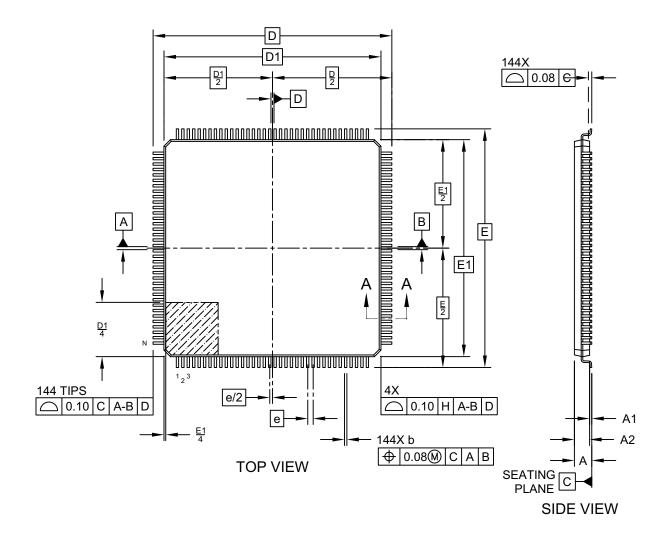


### 144-Lead Plastic Low Profile Quad Flatpack (PL)- 20x20x1.40 mm Body [LQFP] 2.00 mm Footprint

**Note:** For the most current package drawings, please see the Microchip Packaging Specification located at http://www.microchip.com/packaging

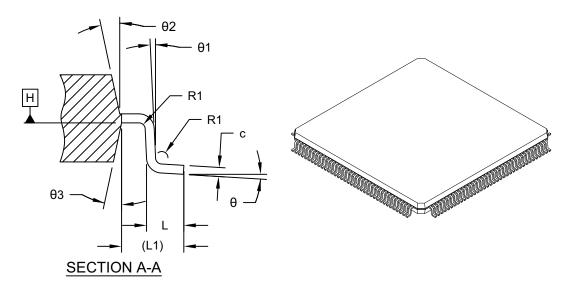


Microchip Technology Drawing C04-044 Rev C Sheet 1 of 2



# 144-Lead Plastic Low Profile Quad Flatpack (PL)- 20x20x1.40 mm Body [LQFP] 2.00 mm Footprint

**Note:** For the most current package drawings, please see the Microchip Packaging Specification located at http://www.microchip.com/packaging



|                         | MILLIMETERS |            |          |      |  |
|-------------------------|-------------|------------|----------|------|--|
| Dimension               | Limits      | MIN        | NOM      | MAX  |  |
| Number of Leads         | N           |            | 144      |      |  |
| Lead Pitch              | е           |            | 0.50 BSC |      |  |
| Overall Height          | Α           | -          | -        | 1.60 |  |
| Molded Package Height   | A2          | 1.35       | 1.40     | 1.45 |  |
| Standoff                | A1          | 0.05       | -        | 0.15 |  |
| Overall Width           | Е           | 22.00 BSC  |          |      |  |
| Overall Length          | D           | 22.00 BSC  |          |      |  |
| Molded Body Width       | E1          | 20.00 BSC  |          |      |  |
| Molded Body Length      | D1          | 20.00 BSC  |          |      |  |
| Lead Thickness          | С           | 0.09       | -        | 0.20 |  |
| Lead Width              | b           | 0.17       | 0.22     | 0.27 |  |
| Foot Length             | L           | 0.45       | 0.60     | 0.75 |  |
| Footprint               | L1          | 1.00 (REF) |          |      |  |
| Lead Bend Radius        | R1          | 0.08       | -        | -    |  |
| Lead Bend Radius        | R2          | 0.08       | -        | 0.20 |  |
| Terminal Foot Angle     | θ           | 0°         | 3.5°     | 7°   |  |
| Lead Angle              | θ1          | 0°         | -        | -    |  |
| Mold Draft Angle Top    | θ2          | 11°        | 12°      | 13°  |  |
| Mold Draft Angle Bottom | θ3          | 11°        | 12°      | 13°  |  |

#### Notes:

- 1. Pin 1 visual index feature may vary, but must be located within the hatched area.
- 2. Package is saw singulated.
- 3. Dimensioning and tolerancing per ASME Y14.5M.

BSC: Basic Dimension. Theoretically exact value shown without tolerances.

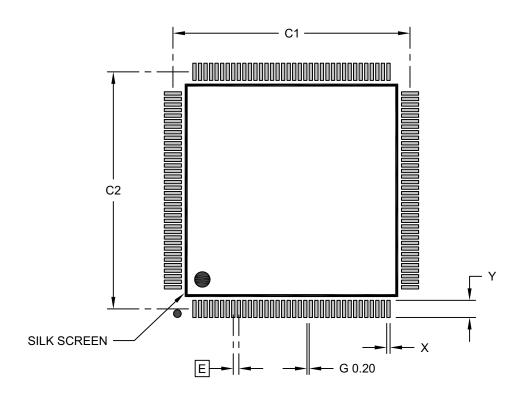
REF: Reference Dimension, usually without tolerance, for information purposes only.

Microchip Technology Drawing C04-044 Rev C Sheet 2 of 2



## 144-Lead Plastic Low Profile Quad Flatpack (PL)- 20x20x1.40 mm Body [LQFP] 2.00 mm Footprint

**Note:** For the most current package drawings, please see the Microchip Packaging Specification located at http://www.microchip.com/packaging



### RECOMMENDED LAND PATTERN

|                                   | Units            | s MILLIMETERS |       |      |
|-----------------------------------|------------------|---------------|-------|------|
| Dimension                         | Dimension Limits |               | NOM   | MAX  |
| Contact Pitch                     | E                | 0.50 BSC      |       |      |
| Contact Pad Spacing               | C1               |               | 21.40 |      |
| Contact Pad Spacing               | C2               |               | 21.40 |      |
| Contact Pad Width (X144)          | X1               |               |       | 0.30 |
| Contact Pad Length (X144)         | Y1               |               |       | 1.55 |
| Contact Pad to Contact Pad (X140) | Y1               | 0.20          |       |      |

#### Notes:

1. Dimensioning and tolerancing per ASME Y14.5M  $\,$ 

BSC: Basic Dimension. Theoretically exact value shown without tolerances.

Microchip Technology Drawing C04-2044 Rev C