

FIGURE 1



FOR REVISION UPDATE PLEASE REFER TO HISTORY OF CHANGES.



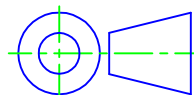
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JEDEC REF.



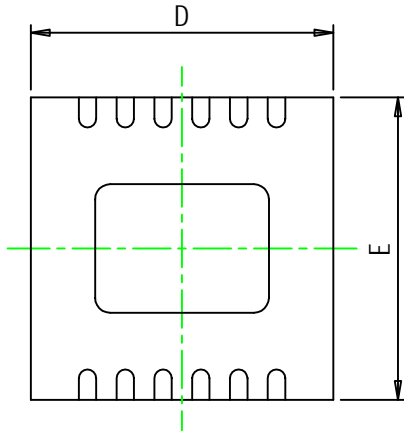
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DWG TITLE:

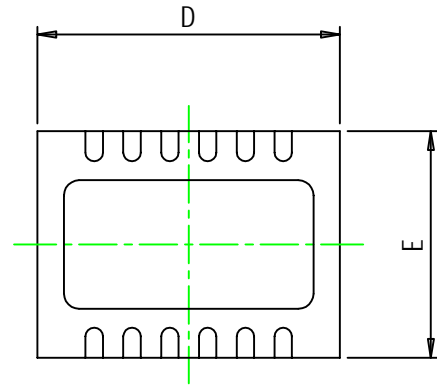
MLP DUAL FAMILY PACKAGE OUTLINE

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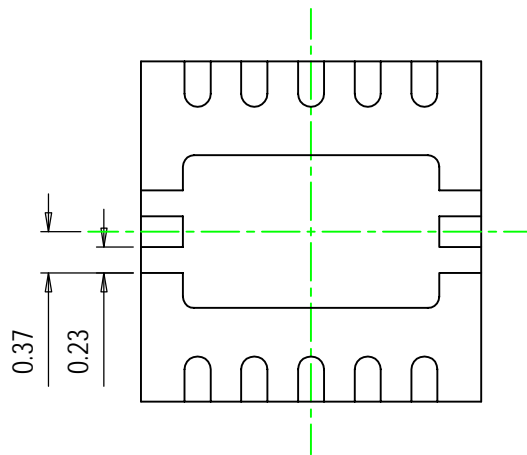
PACKAGE LAYOUT



TYPE A  
(SQUARE D=E)




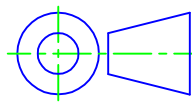
TYPE B  
(Rectangular D>E)  
Or  
(Rectangular D<E)



TYPE C  
Exposed Tie Bar Configuration

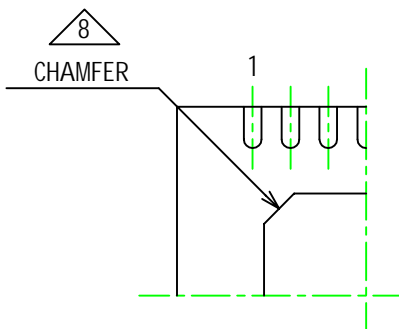
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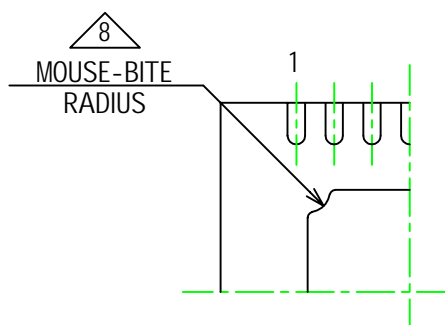
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PIN#1 ID CONFIGURATION

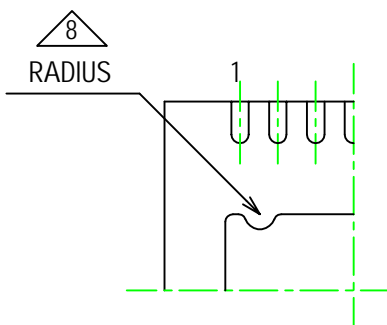
(BOTTOM VIEW)



TYPE A ID



TYPE B ID



TYPE C ID

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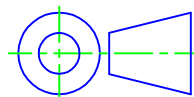
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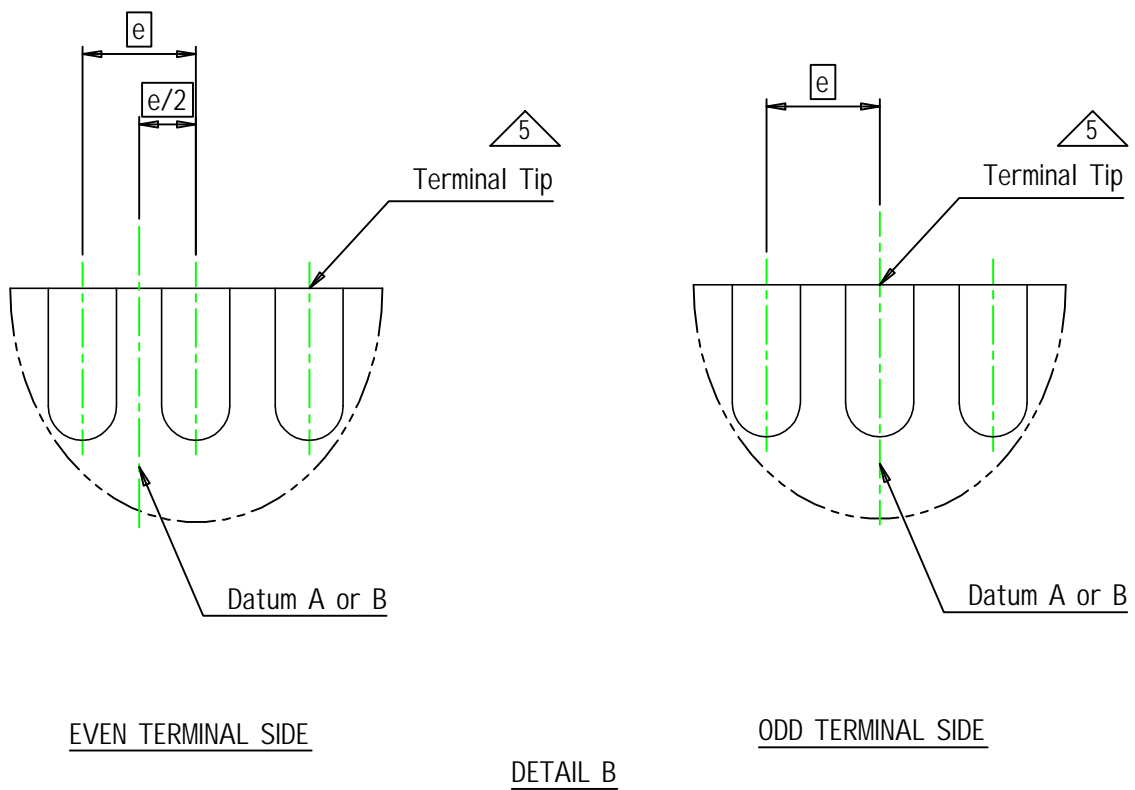
MLP DUAL FAMILY  
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TABLE 1

