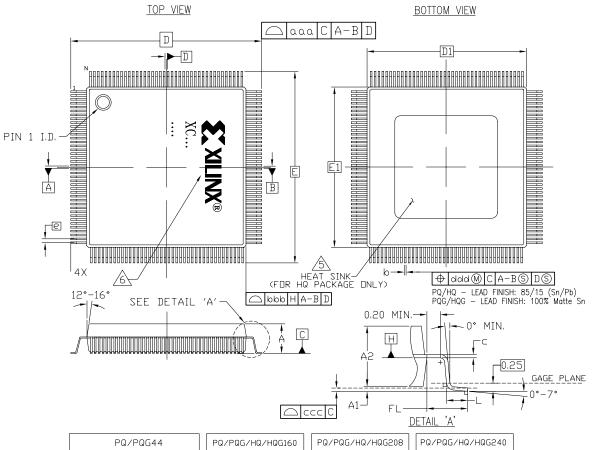
PQFP (PQ/PQG 44, 160, 208, 240 Pin) Packages and Heat Sink PQFP (HQ/HQG 160, 208, 240 Pin) Packages



PQ/PQG44				PQ/PQG/HQ/HQG160			PQ/PQG/HQ/HQG208			PQ/PQG/HQ/HQG240			
SYMBI	MILLIMETERS			MILLIMETERS			MILLIMETERS			MILLIMETERS			
Ë	MIN.	N□M.	MAX.	MIN.	N□M.	MAX.	MIN.	N□M.	MAX.	MIN.	N□M.	MAX.	
Α	~	2.15	2.35	~	3.70	4.10	~	3.70	4.10	~	3.78	4.10	
A ₁	0.05	~	0.25	0.25	0.33	0.50	0.25	0.33	0.50	0.25	0.38	0.50	
Aa	1.95	2.00	2.10	3.20	3.40	3.60	3.20	3.40	3.60	3.20	3.40	3.60	
D/E	13.20 BSC			31.20 BSC			30.60 BSC			34.60 BSC			
D_1/E_1	10.00 BSC			28.00 BSC			28.00 BSC			32.00 BSC			
FL	1.60 REF.			1.60 REF.			1.30 REF.			1.30 REF.			
L	0.73	0.88	1.03	0.73	0.88	1.03	0.50	0.60	0.75	0.50	0.60	0.75	
е	0.80 BSC.			0.65 BSC.			0.50 BSC.			0.50 BSC.			
b	0.30	~~	0.45	0.22	~	0.40	0.17	0.22	0.27	0.17	~	0.27	
C	0.13	~~	0.23	0.13	*	0.23	0.09	*	0.20	0.09	*	0.20	
aaa	~~	~~	0.25	~	×	0.25	~	~	0.25	~	~	0.25	
bbb	*	~~	0.20	*	~	0.20	*	*	0.20	*	~	0.20	
CCC	~~	~~	0.10	~	~	0.10	*	~	0.08	*	~	0.08	
ddd	*	*	0.20	*	*	0.13	*	*	0.08	*	~	0.08	
N	44			160			208			240			
REF.	JEDEC MS-022-AB			JEDEC MS-022-DD1			JEDEC MS-029-FA-1			JEDE	JEDEC MS-029-GA		

NOTES: 1. ALL DIMENSIONS AND TOLERANCES CONFORM TO ANSI Y14.5M-1994.

- 2. DIMENSIONS D1 AND E1 DO NOT INCLUDE MOLD PROTRUSION. ALLOWABLE MOLD PROTRUSION SHALL NOT EXCEED 0.25mm PER SIDE.
- 3. PACKAGE TOP DIMENSIONS MAY BE SMALLER THAN THE BOTTOM DIMENSIONS BY 0.20mm.
- 4. THE SAME PACKAGE DIMENSIONS APPLY FOR THERMALLY ENHANCED PRODUCTS. HEAT SINK IS ADDED. THE PACKAGE CODE IS "HQ".

5. HEAT SINK DIMENSIONS: HQ160/HQ208=21mm SQ. REF.; HQ240=24mm SQ. REF.

6 MARK ORIENTATION WITH RESPECT TO PIN-1 I.D.

IF 2 OR MORE CIRCLES EXIST ON TOP OF THE PACKAGE, USE
THE SMALLEST CIRCLE AS PIN-1 I.D.

44, 160, 208, and 240-PIN PQFP (PQ44/PQG44, PQ160/PQG160, PQ208/PQG208, and PQ240/PQG240) and 160, 208, and 240-PIN HEAT SINK PQFP (HQ160/HQG160, HQ208/HQG208, and HQ240/HQG240)

© 2004 Xilinx, Inc. All rights reserved. All Xilinx trademarks, registered trademarks, patents, and disclaimers are as listed at http://www.xilinx.com/legal.htm.
All other trademarks and registered trademarks are the property of their respective owners. All specifications are subject to change without notice.