Altera Device Package Information

04R-00384-1.0

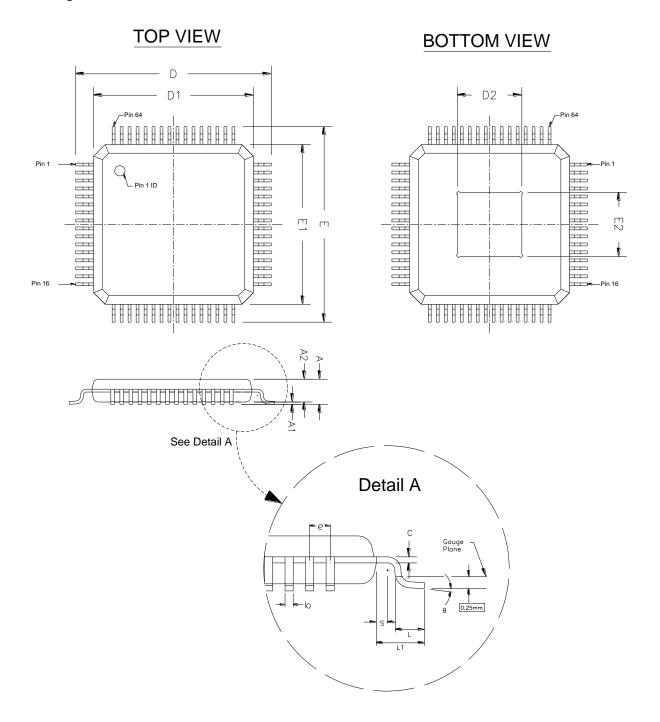
64-Pin Plastic Enhanced Quad Flat (EQFP) - Wire Bond - A:1.20 - D2:4.5

- All dimensions and tolerances conform to ASME Y14.5M 1994.
- Controlling dimension is in millimeters.
- Pin 1 may be indicated by an ID dot, or a special feature, in its proximity on package surface.

Package Information		
Description	Specification	
Ordering Code Reference	Е	
Package Acronym	EQFP	
Leadframe Material	Copper	
Lead Finish (plating)	Regular: 85Sn:15Pb (Typ.) Pb-free: Matte Sn	
JEDEC Outline Reference	MS-026 Variation: ABD-HD	
Lead Coplanarity	0.003 inch (0.08mm)	
Weight	0.15 g (Typ.)	
Moisture Sensitivity Level	Printed on moisture barrier bag	

Symbol	Millimeters			
	Min.	Nom.	Max.	
Α	-	-	1.20	
A1	0.05	-	0.15	
A2	0.95	1.00	1.05	
D	9.00 BSC			
D1	7.00 BSC			
D2	3.50	4.50	5.50	
E	9.00 BSC			
E1	7.00 BSC			
E2	3.50	4.50	5.50	
L	0.45	0.60	0.75	
L1	1.00 REF			
s	0.20	-	-	
b	0.13	0.18	0.23	
С	0.09	-	0.20	
е	0.40 BSC			
θ	0°	3.5°	7°	

Package Outline



Document Revision History

Table 1 shows the revision history for this document.

Table 1. Document Revision History

Date	Version	Changes
July 2011	1.0	Initial release

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