VARIATION DESIGNATORS							
FIRST DIGIT CODE		SECOND DIGIT CODE		THIRD DIGIT CODE		FOURTH DIGIT CODE	
OVERALL HEIGHT		BODY LENGTH		BODY WIDTH		TERMINAL PITCH	
A	LETTER CODE	D	LETTER CODE	E	LETTER CODE	e	LETTER CODE
1.00 max	V	1.0	10	1.0	10	0.95	A
0.80 max	W	1.5	15	1.5	15	0.80	B
---	---	2.0	20	2.0	20	0.65	C
---	---	2.5	25	2.5	25	0.50	D
---	---	3.0	30	3.0	30	0.40	E
---	---	3.5	35	3.5	35	---	---
---	---	4.0	40	4.0	40	---	---
---	---	4.5	45	4.5	45	---	---
---	---	5.0	50	5.0	50	---	---
---	---	5.5	55	5.5	55	---	---
---	---	6.0	60	6.0	60	---	---

EXAMPLE: A 10 terminal HWF-PDSO-N which is 4mm long (D) by 5mm wide (E) and a pitch of 0.80mm will be variation WGJB

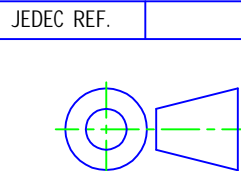


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TABLE 2

COMMON DIMENSION						
TOLERANCE OF FORM AND POSITION						
	e=0.95	e=0.80	e=0.65	e=0.50	e=0.40	
aaa	0.10	0.10	0.10	0.10	0.10	
bbb	0.10	0.10	0.10	0.10	0.07	
ccc	0.10	0.10	0.10	0.10	0.10	
ddd	0.05	0.05	0.05	0.05	0.05	
eee	0.08	0.08	0.08	0.08	0.08	
ggg	0.10	0.10	0.10	0.10	0.10	
NOTES	1,2					
ISSUE	C					

TABLE 3

COMMON DIMENSION						
SYMBOL	V : very thin			W : very very thin		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.70	0.75	0.80
A1	0.00	0.02	0.05	0.00	0.02	0.05
A3	---	0.20 ref	---	---	0.20 ref	---
$\theta$	0	---	14°	0	---	14°
K	0.20	---	---	0.20	---	---
NOTES	1,2					
ISSUE	C					

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TABLE 4

COMMON DIMENSIONS						
	LEAD WIDTH [b]					
PITCH	MIN	NOM	MAX			
0.95	0.30	0.40	0.45			
0.80	0.25	0.30	0.35			
0.65	0.25	0.30	0.35			
0.50	0.18	0.25	0.30			
0.40	0.15	0.20	0.25			
NOTES	1,2,5					
ISSUE	B					

TABLE 5

SPECIFIC DIMENSION VARIATIONS					
		LEAD WIDTH [b]			
VARIATION		MIN	NOM	MAX	
VCCC-NJ1	WCCC-NJ1	0.20	0.25	0.30	
VECD-NJ1	-	0.18	0.23	0.30	
VEEA-NJ1	WEEA-NJ1	0.25	0.35	0.40	
VEEA-NJ5	WEEA-NJ5	0.25	0.35	0.40	
VEEA-2NJ1	WEEA-2NJ1	0.23	0.30	0.38	
VEED-5NJ1	WEED-5NJ1	0.18	0.23	0.30	
VEED-2NJ2	-	0.20	0.25	0.30	
VGGC-0NJ1	WGGC-0NJ1	0.23	0.30	0.38	
VGGB-NJ1	WGGB-NJ1	0.23	0.30	0.38	
VGGB-0NJ1	WGGB-0NJ1	0.23	0.30	0.38	
VJGD-2NJ1	WJGD-2NJ1	0.20	0.25	0.30	

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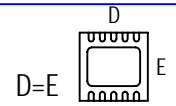
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TABLE 6

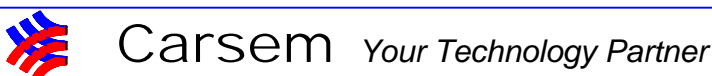


SUMMARY TABLE Square packages



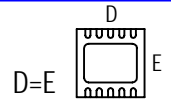
BODY SIZE	LEAD PITCH	LEAD COUNT	Very thin FQFP-N	Very very thin FQFP-N	TYPE A ID	TYPE B ID	TYPE C ID
1.5X1.5	0.50	4	V1515D	W1515D	---	---	---
2.0X2.0	0.65	6	V2020C	---	---	---	---
2.0X2.0	0.50	4	V2020D-1	W2020D-1	---	---	---
2.0X2.0	0.50	6	V2020D-2,4	W2020D-2,4	---	---	---
2.0X2.0	0.50	8	V2020D-3	---	---	---	R0.10
2.5X2.5	0.80	6	V2525B	W2525B	---	---	---
2.5X2.5	0.50	6	V2525D-1	W2525D-1	---	---	---
2.5X2.5	0.50	8	V2525D-2	W2525D-2	---	---	---
3.0X3.0	0.95	6	V3030A-1,2	W3030A-2	---	---	---
3.0X3.0	0.80	6	V3030B	---	---	---	---
3.0X3.0	0.80	6	---	W3030B	---	---	---
3.0X3.0	0.95	6	V3030A-1.1	W3030A-1.1	---	R0.20	---
3.0X3.0	0.65	8	V3030C-1,2	W3030C-1,2	---	---	---
3.0X3.0	0.65	8	V3030C-2.1	W3030C-2.1	---	---	R0.20
3.0X3.0	0.65	8	V3030C-2.2	W3030C-2.2	---	R0.30	---
3.0X3.0	0.65	8	V3030C-2.3	W3030C-2.3	---	R0.20	---
3.0X3.0	0.50	8	V3030D-1,4,6	W3030D-1,4,6	---	---	---
3.0X3.0	0.50	10	V3030D-2,3,5	W3030D-2,3,5	---	---	---
3.0X3.0	0.50	8	V3030D-4.1	W3030ED-4.1	---	R0.20	---
3.0X3.0	0.50	10	V3030D-5.1	W3030D-5.1	C'0.225	---	---
3.0X3.0	0.50	10	V3030D-5.2	W3030D-5.2	C'0.225	---	---
3.0X3.0	0.50	10	V3030D-5.3	W3030D-5.3	---	---	R0.20
3.0X3.0	0.50	8	V3030D-6.1	W3030D-6.1	C'0.225	---	---
3.5X3.5	0.50	10	V3535D-1	W3535D-1	---	---	---
3.5X3.5	0.50	12	V3535D-2	W3535D-2	---	---	---
4.0X4.0	0.80	8	V4040B	W4040B	---	---	---
4.0X4.0	0.65	10	V4040C	W4040C	---	---	---
4.0X4.0	0.50	10	V4040D-1	W4040D-1	---	---	---
4.0X4.0	0.50	12	V4040D-2	W4040D-2	---	---	---
4.0X4.0	0.50	14	V4040D-3	W4040D-3	---	---	---
5.0X5.0	0.80	8	V5050B	W5050B	---	---	---
5.0X5.0	0.50	16	V5050D-1	W5050D-1	---	---	---
5.0X5.0	0.50	18	V5050D-2	W5050D-2	---	---	---

