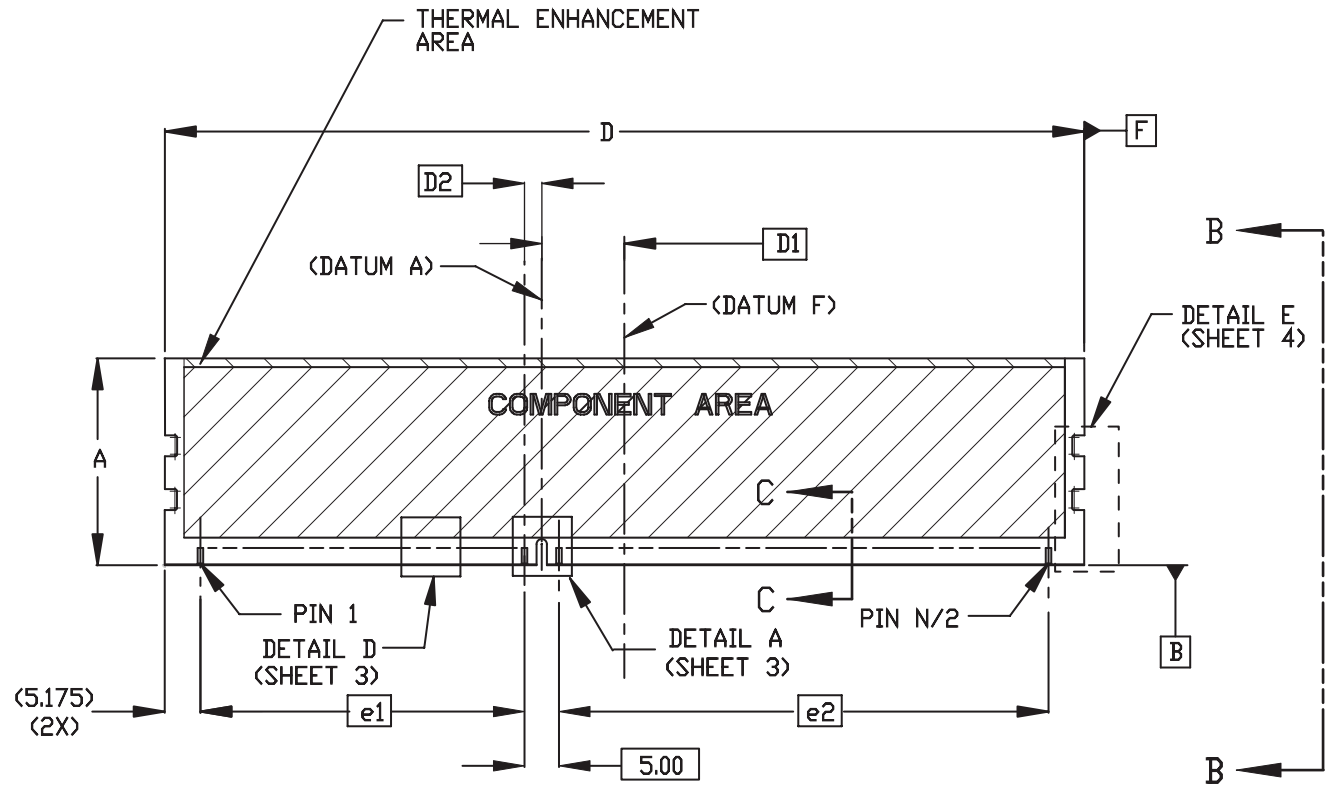
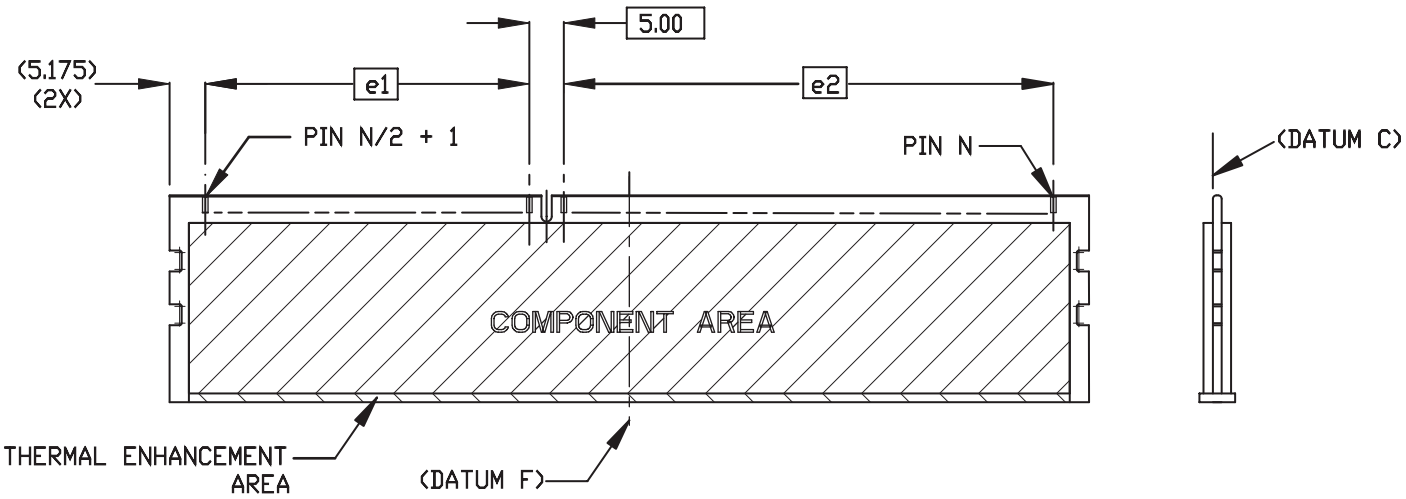


