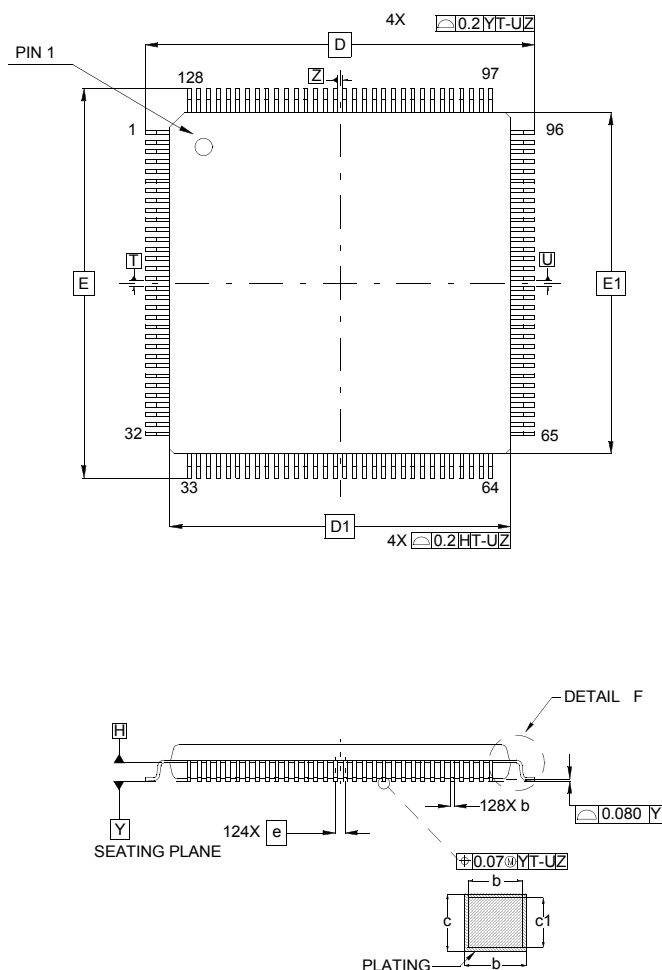


Plastic Packages for Integrated Circuits

Low Plastic Quad Flatpack Exposed Pad Package (LQFP-EP)



Q128.14x14A

128 Lead Low Plastic Quad Flatpack Exposed Pad Package
(0.4mm pitch)

| SYMBOL | MILLIMETERS | | | NOTES |
|--------|-------------|-------|-------|-------|
| | MIN | NOM | MAX | |
| A | - | - | 1.60 | |
| A1 | 0.05 | - | 0.15 | |
| A2 | 1.35 | 1.40 | 1.45 | |
| b | 0.13 | 0.18 | 0.23 | 4 |
| b1 | 0.13 | 0.16 | 0.19 | |
| c | 0.09 | - | 0.20 | |
| c1 | 0.09 | - | 0.16 | |
| D | 16 BSC | | | |
| D1 | 14 BSC | | | 3 |
| E | 16 BSC | | | 4 |
| E1 | 14 BSC | | | 3 |
| L | 0.45 | 0.60 | 0.75 | |
| L1 | 1.00 REF | | | |
| R1 | 0.08 | - | - | |
| R2 | 0.08 | - | 0.20 | |
| S | 0.20 | - | - | |
| θ | 0° | 3.5° | 7.0° | |
| θ1 | 0° | - | - | |
| θ2 | 11° | 12° | 13° | |
| θ3 | 11° | 12° | 13° | |
| e | 0.40 BSC | | | |
| M | 6.855 | 6.955 | 7.055 | |
| N | 6.855 | 6.955 | 7.055 | |

Rev. 1 7/11

NOTES:

- Dimensions are in millimeters.
Dimensions in () for Reference Only.
- Dimensioning and tolerancing conform to AMSE Y14.5m-1994.
- Dimensions D1 and E1 are excluding mold protrusion. Allowable protrusion is 0.25mm per side. Dimensions D1 and E1 are inclusive of mold mismatch and determined by datum plane H.
- Dimension b does not include dambar protrusion. Allowable dambar protrusion shall not cause the lead width to exceed the maximum b dimension by more than 0.08mm. Dambar cannot be located at the lower radius or the foot. Minimum space between protrusion and an adjacent lead is 0.07mm.