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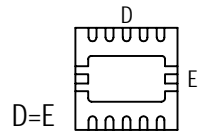
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TABLE 7



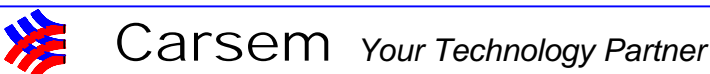
SUMMARY TABLE Square packages							
BODY SIZE	LEAD PITCH	LEAD COUNT	Very thin FQFP-N	Very very thin FQFP-N	TYPE A ID	TYPE B ID	TYPE C ID
2.0X2.0	0.65	6	V2020C-NJ1	W2020C-NJ1	---	---	R0.10
2.0X2.0	0.50	8	V2020D-NJ1	W2020D-NJ1	---	R0.20	---
2.0X2.0	0.50	8	V2020D-NJ2	W2020D-NJ2	---	R0.20	---
2.5X2.5	0.50	10	V2525D-NJ1	W2525D-NJ1		---	R0.20
3.0X3.0	0.95	6	V3030A-NJ1	W3030A-NJ1	---	R0.20	---
3.0X3.0	0.95	6	V3030A-NJ2	W3030A-NJ2	---	R0.20	---
3.0X3.0	0.95	6	V3030A-NJ3	N/A	C'0.225	---	---
3.0X3.0	0.95	5	N/A	W3030A-NJ4	---	R0.20	---
3.0X3.0	0.95	6	V3030A-NJ5	W3030A-NJ5	---	R0.20	---
3.0X3.0	0.95	6	V3030A-NJ6	W3030A-NJ6	---	R0.20	---
3.0X3.0	0.95	6	V3030A-2NJ1	W3030A-2NJ1	C'0.225	---	---
3.0X3.0	0.65	8	N/A	W3030C-NJ1	---	R0.20	---
3.0X3.0	0.65	8	V3030C-2NJ1	W3030C-2NJ1	---	R0.20	---
3.0X3.0	0.50	8	N/A	W3030D-NJ1	---	R0.20	---
3.0X3.0	0.50	10	V3030D-NJ2	W3030D-NJ2	---	R0.20	---
3.0X3.0	0.50	10	V3030D-5NJ1	W3030D-5NJ1	C'0.246	---	---
3.0X3.0	0.50	10	V3030D-5NJ2	W3030D-5NJ2	---	R0.20	---
4.0X4.0	0.80	8	V4040B-NJ1	W4040B-NJ1	---	R0.20	---
4.0X4.0	0.80	8	V4040B-0NJ1	W4040B-0NJ1	---	R0.20	---
4.0X4.0	0.65	12	V4040C-NJ1	W4040C-NJ1	---	---	R0.30
4.0X4.0	0.65	10	V4040C-0NJ1	W4040C-0NJ1	C'0.225	---	---
5.0X5.0	0.50	16	V5050D-NJ1	W5050D-NJ1	---	R0.30	---
5.0X5.0	0.80	8	V5050B-1	W5050B-2	C'0.225	---	---

TABLE 8



SUMMARY TABLE Square Package, TYPE 3							
BODY SIZE	LEAD PITCH	LEAD COUNT	Very thin FQFP-N	Very very thin FQFP-N	TYPE A ID	TYPE B ID	TYPE C ID
3.0X3.0	0.50	10	V3030D-2NJ1	N/A	C'0.246	---	---

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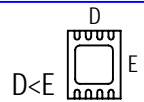


TABLE 9

SUMMARY TABLE Rectangular Packages, TYPE 1								9	11a
BODY SIZE	LEAD PITCH	LEAD COUNT	Very thin FQFP-N	Very very thin FQFP-N	TYPE A ID	TYPE B ID	TYPE C ID		
2.0X2.5	0.80	4	V2025B	W2025B	---	---	---		
2.0X2.5	0.50	6	V2025D-1	W2025D-1	---	---	---		
2.0X2.5	0.50	8	V2025D-2	W2025D-2	---	---	---		
2.0X3.0	0.50	6	V2030D-1	W2030D-1	---	---	---		
2.0X3.0	0.50	8	V2030D-2	W2030D-2	---	---	---		
2.0X3.0	0.50	8	V2030D-2.1	W2030D-2.1	---	R0.20	---		
2.5X3.0	0.80	6	V2530B	W2530B	---	---	---		
2.5X3.0	0.50	8	V2530D	W2530D	---	---	---		
3.0X4.0	0.80	6	V3040B	W3040B	---	---	---		
3.0X4.0	0.50	10	V3040D	W3040D	---	---	---		
4.0X5.0	0.80	10	V4050B	W4050B	---	---	---		
4.0X5.0	0.50	14	V4050D	W4050D	---	---	---		

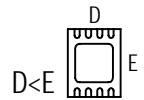


TABLE 10

SUMMARY TABLE Rectangular Packages, TYPE 1								9	11a
BODY SIZE	LEAD PITCH	LEAD COUNT	Very thin FQFP-N	Very very thin FQFP-N	TYPE A ID	TYPE B ID	TYPE C ID		
2.0X3.0	0.50	8	V2030D-NJ1	W2030D-NJ1	---	R0.20	---		
2.0X3.0	0.50	6	V2030D-NJ2	W2030D-NJ2	---	R0.20	---		
2.0X3.0	0.50	8	V2030D-NJ3	N/A	C'0.225	---	---		
2.0X3.0	0.50	6	V2030D-NJ4	W2030D-NJ4	---	R0.20	---		
2.0X5.0	0.50	6	V2050D-NJ1	W2050D-NJ1	---	R0.20	---		
2.5X3.0	0.50	8	V2530D-NJ1	W2530D-NJ1	---	R0.20	---		
2.5X3.0	0.50	8	V2530D-NJ2	W2530D-NJ2	---	R0.20	---		
3.0X4.9	0.65	8	V3049C-NJ	W3049C-NJ	---	R0.20	---		

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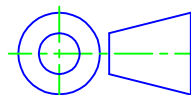
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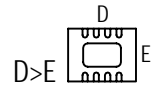
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TABLE 11