FRONT SIDE



BACK SIDE

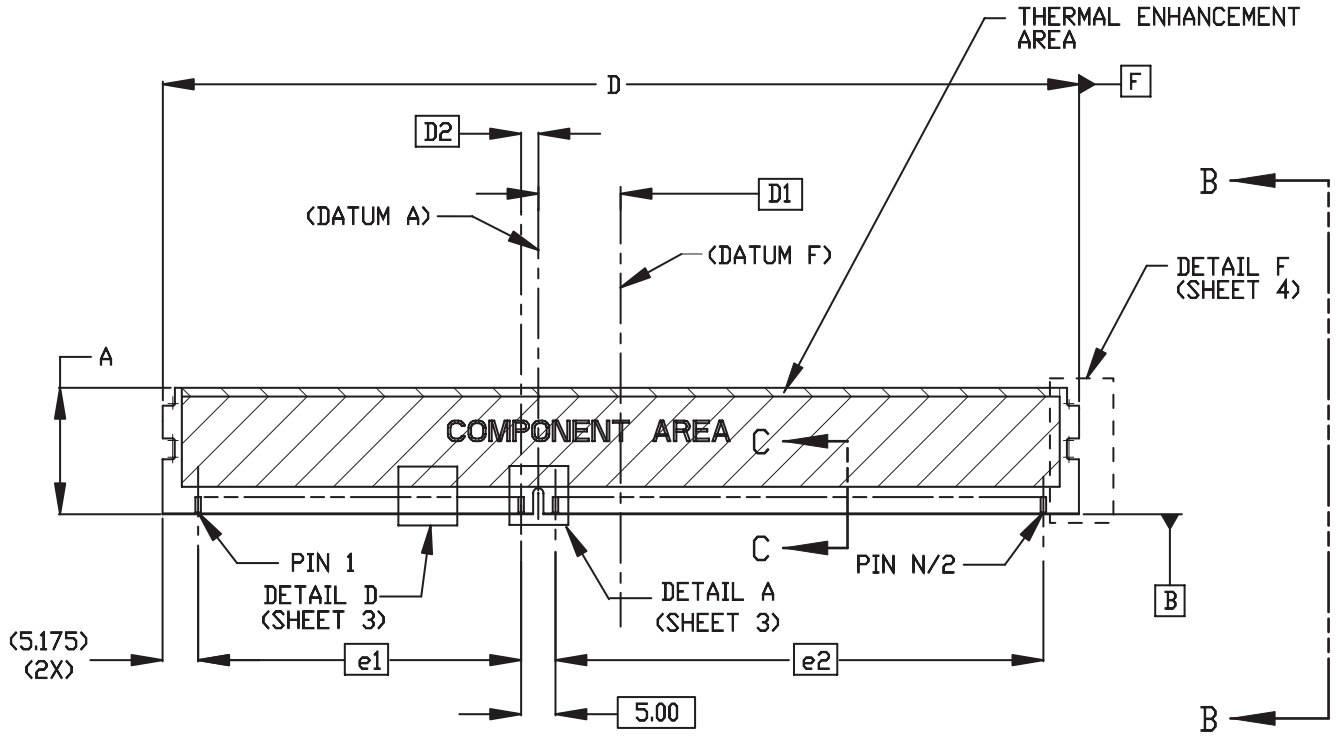
CENTER KEY CONFIGURATION
SEE PAGE 3

VARIATION A, B

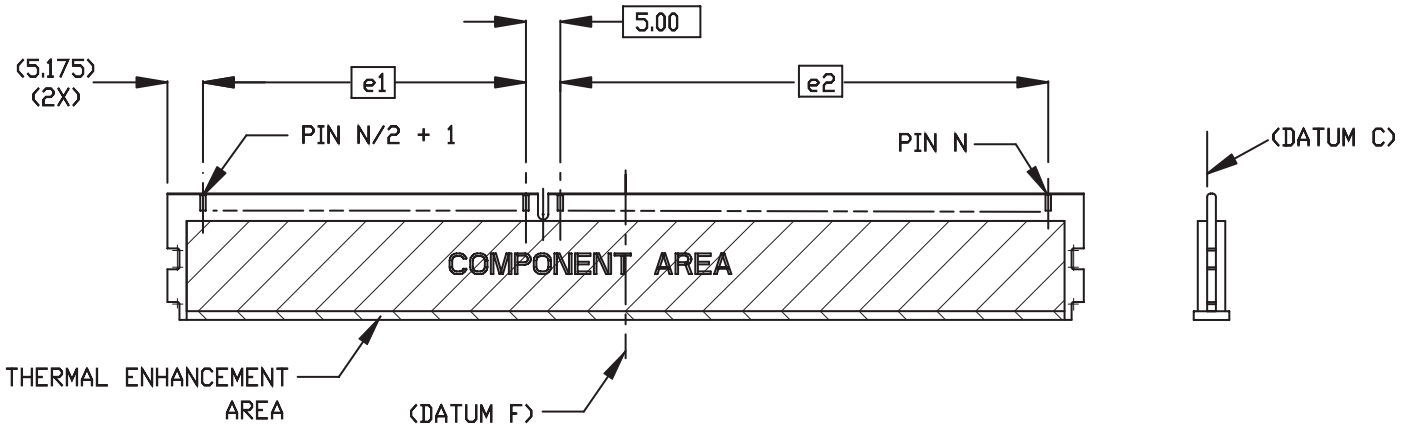
13 PATENTS

JEDEC SOLID STATE PRODUCT OUTLINE	THIS REGISTERED OUTLINE HAS BEEN PREPARED AND PUBLISHED BY THE JEDEC JC-11 COMMITTEE AND REFLECTS A PRODUCT WITH ANTICIPATED USE IN THE ELECTRONICS INDUSTRY. CHANGES ARE LIKELY TO OCCUR.

