

TITLE: PACKAGE OUTLINE, 32,44,48,56L THIN QFN, 7x7x0.8 mm

DOC ID # 21-0144	NEW REV: D	OLD REV: C	EFFECTIVE:
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TYPE	883 <input type="checkbox"/>	SMD <input type="checkbox"/> #	PERMANENT <input checked="" type="checkbox"/>	TEMPORARY <input type="checkbox"/>	EXPIRES:
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ORIGINATOR	JOHN DANGTRAN	EXT: 6332	VP NAME: RICH HOOD
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OTHER DOC AFFECTED: NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> LIST: →	
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MATL. AFFECTED: NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> →	USE AS IS: <input type="checkbox"/>	REWORK: <input type="checkbox"/>	SCRAP: <input type="checkbox"/>
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For Maxfab Lot Traveler Changes ONLY: Affects version number? NO YES IF YES, ECN the Process Revision List.

For Data Sheet Changes ONLY: Review Data Sheet before printing? NO YES IF YES, initial

DESIGN CHANGES ONLY:

ROOT CAUSE:

CORRECTIVE ACTION:

**REASON FOR CHANGE: NEW PKG. CODES ADDED TO EXPOSED PAD VARIATIONS TABLE.
DOWN BONDS COLUMN ADDED TO THIS TABLE.**

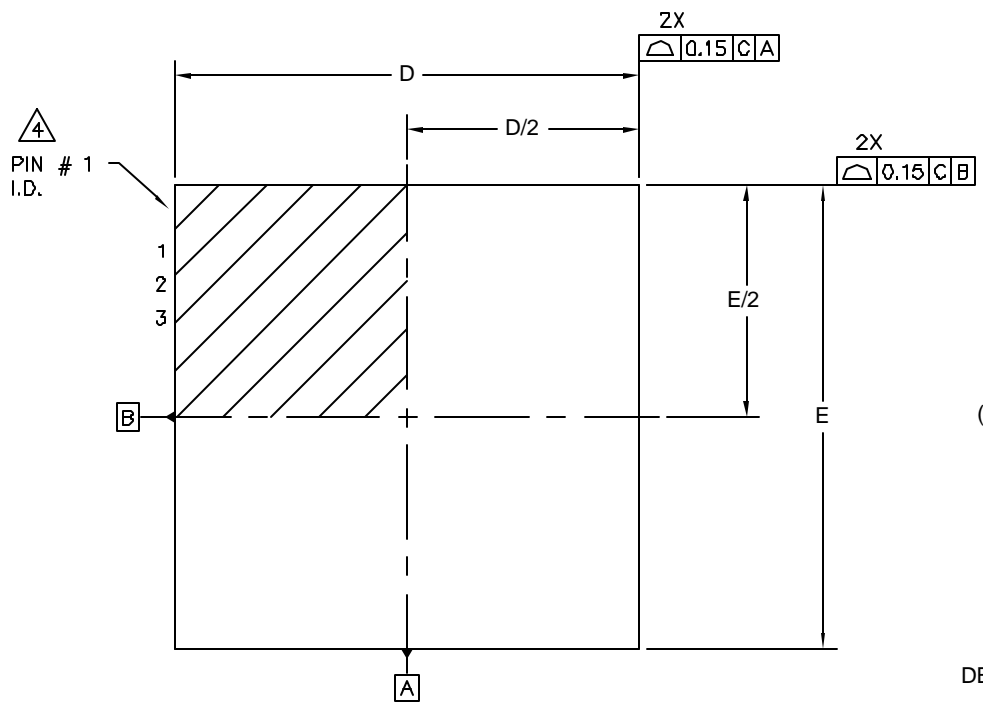
FROM:	TO:
<p>TITLE: PACKAGE OUTLINE, 32,44,48L THIN QFN 7x7x0.8mm</p>	<p>TITLE: PACKAGE OUTLINE, 32,44,48,56L THIN QFN 7x7x0.8mm</p> <p>56L 0.4mm LEAD PITCH DATA FROM 21-0161/A DWG. MERGED INTO THIS DWG. -DETAIL B DIAGRAM ADDED TO PAGE 1. -56L DATA ADDED TO BOTH TABLES ON PAGE 2.</p> <p>NOTE 9: ADDED T5677-1; T4877-4/-5/-6 PKGS.</p>

DISTRIBUTION: HQ Maxim North Maxfab South **Manufacturing Areas** N/A **Offshore:** N/A
Other: J.MOIST, L.JACKSON, M.RUBENZAHL, S. SUNG, S.SCHROEDER, A.ARREOLA, A.WICHMAN, D.GOLDBAUM, E.EVANS;
 COLORADO / AUSTIN / PLANO DESIGN CENTERS