SUMMARY TABLE Rectangular Packages, TYPE 2							
BODY SIZE	LEAD PITCH	LEAD COUNT	Very thin FQFP-N	Very very thin FQFP-N	TYPE A ID	TYPE B ID	TYPE C ID
1.5X1.0	0.50	4	V1510D	W1510D	---	---	---
2.0X1.0	0.50	4	V2010D-1	W2010D-1	---	---	---
2.0X1.0	0.50	6	V2010D-2	W2010D-2	---	---	---
2.0X1.5	0.50	4	V2015D-1	W2015D-1	---	---	---
2.0X1.5	0.50	6	V2015D-2	W2015D-2	---	---	---
2.5X1.5	0.50	6	V2515D-1	W2515D-1	---	---	---
2.5X1.5	0.50	8	V2515D-2	W2515D-2	---	---	---
2.5X2.0	0.50	4	V2520D-1	W2520D-1	---	---	---
2.5X2.0	0.50	6	V2520D-2	W2520D-2	---	---	---
2.5X2.0	0.50	8	V2520D-3	W2520D-3	---	---	---
3.0X1.5	0.50	8	V3015D-1	W3015D-1	---	---	---
3.0X1.5	0.50	10	V3015D-2	W3015D-2	---	---	---
3.0X2.0	0.95	6	V3020A	---	---	---	---
3.0X2.0	0.65	8	V3020C	---	---	---	---
3.0X2.0	0.50	8	V3020D-1,4	W3020D-1,4	---	---	---
3.0X2.0	0.50	10	V3020D-2,3	W3020D-2	---	---	---
3.0X2.5	0.50	8	V3025D-1	W3025D-1	---	---	---
3.0X2.5	0.50	10	V3025D-2	W3025D-2	---	---	---
3.5X2.5	0.50	10	V3525D-1	W3525D-1	---	---	---
3.5X2.5	0.50	12	V3525D-2	W3525D-2	---	---	---
3.5X3.0	0.50	10	V3530D-1	W3530D-1	---	---	---
3.5X3.0	0.50	12	V3530D-2	W3530D-2	---	---	---
4.0X3.0	0.50	10	V4030D-1	W4030D-1	---	---	---
4.0X3.0	0.50	12	V4030D-2,4	W4030D-2,4	---	---	---
4.0X3.0	0.50	14	V4030D-3	W4030D-3	---	---	---
5.0X3.0	0.50	16	V5030D-1	W5030D-1	---	---	---
5.0X3.0	0.50	18	V5030D-2	W5030D-2	---	---	---
5.0X4.0	0.50	14	V5040D-1	W5040D-1	---	---	---
5.0X4.0	0.50	18	V5040D-3	W5040D-3	---	---	---
6.0X5.0	0.50	16	V6050D-1	W6050D-1	---	---	---
6.0X5.0	0.50	18	V6050D-2	W6050D-2	---	---	---

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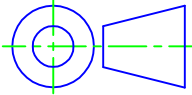
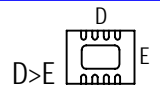
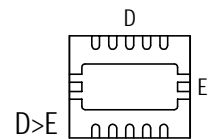
Official Revision  <b>F</b>	ORIGINATOR	ZAHRUL	JEDEC REF.  	DRAWING NO: PKGMLPD
	TOOLING DEPT MANAGER	SA TAN		DWG TITLE:  MLP DUAL FAMILY PACKAGE OUTLINE
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TABLE 12



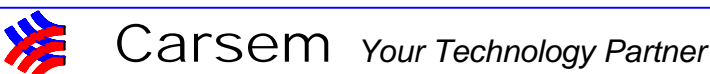
SUMMARY TABLE Rectangular Packages, TYPE 2							
BODY SIZE	LEAD PITCH	LEAD COUNT	Very thin FQFP-N	Very very thin FQFP-N	TYPE A ID	TYPE B ID	TYPE C ID
3.0X2.0	0.50	8	V3020D-NJ1	N/A	C'0.225	---	---
3.0X2.0	0.50	8	V3020D-NJ2	W3020D-NJ2	C'0.225	---	---
3.0X2.0	0.50	8	N/A	W3020D-NJ3	C'0.225	---	---
3.0X2.0	0.50	10	V3020D-NJ4	---	---	R0.20	---
3.0X2.0	0.50	8	V3020D-NJ5	N/A	C'0.225	---	---
3.5X3.0	0.50	12	V3530D-NJ1	W3530D-NJ1	---	R0.20	---
4.0X3.0	0.50	14	V4030D-3NJ1	W4030D-3NJ1	---	R0.20	---
4.5X3.5	0.80	8	V4535B-NJ1	W4535B-NJ1	---	R0.20	---
5.0X3.0	0.50	16	V5030D-NJ1	W5030D-NJ1	---	R0.30	---
5.0X4.0	0.50	16	V5040D-2NJ1	W5040D-2NJ1	---	R0.30	---

TABLE 13



SUMMARY TABLE Rectangular Packages, TYPE 3							
BODY SIZE	LEAD PITCH	LEAD COUNT	Very thin FQFP-N	Very very thin FQFP-N	TYPE A ID	TYPE B ID	TYPE C ID
6.0X5.0	0.50	20	V6050D-NJ1	N/A	C'0.225	---	---
6.0X5.0	0.50	22	V6050D-NJ2	N/A	---	R0.30	---
6.0X5.0	0.50	18	V6050D-NJ3	N/A	C'0.225	---	---

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TABLE 14		e=0.50mm									Note
Variation Symbol	V1510D	V1515D	V2010D-1	V2010D-2	V2015D-1	V2015D-2	V2020D-1	V2020D-2	V2020D-3		
	W1510D	W1515D	W2010D-1	W2010D-2	W2015D-1	W2015D-2	W2020D-1	W2020D-2	N/A		
D BSC	1.50	1.50	2.00	2.00	2.00	2.00	2.00	2.00	2.00		
E BSC	1.00	1.50	1.00	1.00	1.50	1.50	2.00	2.00	2.00		
D1 BSC	---	---	---	---	---	---	---	---	---		
E1 BSC	---	---	---	---	---	---	---	---	---		
D2	MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NOM	0.00	0.70	0.00	0.00	1.20	1.20	1.20	1.20		
	MAX	0.00	0.75	0.00	0.00	1.25	1.25	1.25	1.25		
E2	MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	NOM	0.00	0.10	0.00	0.00	0.10	0.10	0.60	0.60		
	MAX	0.00	0.15	0.00	0.00	0.15	0.15	0.65	0.65		
L	MIN	0.20	0.45	0.20	0.20	0.45	0.45	0.45	0.45		
	NOM	0.30	0.55	0.30	0.30	0.55	0.55	0.55	0.55		
	MAX	0.40	0.65	0.40	0.40	0.65	0.65	0.65	0.65		
N	4	4	4	6	4	6	4	6	8		
ND	2	2	2	3	2	3	2	3	4		
NE	---	---	---	---	---	---	---	---	---		
NOTES	1,2,11b	1,2	1,2,11b	1,2,11b	1,2,11b	1,2,11b	1,2	1,2	1,2		
ISSUE	A	A	A	A	A	A	A	A	A		

TABLE 15		e=0.50mm									Note
Variation Symbol	V2020D-4	V2025D-1	V2025D-2	V2030D-1	V2030D-2	V2030D-2.1	V2515D-1	V2515D-2	V2520D-1		
	W2020D-4	W2025D-1	W2025D-2	W2030D-1	W2030D-2	W2030D-2.1	W2515D-1	W2515D-2	W2520D-1		
D BSC	2.00	2.00	2.00	2.00	2.00	2.00	2.50	2.50	2.50		
E BSC	2.00	2.50	2.50	3.00	3.00	3.00	1.50	1.50	2.00		
D1 BSC	---	---	---	---	---	---	---	---	---		
E1 BSC	---	---	---	---	---	---	---	---	---		
D2	MIN	1.30	0.00	0.00	0.60	1.50	1.50	0.00	0.00		
	NOM	---	1.00	---	---	---	1.65	1.70	1.70		
	MAX	1.75	1.10	1.10	1.00	1.75	1.75	1.75	1.75		
E2	MIN	0.50	0.00	0.00	0.90	1.60	1.65	0.00	0.00		
	NOM	---	0.70	---	---	---	1.80	0.10	0.10		
	MAX	0.80	0.80	0.80	1.20	1.90	1.90	0.15	0.15		
L	MIN	0.30	0.45	0.45	0.30	0.30	0.30	0.45	0.45		
	NOM	0.40	0.55	0.55	0.40	0.40	0.40	0.55	0.55		
	MAX	0.50	0.65	0.65	0.50	0.50	0.50	0.65	0.65		
N	6	6	8	6	8	8	6	8	4		
ND	3	3	4	3	4	4	3	4	2		
NE	---	---	---	---	---	---	---	---	---		
NOTES	1,2	1,2,11a	1,2,11a	1,2,11a	1,2,11a	1,2,11a	1,2,11b	1,2,11b	1,2,11b		
ISSUE	---	A	C	C	C	---	---	B	A		

