



| SYMBOL | MILLIMETERS | | | NOTE |
|--------------------------------|-------------|-----------|------|------|
| | MIN. | NOM. | MAX. | |
| A | 2.70 | \approx | 3.50 | 2 |
| A ₁ | 0.40 | 0.50 | 0.60 | |
| A ₂ | 0.90 | \approx | 1.50 | |
| D/E | 35.00 BASIC | | | |
| D ₁ /E ₁ | 33.00 REF | | | |
| e | 1.00 BASIC | | | |
| phi b | 0.50 | 0.60 | 0.70 | |
| aaa | \approx | \approx | 0.20 | |
| ccc | \approx | \approx | 0.35 | |
| ddd | \approx | \approx | 0.25 | |
| eee | \approx | \approx | 0.10 | |
| M | 34 | | | |

NOTES:

1. ALL DIMENSIONS AND TOLERANCES CONFORM TO ANSI Y14.5M-1994
2. SYMBOL 'M' IS THE BALL MATRIX SIZE
3. CONFORMS TO JEDEC MS-034-AAR-1
4. THIS PACKAGE IS ONLY USED FOR VIRTEX[®]-5 FPGAS REFER TO PK401 FOR THE MECHANICAL DRAWING OF THE FF1156 PACKAGE USED BY VIRTEX-6 FPGAS

pk384_01_121009

Revision History

The following table shows the revision history for this document.

| Date | Version | Description of Revisions |
|----------|---------|---|
| 06/04/09 | 1.0 | Initial Xilinx release. |
| 12/14/09 | 1.1 | Revised document title and added note 4 to indicate this package is a variation of the FF1156/FFG1156 type used only on Virtex-5 FPGAs. |

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