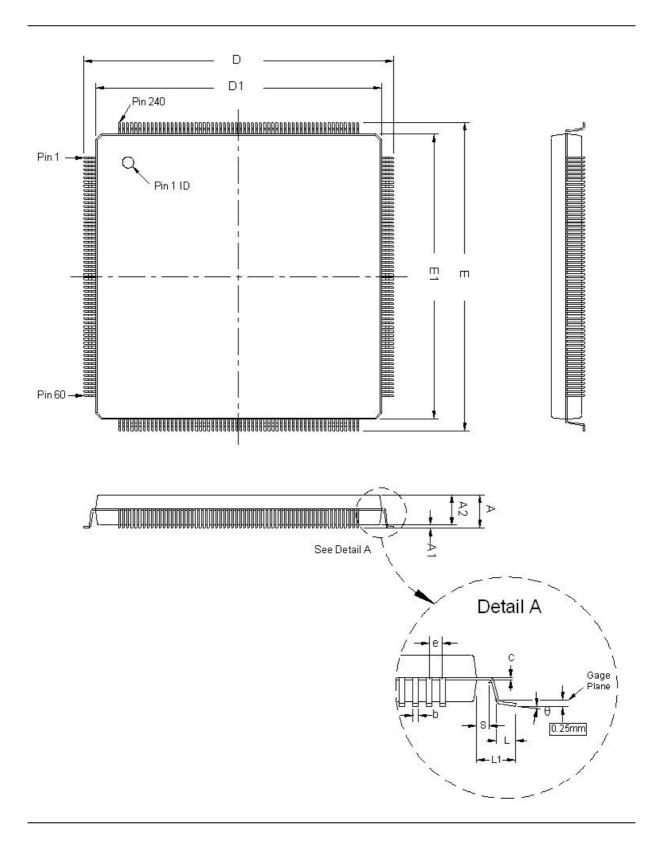
240-Pin Plastic Quad Flat Pack (PQFP)—Wire Bond

- 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	Q	
Package Acronym	PQFP	
Leadframe Material	Copper	
Lead Finish (Plating)	Regular: 85Sn:15Pb (Typ.) Pb-free: Matte Sn	
JEDEC Outline Reference	MS-029 Variation: GA	
Lead Coplanarity	0.003 inches (0.08mm)	
Weight	8.0 g (Typ.)	
Moisture Sensitivity Level	Printed on moisture barrier bag	

ackage Outline Dimension Table				
Symbol –	Millimeters			
	Min.	Nom.	Max.	
Α		_	4.10	
A1	0.25	_	0.50	
A2		3.40	3.60	
D	34.60 BSC			
D1	32.00 BSC			
E	34.60 BSC			
E1	32.00 BSC			
L		0.60	0.75	
L1	1.30 REF			
S	0.20	_	_	
b	0.17	_	0.27	
С	0.09	_	0.20	
е	0.50 BSC			
θ	0°	3.5°	8°	



Package Information Datasheet for Mature Altera Devices

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