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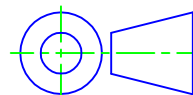
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TABLE 16		e=0.50mm								
Variation Symbol	V2520D-2	V2520D-3	V2525D-1	V2525D-2	V2530D	V3015D-1	V3015D-2	V3020D-1	V3020D-2	Note
	W2520D-2	W2520D-3	W2525D-1	W2525D-2	W2530D	W3015D-1	W3015D-2	W3020D-1	W3020D-2	
D BSC	2.50	2.50	2.50	2.50	2.50	3.00	3.00	3.00	3.00	
E BSC	2.00	2.00	2.50	2.50	3.00	1.50	1.50	2.00	2.00	
D1 BSC	---	---	---	---	---	---	---	---	---	
E1 BSC	---	---	---	---	---	---	---	---	---	
D2	MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NOM	1.70	1.70	1.70	1.70	1.50	2.20	2.20	2.20	
	MAX	1.75	1.75	1.75	1.75	1.60	2.25	2.25	2.25	
E2	MIN	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.00	
	NOM	0.60	0.60	1.10	1.10	1.20	0.10	0.10	0.60	
	MAX	0.65	0.65	1.15	1.15	1.30	0.15	0.15	0.65	
L	MIN	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	
	NOM	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	
	MAX	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	
N	6	8	6	8	8	8	10	8	10	
ND	3	4	3	4	4	4	5	4	5	
NE	---	---	---	---	---	---	---	---	---	
NOTES	1,2,11b	1,2,11b	1,2	1,2	1,2,11a	1,2,11b	1,2,11b	1,2,11b	1,2,11b	
ISSUE	A	A	A	A	A	A	A	A	A	

TABLE 17		e=0.50mm								
Variation Symbol	V3020D-3	V3020D-4	V3025D-1	V3025D-2	V3030D-1	N/A	V3030D-2	N/A	V3030D-3	Note
	N/A	W3020D-4	W3025D-1	W3025D-2	N/A	W3030D-1	N/A	W3030D-2	N/A	
D BSC	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
E BSC	2.00	2.00	2.50	2.50	3.00	3.00	3.00	3.00	3.00	
D1 BSC	---	---	---	---	---	---	---	---	---	
E1 BSC	---	---	---	---	---	---	---	---	---	
D2	MIN	0.00	1.70	0.00	0.00	0.00	0.00	0.00	0.00	
	NOM	2.20	---	2.20	2.20	2.20	2.00	2.20	2.00	
	MAX	2.25	2.20	2.25	2.25	2.25	2.10	2.25	2.10	
E2	MIN	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	
	NOM	0.60	---	1.10	1.10	1.60	1.20	1.60	1.20	
	MAX	0.65	0.60	1.15	1.15	1.65	1.30	1.65	1.30	
L	MIN	0.20	0.30	0.45	0.30	0.45	0.45	0.45	0.45	
	NOM	0.30	0.40	0.55	0.50	0.55	0.55	0.55	0.55	
	MAX	0.45	0.50	0.65	0.65	0.65	0.65	0.65	0.65	
N	10	8	8	10	8	8	10	10	10	
ND	5	4	4	5	4	4	5	5	5	
NE	---	---	---	---	---	---	---	---	---	
NOTES	1,2,11b	1,2,11b	1,2,11b	1,2,11b	1,2	1,2	1,2	1,2	1,2	
ISSUE	A	C	A	A	A	A	A	A	A	

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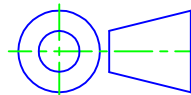
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Variation Symbol	V3030D-4	V3030D-4.1	V3030D-5	V3030D-5.1	V3030D-5.2	V3030D-5.3	V3030D-6	V3030D-6.1	V3040D	Note
	W3030D-4	W3030D-4.1	W3030D-5	W3030D-5.1	W3030D-5.2	W3030D-5.3	W3030D-6	W3030D-6.1	W3040D	
D BSC	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
E BSC	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	4.00	
D1 BSC	---	---	---	---	---	---	---	---	---	
E1 BSC	---	---	---	---	---	---	---	---	---	
D2	MIN	2.20	2.23	2.20	2.23	2.23	2.23	2.00	2.20	0.00
	NOM	---	2.38	---	2.38	2.38	2.38	---	2.35	2.00
	MAX	2.70	2.48	2.70	2.48	2.48	2.48	2.50	2.45	2.10
E2	MIN	1.40	1.49	1.40	1.49	1.49	1.49	1.20	1.20	0.00
	NOM	---	1.64	---	1.64	1.64	1.64	---	1.35	2.20
	MAX	1.75	1.74	1.75	1.74	1.74	1.74	1.50	1.45	2.30
L	MIN	0.30	0.30	0.30	0.30	0.30	0.30	0.45	0.45	0.45
	NOM	0.40	0.40	0.40	0.40	0.40	0.40	0.55	0.55	0.55
	MAX	0.50	0.50	0.50	0.50	0.50	0.50	0.65	0.65	0.65
N	8	8	10	10	10	10	8	8	10	
ND	4	4	5	5	5	5	4	4	5	
NE	---	---	---	---	---	---	---	---	---	
NOTES	1,2	---	1,2	---	---	---	1,2	---	1,2,11a	
ISSUE	C	A	C	---	---	A	C	A	A	

Variation Symbol	V3525D-1	V3525D-2	V3530D-1	V3530D-2	V3535D-1	V3535D-2	V4030D-1	V4030D-2	V4030D-3	Note
	W3525D-1	W3525D-2	W3530D-1	W3530D-2	W3535D-1	W3535D-2	W4030D-1	W4030D-2	W4030D-3	
D BSC	3.50	3.50	3.50	3.50	3.50	3.50	4.00	4.00	4.00	
E BSC	2.50	2.50	3.00	3.00	3.50	3.50	3.00	3.00	3.00	
D1 BSC	---	---	---	---	---	---	---	---	---	
E1 BSC	---	---	---	---	---	---	---	---	---	
D2	MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NOM	2.70	2.70	2.70	2.70	2.70	2.70	3.20	3.20	3.20
	MAX	2.75	2.75	2.75	2.75	2.75	2.75	3.25	3.25	3.25
E2	MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NOM	1.10	1.10	1.60	1.60	2.10	2.10	1.60	1.60	1.60
	MAX	1.15	1.15	1.65	1.65	2.15	2.15	1.65	1.65	1.65
L	MIN	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	
	NOM	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	
	MAX	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	
N	10	12	10	12	10	12	10	12	14	
ND	5	6	5	6	5	6	5	6	7	
NE	---	---	---	---	---	---	---	---	---	
NOTES	1,2,11b	1,2,11b	1,2,11b	1,2,11b	1,2	1,2	1,2,11b	1,2,11b	1,2,11b	
ISSUE	A	A	A	A	A	A	A	A	A	

