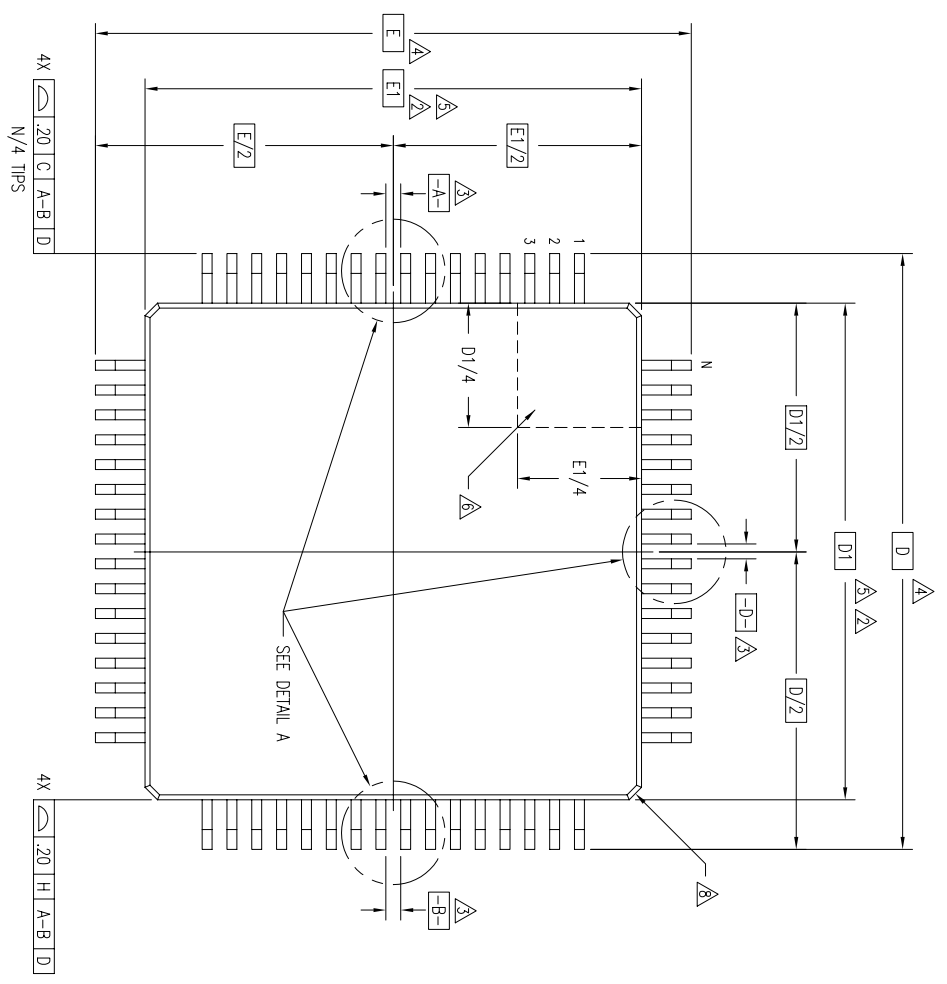
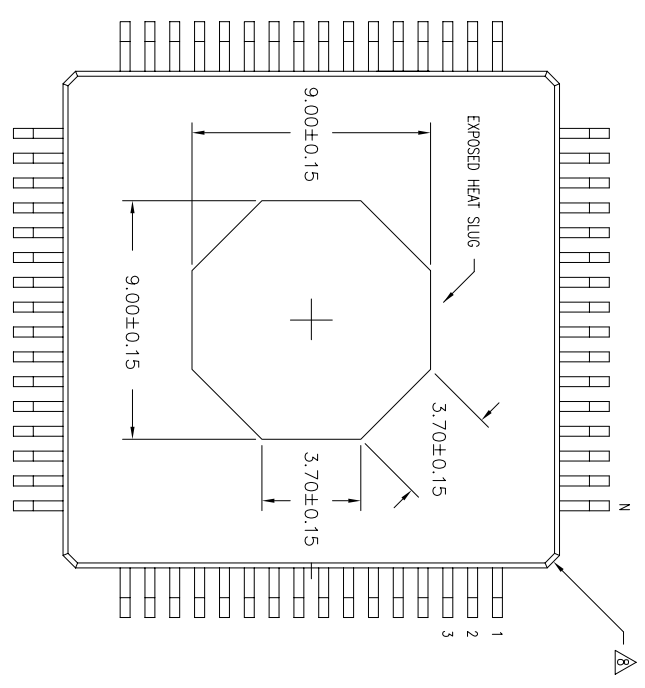