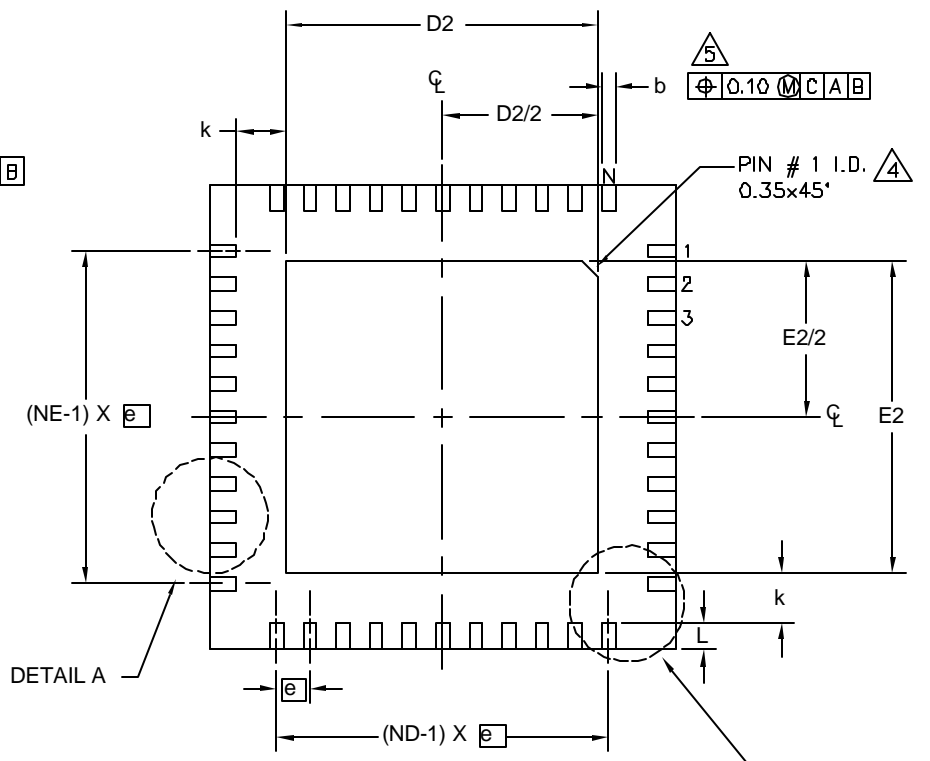
ORIGINAL APPROVALS ARE ON FILE IN THE _____ DOCUMENT CONTROL OFFICE.

APPROVALS	DATE	APPROVALS	DATE	APPROVALS	DATE
PKG. ENGR.	/ /	A. QUINTERO	/ /		/ /
T. MAK	/ /		/ /		/ /
C. KEENE	/ /		/ /		/ /

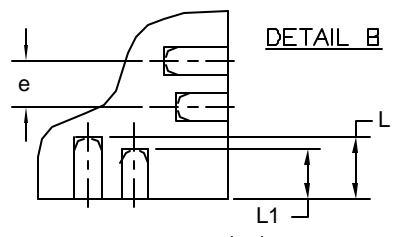
Date ECN submitted into D.C.:	Document Control processor initials:
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TOP VIEW

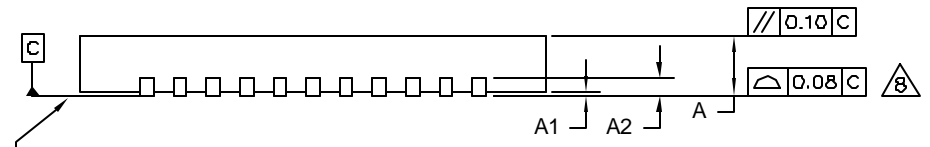
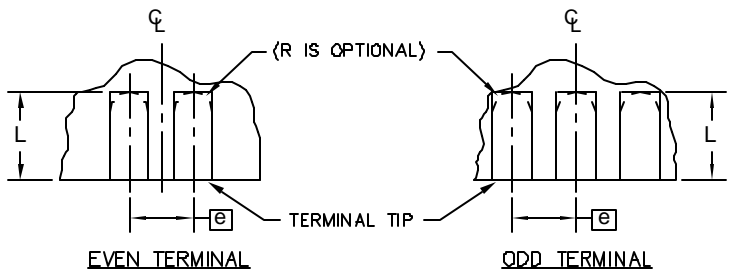


BOTTOM VIEW



PKG. CORNERS ONLY (4x)
 APPLICABLE TO .4mm PITCH PKG. ONLY

DETAIL A



SIDE VIEW

DALLAS SEMICONDUCTOR
MAXIM
 PROPRIETARY INFORMATION
 TITLE: PACKAGE OUTLINE
 32, 44, 48, 56L THIN QFN, 7x7x0.8mm
 APPROVAL: _____ DOCUMENT CONTROL NO. 21-0144 REV. 1/2
 D