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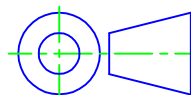
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TABLE 20		e=0.50mm								
Variation Symbol	V4030D-4	V4040D-1	N/A	V4040D-2	N/A	V4040D-3	N/A	V4050D	V5030D-1	Note
	W4030D-4	N/A	W4040D-1	N/A	W4040D-2	N/A	W4040D-3	W4050D	W5030D-1	
D BSC	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	
E BSC	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	3.00
D1 BSC	---	---	---	---	---	---	---	---	---	
E1 BSC	---	---	---	---	---	---	---	---	---	
D2	MIN	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOM	---	3.20	3.00	3.20	3.00	3.20	3.00	3.00	4.20
	MAX	3.70	3.25	3.10	3.25	3.10	3.25	3.10	3.10	4.25
E2	MIN	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	NOM	---	2.60	2.20	2.60	2.20	2.60	2.20	3.20	1.60
	MAX	1.80	2.65	2.30	2.65	2.30	2.65	2.30	3.30	1.65
L	MIN	0.30	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
	NOM	0.40	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
	MAX	0.50	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
N	12	10	10	12	12	14	14	14	16	
ND	6	5	5	6	6	7	7	7	8	
NE	---	---	---	---	---	---	---	---	---	
NOTES	1,2,11b	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2,11b	1,2,11b
ISSUE	C	A	A	A	A	A	A	A	A	A

TABLE 21		e=0.50mm								
Variation Symbol	V5030D-2	V5040D-1	V5040D-3	V5050D-1	N/A	V5050D-2	N/A	V6050D-1	V6050D-2	Note
	W5030D-2	W5040D-1	W5040D-3	N/A	W5050D-1	N/A	W5050D-2	W6050D-1	W6050D-2	
D BSC	5.00	5.00	5.00	5.00	5.00	5.00	5.00	6.00	6.00	
E BSC	3.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	
D1 BSC	---	---	---	---	---	---	---	---	---	
E1 BSC	---	---	---	---	---	---	---	---	---	
D2	MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.80	3.80
	NOM	4.20	4.20	4.20	4.20	4.00	4.20	4.00	---	---
	MAX	4.25	4.25	4.25	4.25	4.10	4.25	4.10	4.70	4.70
E2	MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80	2.80
	NOM	1.60	2.60	2.60	3.60	3.20	3.60	3.20	---	---
	MAX	1.65	2.65	2.65	3.65	3.30	3.65	3.30	3.40	3.40
L	MIN	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
	NOM	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
	MAX	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
N	18	14	18	16	16	18	18	16	18	
ND	9	7	9	8	8	9	9	8	9	
NE	---	---	---	---	---	---	---	---	---	
NOTES	1,2,11b	1,2,11b	1,2,11b	1,2	1,2	1,2	1,2	1,2,11b	1,2,11b	
ISSUE	A	A	A	A	A	A	A	C	C	

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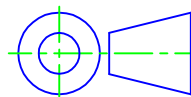
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TABLE 22		e=0.50mm									Note
Variation Symbol	V2020D-NJ1	V2020D-NJ2	V2525D-NJ1	V2030D-NJ1	V2030D-NJ2	V2030D-NJ3	V2030D-NJ4	V2050D-NJ1	V2530D-NJ1		
	W2020D-NJ1	W2020D-NJ2	W2525D-NJ1	W2030D-NJ1	W2030D-NJ2	---	W2030D-NJ4	W2050D-NJ1	W2530D-NJ1		
D BSC	2.00	2.00	2.50	2.00	2.00	2.00	2.00	2.00	2.50		
E BSC	2.00	2.00	2.50	3.00	3.00	3.00	3.00	5.00	3.00		
D1 BSC	---	---	---	---	---	---	---	---	---		
E1 BSC	---	---	---	---	---	---	---	---	---		
D2	MIN	1.55	1.30	1.75	1.35	1.225	1.50	1.20	1.33	1.05	
	NOM	1.70	1.45	1.90	1.50	1.375	1.65	1.35	1.48	1.20	
	MAX	1.80	1.55	2.00	1.60	1.475	1.75	1.45	1.58	1.30	
E2	MIN	0.75	0.65	1.05	1.15	1.00	1.65	1.40	2.39	1.35	
	NOM	0.90	0.80	1.20	1.30	1.15	1.80	1.55	2.54	1.50	
	MAX	1.00	0.90	1.30	1.40	1.25	1.90	1.65	2.64	1.60*	
L	MIN	0.20	0.20	0.30	0.30	0.45	0.30	0.30	0.35	0.30*	
	NOM	0.30	0.30	0.40	0.40	0.55	0.40	0.40	0.45	0.40*	
	MAX	0.40	0.40	0.50	0.50	0.65	0.50	0.50	0.55	0.50	
N	8	8	10	8	6	8	6	6	8		
ND	4	4	5	4	3	4	3	3	4		
NE	---	---	---	---	---	---	---	---	---		
NOTES	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2		
ISSUE	---	---	---	---	---	---	---	---	---		

TABLE 23		e=0.50mm									Note
Variation Symbol	V2530D-NJ2	V3020D-NJ1	V3020D-NJ2	---	V3020D-NJ4	V3020D-NJ5	N/A	V3030D-NJ2	V3030D-2NJ1		
	W2530D-NJ2	N/A	W3020D-NJ2	W3020D-NJ3	---	N/A	W3030D-NJ1	W3030D-NJ2	---		
D BSC	2.50	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00		
E BSC	3.00	2.00	2.00	2.00	2.00	2.00	3.00	3.00	3.00		
D1 BSC	---	---	---	---	---	---	---	---	---		
E1 BSC	---	---	---	---	---	---	---	---	---		
D2	MIN	1.35	2.25	1.988	1.988	2.25	1.59	2.20	1.87	2.11	
	NOM	1.50	2.40	2.138	2.138	2.40	1.74	2.30	2.02	2.26	
	MAX	1.60	2.50	2.238	2.238	2.50	1.84	2.40	2.12	2.36*	
E2	MIN	1.05*	0.65	0.413	0.413	0.60	0.30	1.40	1.06	1.19	
	NOM	1.20	0.80	0.563	0.563	0.75	0.45	1.50	1.21	1.34	
	MAX	1.30	0.90	0.663	0.663	0.85	0.55	1.60	1.31	1.44	
L	MIN	0.40*	0.30	0.30	0.30	0.30	0.30*	0.20	0.30*	0.45	
	NOM	0.50	0.40	0.40	0.40	0.40	0.40	0.30	0.40	0.55	
	MAX	0.60	0.50	0.50	0.50	0.50	0.50	0.40	0.50	0.65	
N	8	8	8	8	10	8	10	10	10		
ND	4	4	4	4	5	4	5	5	5		
NE	---	---	---	---	---	---	---	---	---		
NOTES	1,2	1,2	1,2	1,2	1,2	1,2	1,2	---	1,2		
ISSUE	---	---	---	---	---	---	---	A	---		