TITLE:	DESIGNATOR:	ISSUE:	DATE:		PAGE:
DDR3 SDRAM DIMM (DUAL INLINE MEMORY MODULE) FAMILY, FLEX-BASED, 1.00mm CONTACT CENTERS		A	11/07	MO-290	1 OF 9



FRONT SIDE

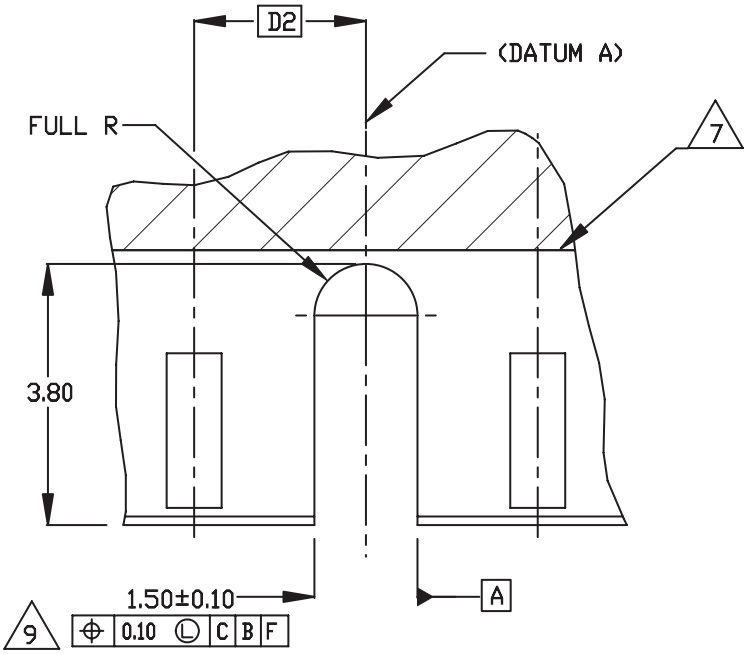


BACK SIDE

CENTER KEY CONFIGURATION
SEE PAGE 3

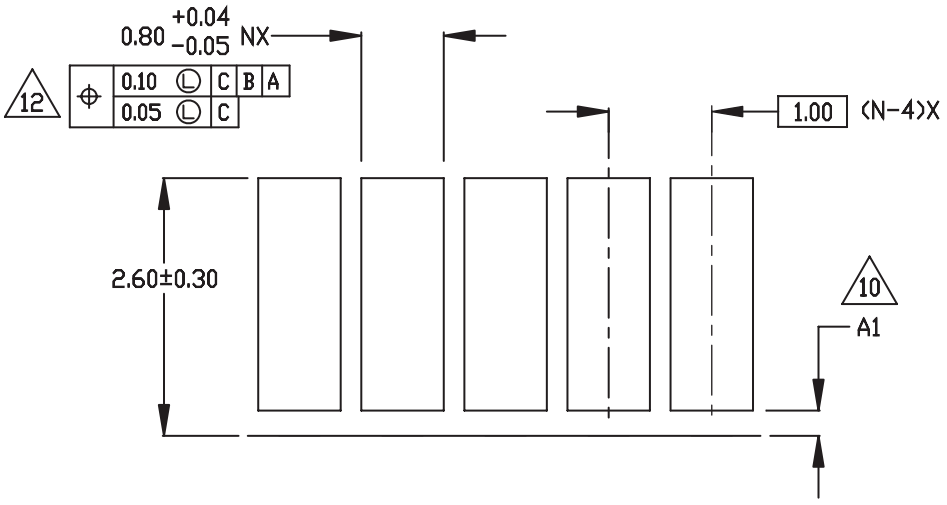
VARIATION C, D, E

TITLE: DDR3 SDRAM DIMM (DUAL INLINE MEMORY MODULE) FAMILY, FLEX-BASED, 1.00mm CONTACT CENTERS	DESIGNATOR:	ISSUE: A	DATE: 11/07	MO-290	PAGE: 2 OF 9