COMMON DIMENSIONS															
PKG	32L 7x7			44L 7x7			48L 7x7			CUSTOM PKG. (T4877-1) 48L 7x7			56L 7x7		
SYMBOL	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.
A	0.70	0.75	0.80	0.70	0.75	0.80	0.70	0.75	0.80	0.70	0.75	0.80	0.70	0.75	0.80
A1	0	0.02	0.05	0	0.02	0.05	0	0.02	0.05	0	0.02	0.05	0	-	0.05
A2	0.20 REF.			0.20 REF.			0.20 REF.			0.20 REF.			0.20 REF.		
b	0.25	0.30	0.35	0.20	0.25	0.30	0.20	0.25	0.30	0.20	0.25	0.30	0.15	0.20	0.25
D	6.90	7.00	7.10	6.90	7.00	7.10	6.90	7.00	7.10	6.90	7.00	7.10	6.90	7.00	7.10
E	6.90	7.00	7.10	6.90	7.00	7.10	6.90	7.00	7.10	6.90	7.00	7.10	6.90	7.00	7.10
e	0.65 BSC.			0.50 BSC.			0.50 BSC.			0.50 BSC.			0.40 BSC.		
k	0.25	-	-	0.25	-	-	0.25	-	-	0.25	-	-	0.25	0.35	0.45
L	0.45	0.55	0.65	0.45	0.55	0.65	0.30	0.40	0.50	0.45	0.55	0.65	0.40	0.50	0.60
L1	-	-	-	-	-	-	-	-	-	-	-	-	0.30	0.40	0.50
N	32			44			48			44			56		
ND	8			11			12			10			14		
NE	8			11			12			12			14		

EXPOSED PAD VARIATIONS									
PKG. CODES	DEPOPULATED LEADS	D2			E2			JEDEC MO220 REV. C	DOWN BONDS ALLOWED
		MIN.	NOM.	MAX.	MIN.	NOM.	MAX.		
T3277-1	-	4.55	4.70	4.85	4.55	4.70	4.85	-	NO
T4477-1	-	4.55	4.70	4.85	4.55	4.70	4.85	WKKD-1	NO
T4477-2	-	4.55	4.70	4.85	4.55	4.70	4.85	WKKD-1	YES
T4477-3	-	4.55	4.70	4.85	4.55	4.70	4.85	WKKD-1	YES
T4877-1**	13,24,37,48	4.20	4.30	4.40	4.20	4.30	4.40	-	
T4877-2	-	5.45	5.60	5.63	5.45	5.60	5.63	-	NO
T4877-3	-	4.95	5.10	5.25	4.95	5.10	5.25	-	YES
T4877-4	-	4.20	4.30	4.40	4.20	4.30	4.40	-	YES
T4877-5	-	2.40	2.50	2.60	2.40	2.50	2.60	-	NO
T4877-6	-	5.45	5.60	5.63	5.45	5.60	5.63	-	NO
T5677-1	-	5.20	5.30	5.40	5.20	5.30	5.40	-	YES

** NOTE: T4877-1 IS A CUSTOM 48L PKG. WITH 4 LEADS DEPOPULATED. TOTAL NUMBER OF LEADS ARE 44.

NOTES:

- DIMENSIONING & TOLERANCING CONFORM TO ASME Y14.5M-1994.
- ALL DIMENSIONS ARE IN MILLIMETERS. ANGLES ARE IN DEGREES.
- N IS THE TOTAL NUMBER OF TERMINALS.
- △ THE TERMINAL #1 IDENTIFIER AND TERMINAL NUMBERING CONVENTION SHALL CONFORM TO JESD 95-1 SPP-012. DETAILS OF TERMINAL #1 IDENTIFIER ARE OPTIONAL, BUT MUST BE LOCATED WITHIN THE ZONE INDICATED. THE TERMINAL #1 IDENTIFIER MAY BE EITHER A MOLD OR MARKED FEATURE.
- △ DIMENSION b APPLIES TO METALLIZED TERMINAL AND IS MEASURED BETWEEN 0.25 mm AND 0.30 mm FROM TERMINAL TIP.
- ND AND NE REFER TO THE NUMBER OF TERMINALS ON EACH D AND E SIDE RESPECTIVELY.
- DEPOPULATION IS POSSIBLE IN A SYMMETRICAL FASHION.
- △ COPLANARITY APPLIES TO THE EXPOSED HEAT SINK SLUG AS WELL AS THE TERMINALS.
- DRAWING CONFORMS TO JEDEC MO220 EXCEPT THE EXPOSED PAD DIMENSIONS OF T3277-1; T4877-1/-2/-3/-4/-5/-6 & T5677-1.
- WARPAGE SHALL NOT EXCEED 0.10 mm.

 	
PROPRIETARY INFORMATION	
TITLE: PACKAGE OUTLINE 32, 44, 48, 56L THIN QFN, 7x7x0.8mm	
APPROVAL	DOCUMENT CONTROL NO. 21-0144
REV. D	2/2