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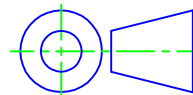
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Variation Symbol	V3030D-5NJ1	V3030D-5NJ2	V3530D-NJ1	V4030D-3NJ1	V5030D-NJ1	V5040D-2NJ1	V5050D-NJ1	V6050D-NJ1	V6050D-NJ2	Note
	W3030D-5NJ1	W3030D-5NJ2	W3530D-NJ1	W4030D-3NJ1	W5030D-NJ1	W5040D-2NJ1	N/A	N/A	N/A	
D BSC	3.00	3.00	3.50	4.00	5.00	5.00	5.00	6.00	6.00	
E BSC	3.00	3.00	3.00	3.00	3.00	4.00	5.00	5.00	5.00	
D1 BSC	---	---	---	---	---	---	---	---	---	
E1 BSC	---	---	---	---	---	---	---	---	---	
D2	MIN	2.11*	2.15*	2.85	3.15*	4.25	4.20	3.85	4.00	4.85
	NOM	2.26	2.30	3.00	3.30	4.40	4.35	4.00	4.15	5.00
	MAX	2.36	2.40	3.10	3.40*	4.50	4.45*	4.10	4.25	5.10
E2	MIN	1.19*	1.35*	1.55	1.55	1.50	2.30	3.30	3.00	3.00
	NOM	1.34	1.50	1.70	1.70	1.65	2.45	3.45	3.15	3.15
	MAX	1.44	1.60	1.80	1.80*	1.75	2.55	3.55	3.25	3.25
L	MIN	0.45	0.20*	0.20	0.30*	0.30	0.30*	0.30*	0.45	0.45
	NOM	0.55	0.30	0.30	0.40	0.40	0.40	0.40*	0.55	0.55
	MAX	0.65*	0.40	0.40	0.50	0.50	0.50	0.50	0.65	0.65
N	10	10	12	14	16	16	16	20	22	
ND	5	5	6	7	8	8	8	10	11	
NE	---	---	---	---	---	---	---	---	---	
NOTES	1,2	1,2,11b	1,2,11b	1,2,11b	1,2,11b	1,2,11b	1,2	1,2	1,2	
ISSUE	---	---	---	---	A	---	---	---	---	

Variation Symbol	V6050D-NJ3									Note
	N/A									
D BSC	6.00									
E BSC	5.00									
D1 BSC	---									
E1 BSC	---									
D2	MIN	4.00								
	NOM	4.15								
	MAX	4.25								
E2	MIN	3.00								
	NOM	3.15								
	MAX	3.25								
L	MIN	0.45								
	NOM	0.55								
	MAX	0.65								
N	18									
ND	9									
NE	---									
NOTES	1,2									
ISSUE	---									

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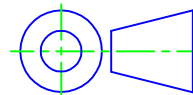
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TABLE 26		e=0.65mm								
Variation Symbol	V2020C	V3030C-1	V3030C-2	V3030C-2.1	V3030C-2.2	V3030C-2.3	V3020C	V4040C	V2020C-NJ1	Note
	N/A	N/A	W3030C-2	W3030C-2.1	W3030C-2.2	W3030C-2.3	N/A	W4040C	W2020C-NJ1	
D BSC	2.00	3.00	3.00	3.00	3.00	3.00	3.00	4.00	2.00	
E BSC	2.00	3.00	3.00	3.00	3.00	3.00	2.00	4.00	2.00	
D1 BSC	---	---	---	---	---	---	---	---	---	
E1 BSC	---	---	---	---	---	---	---	---	---	
D2	MIN	0.00	0.00	1.60	2.234	2.15	2.15	0.00	2.80	1.25
	NOM	---	---	---	2.384	2.30	2.30	---	---	1.40
	MAX	1.58	2.25	2.50	2.484	2.40	2.40	2.25	3.50	1.50
E2	MIN	0.00	0.00	1.35	1.496	1.35	1.35	0.00	2.30	0.65
	NOM	---	---	---	1.646	1.50	1.50	---	---	0.80
	MAX	0.65	1.30	1.75	1.746	1.60	1.60	0.65	2.80	0.90
L	MIN	0.20	0.20	0.30	0.30	0.20	0.20	0.20	0.30	0.25
	NOM	0.30	0.30	0.40	0.40	0.30	0.30	0.30	0.40	0.35
	MAX	0.45	0.45	0.50	0.50	0.40	0.40	0.45	0.50	0.45
N	6	8	8	8	8	8	8	10	6	
ND	3	4	4	4	4	4	4	5	3	
NE	---	---	---	---	---	---	---	---	---	
NOTES	1,2	1,2	1,2	1,2	1,2	1,2	1,2,11b	1,2	1,2	
ISSUE	B	A	C	---	---	---	B	C	---	

TABLE 27		e=0.65mm									
Variation Symbol	N/A	V3030C-2NJ1	V4040C-0NJ1	V4040C-NJ1	V3049C-NJ						Note
	W3030C-NJ1	W3030C-2NJ1	W4040C-0NJ1	W4040C-NJ1	W3049C-NJ						
D BSC	3.00	3.00	4.00	4.00	3.00						
E BSC	3.00	3.00	4.00	4.00	4.90						
D1 BSC	---	---	---	---	---						
E1 BSC	---	---	---	---	---						
D2	MIN	2.20	2.23	2.95	3.20	2.10					
	NOM	2.30	2.38	3.10	3.35	2.25					
	MAX	2.40	2.48	3.20	3.45	2.35					
E2	MIN	1.40	1.49	2.55	1.85	2.90					
	NOM	1.50	1.64	2.70	2.00	3.05					
	MAX	1.60	1.74	2.80	2.10	3.15					
L	MIN	0.20	0.30	0.30	0.45	0.45					
	NOM	0.30	0.40	0.40	0.55	0.55					
	MAX	0.40	0.50	0.50	0.65	0.65					
N	8	8	10	12	8						
ND	4	4	5	6	4						
NE	---	---	---	---	---						
NOTES	1,2	1,2	1,2	1,2	1,2						
ISSUE	---	---	---	---	---						