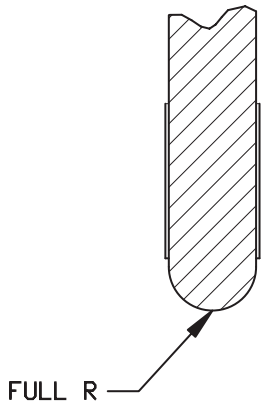


4

DETAIL A: CENTER KEY ZONE

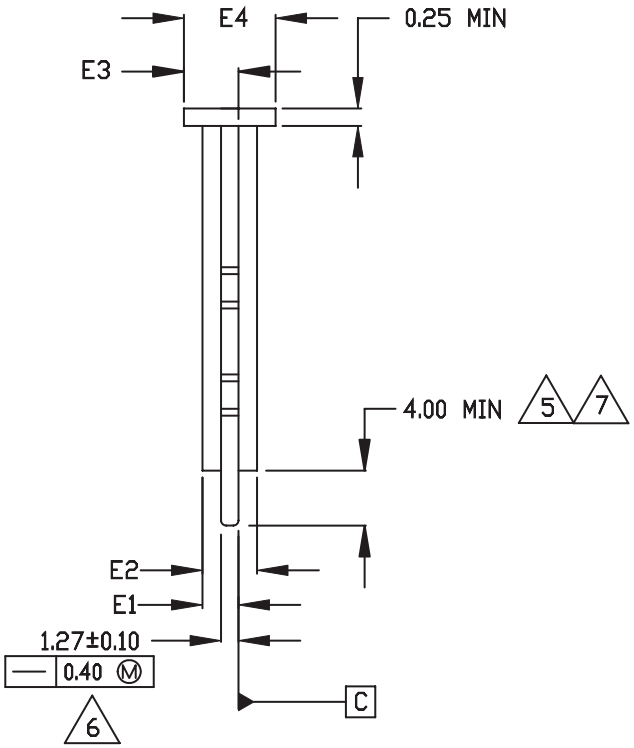


DETAIL D



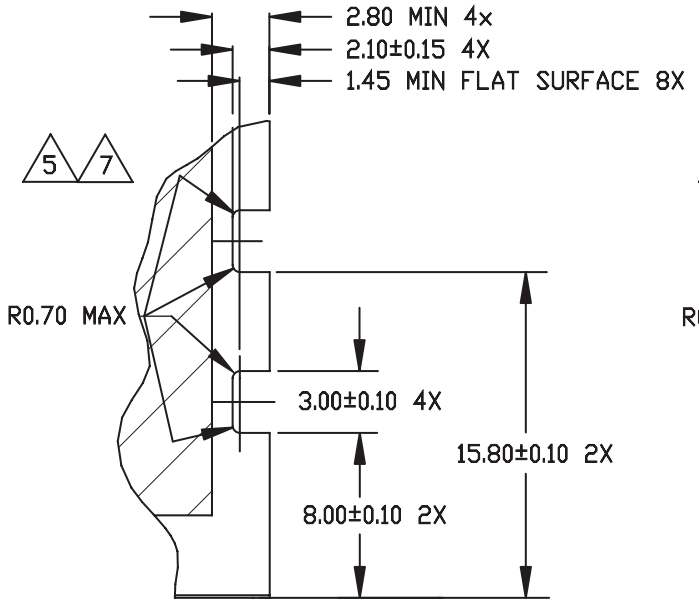
SECTION C-C

TITLE: DDR3 SDRAM DIMM (DUAL INLINE MEMORY MODULE) FAMILY, FLEX-BASED, 1.00mm CONTACT CENTERS	DESIGNATOR:	ISSUE: A	DATE: 11/07	MO-290	PAGE: 3 OF 9