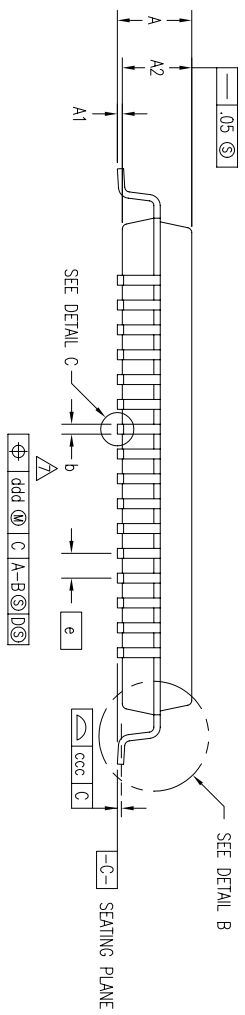
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	10/19/04	PKP
01	MODIFIED LAND PATTERN DIM	05/06/05	PKP
02	ADD PACKAGE CODE	12/10/12	RC



TOP VIEW



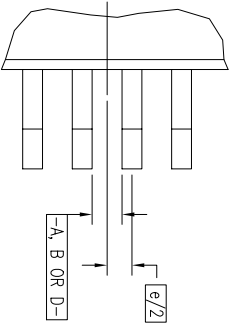
BOTTOM VIEW



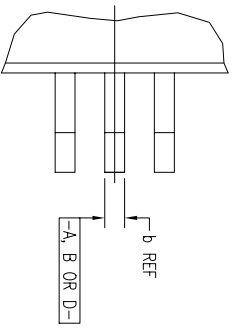
TOLERANCES UNLESS SPECIFIED		 2975 Stender Way Santa Clara, CA 95054 PHONE: (408) 727-6116 FAX: (408) 492-8674
DECIMAL	ANGULAR	
XXX±	±	
XXXX±		
XXXX±		
APPROVALS	DATE	TITLE
DRAWN PXP	10/7/8/04	DQ/DQG PACKAGE OUTLINE
CHECKED		14.0 x 14.0 x 1.4 mm TQFP
		1.00/.10 mm FORM
SIZE	DRAWING No.	REV
C	PSC-4140	02
DO NOT SCALE DRAWING		SHEET 1 OF 3

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	10/19/04	PKP
01	MODIFIED LAND PATTERN DIM	05/06/05	PKP
02	ADD PACKAGE CODE	12/10/12	RC

EVEN LEAD SIDES

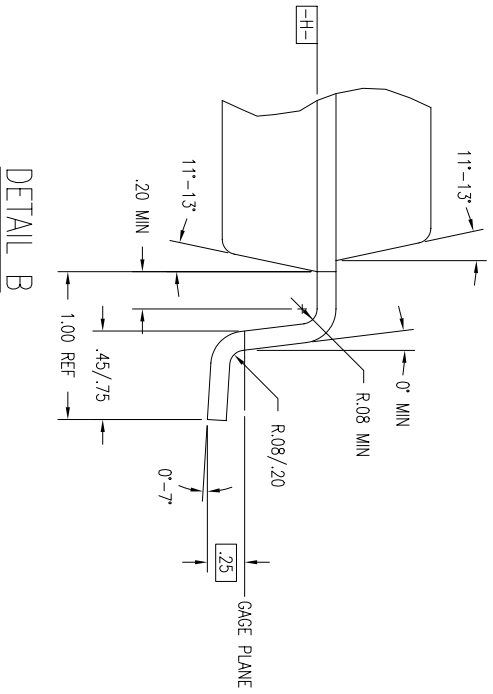
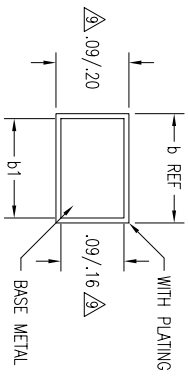


ODD LEAD SIDES



DETAIL A

DETAIL C



DETAIL B

TOLERANCES UNLESS SPECIFIED		2975 Stender Way	
DECIMAL	ANGULAR	San Joaquin, CA 95054	
±	±	PHONE: (408) 727-6116	
±	±	FAX: (408) 492-8674	
±	±	www.IDT.com	
±	±	14.0 x 14.0 x 1.4 mm TQFP	
±	±	1.00/.10 mm FORM	
±	±	DQ/DQG PACKAGE OUTLINE	
±	±	DRAWN P3P 10/18/04	
±	±	CHECKED	
±	±	SIZE C	
±	±	DRAWING No. PSC-4140	
±	±	DO NOT SCALE DRAWING	
±	±	SHEET 2 OF 3	

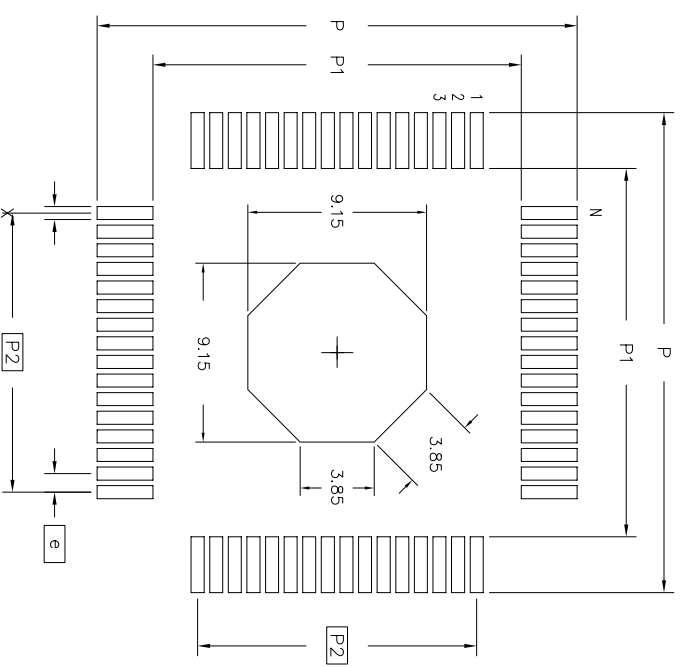
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	INITIAL RELEASE	10/19/04	PKP
01	MODIFIED LAND PATTERN DIM	05/06/05	PKP
02	ADD PACKAGE CODE	12/10/12	RC