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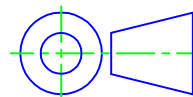
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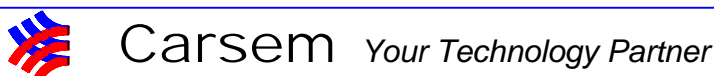
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Variation Symbol	V2025B	V2525B	V2530B	V3030B	N/A	V3040B	V4040B	V4050B	V5050B	Note
	W2025B	W2525B	W2530B	N/A	W3030B	W3040B	W4040B	W4050B	W5050B	
D BSC	2.00	2.50	2.50	3.00	3.00	3.00	4.00	4.00	5.00	
E BSC	2.50	2.50	3.00	3.00	3.00	4.00	4.00	5.00	5.00	
D1 BSC	---	---	---	---	---	---	---	---	---	
E1 BSC	---	---	---	---	---	---	---	---	---	
D2	MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	NOM	1.00	1.50	1.50	2.20	2.00	2.00	3.00	3.00	4.00
	MAX	1.10	1.60	1.60	2.25	2.10	2.10	3.10	3.10	4.10
E2	MIN	0.00	0.00	1.10	0.00	0.00	0.00	0.00	0.00	
	NOM	0.70	0.70	1.20	1.20	1.20	2.20	2.20	3.20	3.20
	MAX	0.80	0.80	1.30	1.30	1.30	2.30	2.30	3.30	3.30
L	MIN	0.40	0.10	0.40	0.40	0.40	0.40	0.40	0.40	
	NOM	0.55	0.55	0.55	0.50	0.55	0.55	0.55	0.55	
	MAX	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	
N	4	6	6	6	6	6	8	10	8	
ND	2	3	3	3	3	3	4	5	4	
NE	---	---	---	---	---	---	---	---	---	
NOTES	1,2,11a	1,2	1,2,11a	1,2	1,2	1,2,11a	1,2	1,2,11a	1,2	
ISSUE	B	A	A	A	B	B	A	B	A	

Variation Symbol	V5050B-1	V4040B-0NJ1	V4040B-NJ1	V4535B-NJ1						Note
	W5050B-1	W4040B-0NJ1	W4040B-NJ1	W4535B-NJ1						
D BSC	5.00	4.00	4.00	4.50						
E BSC	5.00	4.00	4.00	3.50						
D1 BSC	---	---	---	---						
E1 BSC	---	---	---	---						
D2	MIN	3.26	2.82	3.23	3.50					
	NOM	3.41	3.00	3.38	3.65					
	MAX	4.51	3.10	3.48	3.75					
E2	MIN	3.00	2.05	2.30	1.96					
	NOM	3.15	2.20	2.45	2.11					
	MAX	3.25	2.30	2.55	2.21					
L	MIN	0.45	0.40	0.30	0.30					
	NOM	0.55	0.50	0.40	0.40					
	MAX	0.65	0.60	0.50	0.50					
N	8	8	8	8						
ND	4	4	4	4						
NE	---	---	---	---						
NOTES	1,2	1,2	1,2	1,2						
ISSUE	A	---	---	---						

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TABLE 30		e=0.95mm									Note
Variation Symbol	V3020A	V3030A-1	V3030A-2	V3030A-1.1	V3030A-NJ1	V3030A-NJ2	V3030A-NJ3	N/A	V3030A-NJ5		
		N/A	N/A	W3030A-2	W3030A-1.1	W3030A-NJ1	W3030A-NJ2	N/A	W3030A-NJ4	W3030A-NJ5	
D BSC	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
E BSC	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
D1 BSC	---	---	---	---	---	---	---	---	---	---	
E1 BSC	---	---	---	---	---	---	---	---	---	---	
D2	MIN	0.00	0.00	2.20	2.15	1.87	1.75	2.23	1.85	1.87	
	NOM	---	---	---	2.30	2.02	1.90	2.38	2.00	2.02	
	MAX	2.25	2.25	2.60	2.40	2.12	2.00	2.48	2.10	2.12	
E2	MIN	0.00	0.00	1.40	1.35	1.06	1.05	1.50	0.85	1.06	
	NOM	---	---	---	1.50	1.21	1.20	1.65	1.00	1.21	
	MAX	0.65	1.65	1.75	1.60	1.31	1.30	1.75	1.10	1.31	
L	MIN	0.20	0.20	0.30	0.25	0.30	0.40	0.30	0.30	0.30	
	NOM	0.30	0.30	0.40	0.35	0.40	0.50	0.40	0.40	0.40	
	MAX	0.40	0.40	0.50	0.45	0.50	0.60	0.50	0.50	0.50	
N	6	6	6	6	6	6	6	6	5	6	
ND	3	3	3	3	3	3	3	3	3	3	
NE	---	---	---	---	---	---	---	---	---	---	
NOTES	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	
ISSUE	A	A	C	---	---	---	---	---	---	---	

TABLE 31		e=0.95mm									Note
Variation Symbol	V3030A-NJ6	V3030A-2NJ1									
		W3030A-NJ6	W3030A-2NJ1								
D BSC	3.00	3.00									
E BSC	3.00	3.00									
D1 BSC	---	---									
E1 BSC	---	---									
D2	MIN	1.75	2.23								
	NOM	1.90	2.38								
	MAX	2.00	2.48								
E2	MIN	1.05	1.50								
	NOM	1.20	1.65								
	MAX	1.30	1.75								
L	MIN	0.40	0.30								
	NOM	0.50	0.40								
	MAX	0.60	0.50								
N	6	6									
ND	3	3									
NE	---	---									
NOTES	1,2	1,2									
ISSUE	---	---									

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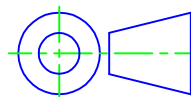
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JEDEC REF.



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DWG TITLE:

MLP DUAL FAMILY PACKAGE OUTLINE

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NOTES:

1. Dimensioning and tolerancing conform to ASME Y14.5M-1994.
2. All dimensions are in millimeters, angle is in degrees (°).
3. N is the total number of terminals.
4. 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, embeded metal or mark feature.
5. Dimension b applies to metallized terminal and is measured between 0.15MM and 0.30MM from terminal tip.
6. ND refers to the maximum number of terminals on D side.
7. Variation in FIGURE 1 (WGGD-3) is shown for illustration only.
8. For each variation identifier dimension detail, please refer to the Summary Table on page.
9. For a complete set of dimensions for each variation, see the individual variation and the common dimensions and tolerances on page 4.
10. Unilateral coplanarity zone applies to the exposed heat sink slug as well as the terminals.
11. In the case of the rectangular package, the terminal side of the package is determined as followed:
  - a) Type 1: The terminals are on the short side of the package.
  - b) Type 2: The terminals are on the long side of the package.
12. Variation codes reference specific JEDEC MO-229 package variations. However, codes starting with NJ are not currently JEDEC registered and not defined in the 'Variation Designation' table. Variation with a star (\*) symbol are also not JEDEC registered.
13. When more than one variation (option) exists for the same profile height, body size (DxE), and pitch then those variations will be denoted by an additional dash number (i.e. -1,-2, etc) designator to identify them. The new variations would be created from all or any of the following reasons : Terminal count, Terminal length and/or exposed pad sizes.
14. Variation with Exposed Tie Bars do not comply with JEDEC OUTLINE MO-229

FOR REVISION UPDATE PLEASE REFER TO HISTORY OF CHANGES.



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HISTORY OF CHANGES			
REVISION	DESCRIPTIONS	ORIGINATOR	DATE
A	Editorial changes on the layout of the MLP Dual outline	ZHRUL	2005-SEP-12
B	Add new variation, VWNJR-40	ZHRUL	2005-SEP-19
C	Add new variation, VWNJR-41 and VWNJR-42	ZHRUL	2005-OCT-12
D	Ammend Pin ID 1 view, change note 12	ZHRUL	2005-OCT-25
E	Add new variation VWNJR-43	ZHRUL	2006-JAN-17
F	Change VNJR-32 from 3.0 x 4.0 to 3.0 x 4.9	ZHRUL	2010-JUN-29
	Change old variation format to new codes		
	Add new variation VJJD-NJ1		

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