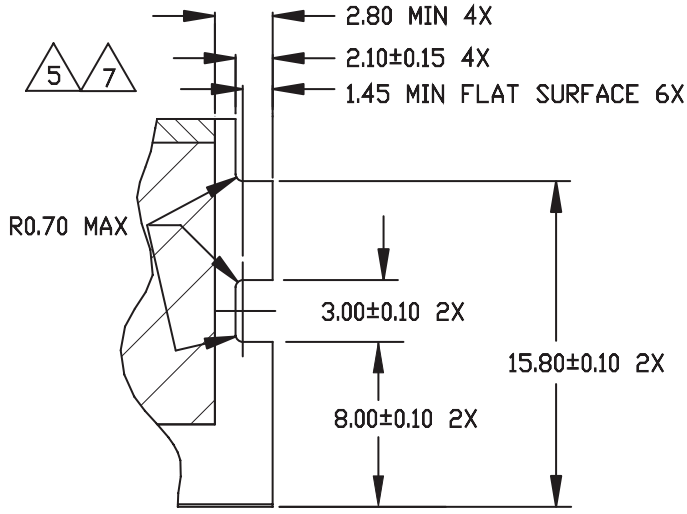
VIEW B-B

11



VARIATION A, B

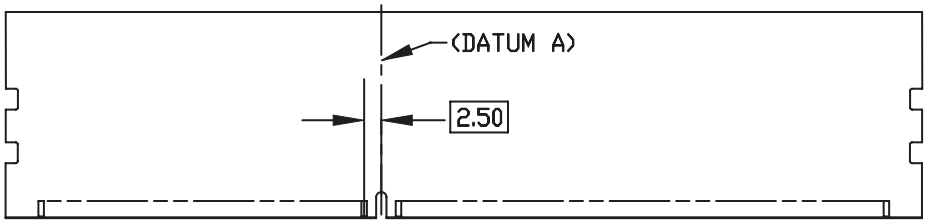
DETAIL E



VARIATION C, D, E

DETAIL F

MECHANICAL KEYING (FRONT VIEWS)

VDD	CENTER KEY POSITION 4
1.5V	

COMMON DIMENSION TABLE

SYMBOL	MIN	NOM	MAX	NOTES
A1	0.30	0.60	0.90	
D	133.20	133.35	133.50	
e1		47.00 BASIC		
e2		71.00 BASIC		
N		240		8
NOTES	1, 2, 3			
REF	11.14-118			
ISSUE				

VARIATIONS

VAR / SYMBOL	A			B						NOTES
	MIN	NOM	MAX	MIN	NOM	MAX	MIN	NOM	MAX	
A	29.85	30.00	30.50	29.85	30.00	30.50				
D1	12.00 BASIC			12.00 BASIC						4
D2	2.50 BASIC			2.50 BASIC						4
E1			3.80			4.45				
E2			6.20			7.55				
E3			4.05			4.05				
E4			6.75			6.75				
NOTES	1, 2, 3, 13									
REF	11.14-118									
ISSUE										

VARIATIONS

VAR / SYMBOL	C			D			E			NOTES
	MIN	NOM	MAX	MIN	NOM	MAX	MIN	NOM	MAX	
A	18.60	18.75	18.90	18.60	18.75	18.90	18.60	18.75	18.90	
D1	12.00 BASIC			12.00 BASIC			12.00 BASIC			4
D2	2.50 BASIC			2.50 BASIC			2.50 BASIC			4
E1			3.80			4.45			5.95	
E2			6.20			7.55			10.55	
E3			4.05			4.05			4.05	
E4			6.75			6.75			6.75	
NOTES	1, 2, 3, 13									
REF	11.14-118									
ISSUE										

NOTES:

1. DIMENSIONING AND TOLERANCING CONFORM TO ASME Y14.5M-1994.
2. TOLERANCES ON ALL DIMENSIONS ±0.15 UNLESS OTHERWISE NOTED.
3. ALL DIMENSIONS ARE IN MILLIMETERS (mm).

