

**Quad Flat No-Lead Plastic Package (QFN)**  
**Micro Lead Frame Plastic Package (MLFP)**

**L56.8x8C**

56 LEAD QUAD FLAT NO-LEAD PLASTIC PACKAGE  
 (Customized with Three Exposed Pads)

| SYMBOL | MILLIMETERS |         |      | NOTES |
|--------|-------------|---------|------|-------|
|        | MIN         | NOMINAL | MAX  |       |
| A      | -           | 0.85    | 0.90 | -     |
| A1     | 0.00        | 0.01    | 0.05 | -     |
| A2     | -           | 0.65    | 0.70 | -     |
| A3     | 0.20 REF    |         |      | -     |
| b      | 0.18        | 0.23    | 0.30 | 5, 8  |
| D      | 8.00 BSC    |         |      | -     |
| D1     | 7.75 BSC    |         |      | -     |
| D2     | 4.35        | 4.50    | 4.65 | 7, 8  |
| D3     | 0.55        | 0.70    | 0.85 | -     |
| D4     | 0.07        | 0.23    | 0.38 | 7, 8  |
| E      | 8.00 BSC    |         |      | -     |
| E1     | 7.75 BSC    |         |      | -     |
| E2     | 6.15        | 6.30    | 6.45 | 7, 8  |
| E3     | 3.52        | 3.67    | 3.82 | 7, 8  |
| E4     | 0.32        | 0.47    | 0.62 | 7, 8  |
| E5     | 2.75        | 2.90    | 3.05 | 7, 8  |
| e      | 0.50 BSC    |         |      | -     |
| k      | 0.25        | -       | -    | -     |
| R      | 0.20        | 0.30    | 0.45 | -     |
| S      | 0.35        | 0.50    | 0.65 | 8     |
| L      | 0.30        | 0.40    | 0.50 | 8     |
| N      | 56          |         |      | 2     |
| Nd     | 14          |         |      | 3     |
| Ne     | 14          |         |      | 3     |
| P      | 0.24        | 0.42    | 0.60 | -     |
| θ      | -           | -       | 12   | -     |

Rev. 0 02/03

NOTES:

1. Dimensioning and tolerancing conform to ASME Y14.5-1994.
2. N is the number of terminals.
3. Nd and Ne refer to the number of terminals on each D and E.
4. All dimensions are in millimeters. Angles are in degrees.
5. Dimension b applies to the metallized terminal and is measured between 0.15mm & 0.30mm from the terminal tip.
6. The configuration of the pin #1 identifier is optional, but must be located within the zone indicated. The pin #1 identifier may be either a mold or mark feature.
7. Dimensions D2, D3, D4 and E2, E3, E4 are for the exposed pads which provide improved electrical and thermal performance.
8. Nominal dimensions are provided to assist with PCB Land Pattern Design efforts, see Intersil Technical Brief TB389.

