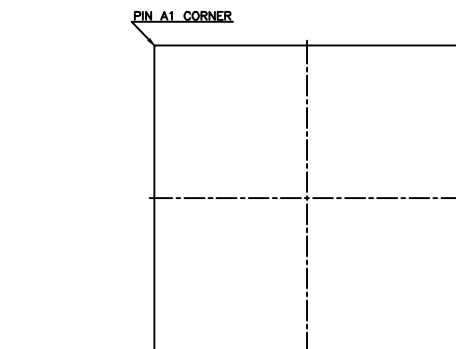
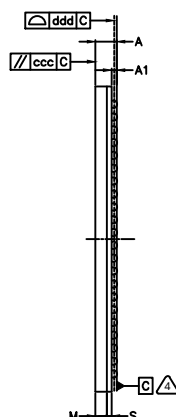


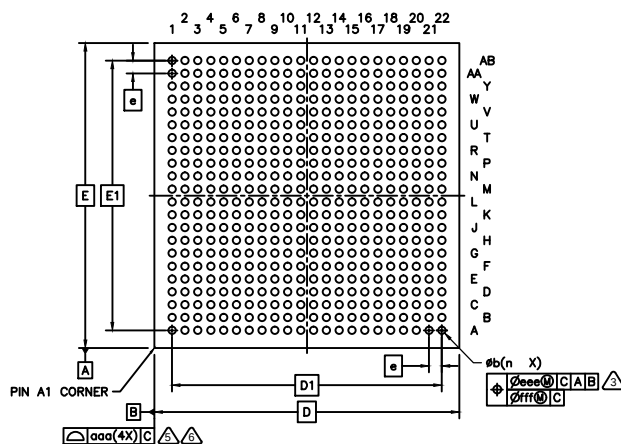
TOP VIEW



SIDE VIEW



|                             | Symbol | Common Dimensions |        |       |
|-----------------------------|--------|-------------------|--------|-------|
|                             |        | MIN.              | NOM.   | MAX.  |
| Body Size:                  | X      | E                 | 19.000 |       |
|                             | Y      | D                 | 19.000 |       |
| Ball Pitch:                 | e      | 0.800             |        |       |
| Total Thickness:            | A      | 1.230             | 1.325  | 1.700 |
| Mold Cap Thickness:         | M      | 0.700             |        | Ref.  |
| Substrate Thickness:        | S      | 0.300             |        | Ref.  |
| Ball Diameter:              |        | 0.450             |        |       |
| Stand Off:                  | A1     | 0.250             | 0.325  | 0.400 |
| Ball Width:                 | b      | 0.400             | 0.450  | 0.500 |
| Package Edge Tolerance:     | aaa    | 0.150             |        |       |
| Mold Parallelism:           | ccc    | 0.200             |        |       |
| Coplanarity:                | ddd    | 0.200             |        |       |
| Ball Offset (Package):      | eee    | 0.150             |        |       |
| Ball Offset (Ball):         | fff    | 0.080             |        |       |
| Ball Count:                 | n      | 484               |        |       |
| Edge Ball Center to Center: | X      | E1                | 16.800 |       |
|                             | Y      | D1                | 16.800 |       |



BOTTOM VIEW

NOTES: UNLESS OTHERWISE SPECIFIED

1. DIMENSIONS AND TOLERANCES PER ANSI Y14.5M.
2. ALL DIMENSIONS ARE IN MILLIMETERS.
3. DIMENSION "b" IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM C.
4. PRIMARY DATUM C AND SEATING PLANE ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
5. BILATERAL TOLERANCE ZONE IS APPLIED TO EACH SIDE OF THE PACKAGE BODY.
6. EXACT SHAPE AND SIZE OF THIS FEATURE IS OPTIONAL.
7. JEDEC REFERENCE: MO-275

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                    |                                    |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------|------------------------------------|-----------|
| Title: Package Outline Drawing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Pkg Type: CABGA    | Document No: <div>POD-250081</div> |           |
| Product Family: LFMXO4/LFMXO4D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Pin Count: 484     |                                    |           |
| Product Name: LFMXO4-110-BBG484<br>LFMXO4D-110-BBG484                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Pkg Size: 19x19 mm | Rev: C                             | PAGE: 3/3 |
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