4 THE JC-45 COMMITTEE CONTROLS THE SIGNIFICANCE OF OFFSET KEY POSITION. IT IS SHOWN FOR REFERENCE ONLY, AND IS SUBJECT TO CHANGE.

5 DIMENSIONS APPLICABLE WHEN COMPONENTS MOUNTED ON ONE OR BOTH SIDES.

6 CARD THICKNESS APPLIES ACROSS TABS AND INCLUDES PLATING AND/OR METALLIZATION OF THE FLEX CIRCUIT MATERIAL. STRAIGHTNESS CALLOUT APPLIES TO ZONE DEFINED BY THE 4.00 CONTACT AREA. DIMENSION FOR THE ENTIRE LENGTH OF 133.35 OF THE FLEX CIRCUIT MATERIAL AND CENTRAL METAL CORE.

7 BORDER OF COMPONENT AREA. COMPONENT AREA INCLUDES ANY FLEX CIRCUIT MATERIAL PROJECTIONS BEYOND 1.37 MAX THICKNESS.

8 N IS THE TOTAL NUMBER OF CIRCUIT CONTACTS (PINS, LEADS, TABS, PADS).

9 OFFSET KEY FEATURE SHALL BE DEFINED BY NON-FLEX CIRCUIT MATERIAL. NO FLEX CIRCUIT MATERIAL SHALL BE ALLOWED TO PROTRUDE INTO OFFSET KEY.

10 LEADING EDGE OF CONTACT PADS SHALL BE FREE OF EXTERNAL TRACES.

11 VIEW B-B MODULE THICKNESS INCLUDES EXTERNAL HEAT SPREADER FOR VARIATIONS B, D AND E.

APPLICATION NOTES:

12 RECOMMENDED PLATING FOR CONTACT PADS ARE:

1) PREFERABLE PLATING: ELECTROLYTIC GOLD PLATING 0.76 MICROMETERS MINIMUM OVER ELECTROLYTIC NICKEL 2.00 MICROMETERS MINIMUM.
2) ALTERNATIVE PLATING: GOLD PLATING 0.05-0.75 MICROMETERS OVER NICKEL 2.00 MICROMETERS MINIMUM MUST USE AN ELECTRONIC CONTACT GRADE CORROSIVE BARRIER LUBRICANT.

NOTES:

13. STAKTEK HAS STATED THAT CERTAIN US PATENT APPLICATIONS MAY APPLY TO CONFIGURATIONS OF THIS OUTLINE. THESE APPLICATIONS INCLUDE:

US2006/0050492	(U.S.Pat. App. No. 10/934,027)
US2006/0050496A1	(U.S.Pat. App. No. 11/005,992)
US2006/0050497	(U.S.Pat. App. No. 11/007,551)
US2006/0049500A1	(U.S.Pat. App. No. 11/058,979)
US2006/0050488	(U.S.Pat. App. No. 11/068,688)
US2006/0053345A1	(U.S.Pat. App. No. 11/123,721)
US2006/0049513A1	(U.S.Pat. App. No. 11/193,954)
US2006/0050489A1	(U.S.Pat. App. No. 11/255,061)
US2006/0090102A1	(U.S.Pat. App. No. 11/283.355)
US2006/0050592A1	(U.S.Pat. App. No. 11/187,269)
US2006/0049513	(U.S.Pat. App. No. 11/193,954)
US2006/0091529A1	(U.S.Pat. App. No. 11/231,418)
US2006/0198238A1	(U.S.Pat. App. No. 11/397,597)
US2007/0115017A1	(U.S.Pat. App. No. 11/624,608)

STAKTEK INTENDS TO COMPLY WITH THE JEDEC PATENT POLICY.

Change Record

If the changes involves any words added or deleted (excluding deletion of accidentally repeated words), the change is included. Punctuation changes may or may not be included.

Initial Issue:A	Date: 11/07	Item: 11.14-118

Revision History:		
Issue:	Date:	Item:

DESCRIPTION OF CHANGES