LAND PATTERN DIMENSIONS

SYMBOL	DQ/DQG64			DQ/DQG80			DQ/DQG100			DQ/DQG120		
	JEDEC VARIATION			JEDEC VARIATION			JEDEC VARIATION			JEDEC VARIATION		
	BEB-HD			BEC-HD			BED-HD			BEE-HD		
	MIN	NOM	MAX	MIN	NOM	MAX	MIN	NOM	MAX	MIN	NOM	MAX
A	-	-	1.60	-	-	1.60	-	-	1.60	-	-	1.60
A1	.05	.10	.15	.05	.10	.15	.05	.10	.15	.05	.10	.15
A2	1.35	1.40	1.45	1.35	1.40	1.45	1.35	1.40	1.45	1.35	1.40	1.45
D	16.00 BSC			16.00 BSC			16.00 BSC			16.00 BSC		
D1	14.00 BSC			14.00 BSC			14.00 BSC			14.00 BSC		
E	16.00 BSC			16.00 BSC			16.00 BSC			16.00 BSC		
E1	14.00 BSC			14.00 BSC			14.00 BSC			14.00 BSC		
N	64			80			100			120		
e	.80 BSC			.65 BSC			.50 BSC			.40 BSC		
b	.30	.37	.45	.22	.32	.38	.17	.22	.27	.13	.18	.23
b1	.30	.35	.40	.22	.30	.33	.17	.20	.23	.13	.16	.19
ccc	-	-	.10	-	-	.10	-	-	.08	-	-	.08
ddd	-	-	.20	-	-	.13	-	-	.08	-	-	.07

NOTES:

- ALL DIMENSIONING AND TOLERANCING CONFORM TO ANSI Y14.5M-1982
- TOP PACKAGE MAY BE SMALLER THAN BOTTOM PACKAGE BY .15 mm
- DATUMS [A-B] AND [D-] TO BE DETERMINED AT DATUM PLANE [H-]
- DIMENSIONS D AND E ARE TO BE DETERMINED AT SEATING PLANE [C-]
- DIMENSIONS D1 AND E1 DO NOT INCLUDE MOLD PROTRUSION. ALLOWABLE MOLD PROTRUSION IS .25 mm PER SIDE. D1 AND E1 ARE MAXIMUM BODY SIZE DIMENSIONS INCLUDING MOLD MISMATCH
- DETAILS OF PIN 1 IDENTIFIER IS OPTIONAL BUT MUST BE LOCATED WITHIN THE ZONE INDICATED
- DIMENSION b DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE DAMBAR PROTRUSION IS .08 mm IN EXCESS OF THE b DIMENSION AT MAXIMUM MATERIAL CONDITION. DAMBAR CANNOT BE LOCATED ON THE LOWER RADIUS OR THE FOOT.
- EXACT SHAPE OF EACH CORNER IS OPTIONAL
- THESE DIMENSIONS APPLY TO THE FLAT SECTION OF THE LEAD BETWEEN .10 AND .25 mm FROM THE LEAD TIP
- ALL DIMENSIONS ARE IN MILLIMETERS
- THIS OUTLINE CONFORMS TO JEDEC REGISTRATION MS-026.



	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
P	16.80	17.00	16.80	17.00	16.80	17.00	16.80	17.00	16.80	17.00
P1	13.80	14.00	13.80	14.00	13.80	14.00	13.80	14.00	13.80	14.00
P2	12.00 BSC		12.35 BSC		12.00 BSC		11.60 BSC		12.00 BSC	
X	.40	.60	.30	.50	.30	.40	.20	.30	.30	.30
e	.80 BSC		.65 BSC		.50 BSC		.40 BSC		.40 BSC	
N	64		80		100		120		120	

TOLERANCES UNLESS SPECIFIED

DECIMAL	±
ANGULAR	±

www.IDT.com 2975 Stender Way
 Santa Clara, CA 95054
 PHONE: (408) 777-6116
 FAX: (408) 492-8674

DATE: 10/7/04
 DRAWN: PXP/10/7/04
 CHECKED: []

TITLE: DQ/DQG PACKAGE OUTLINE
 SIZE: 14.0 x 14.0 x 1.4 mm TQFP
 DRAWING No.: PSC-4140

DO NOT SCALE DRAWING

REV 02 SHEET 3 OF 3