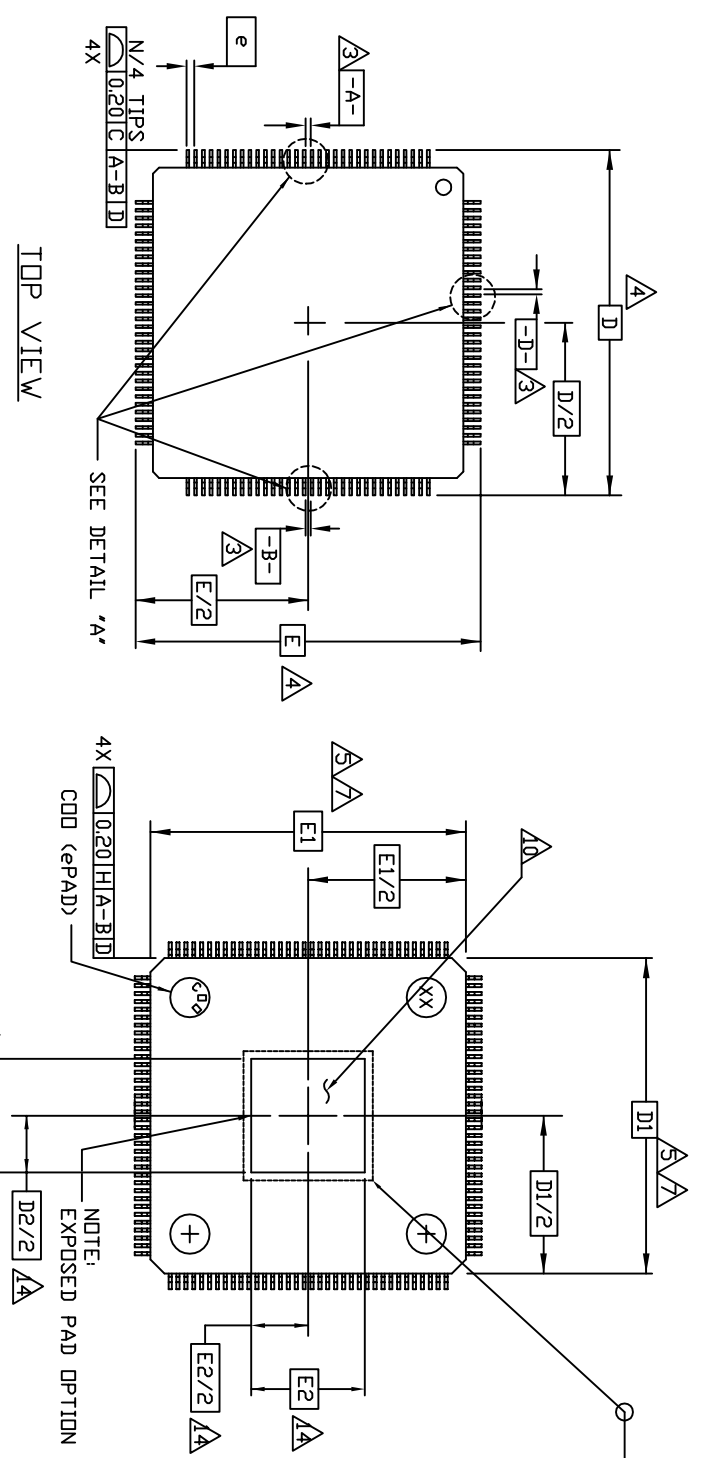
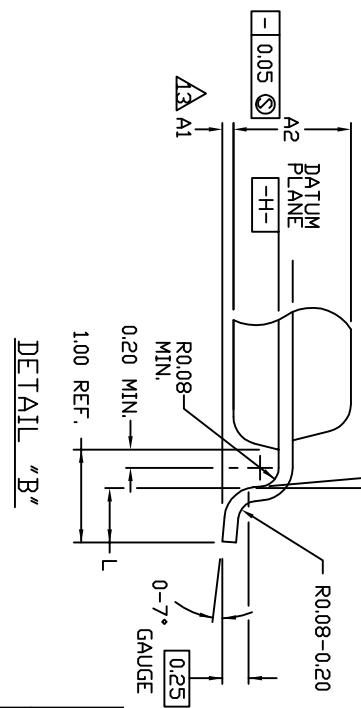
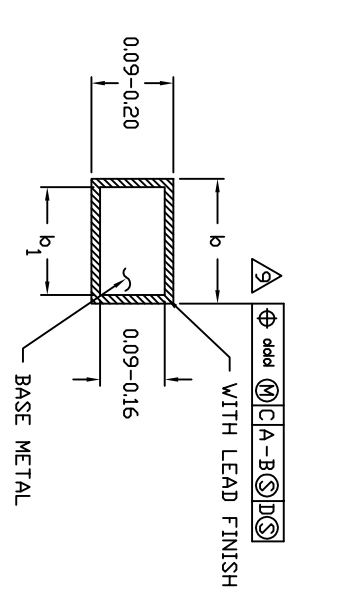
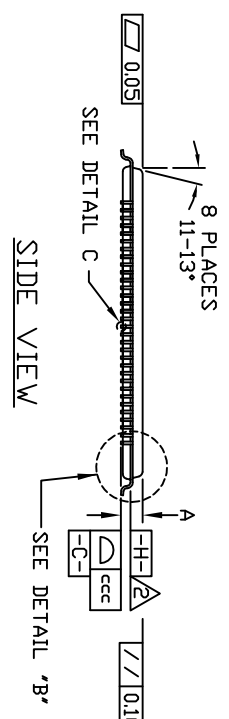
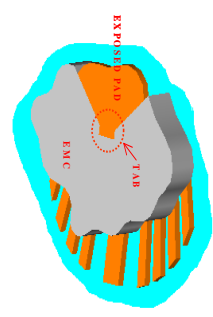


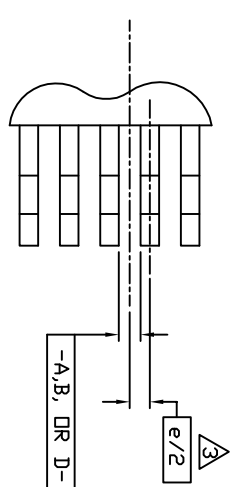
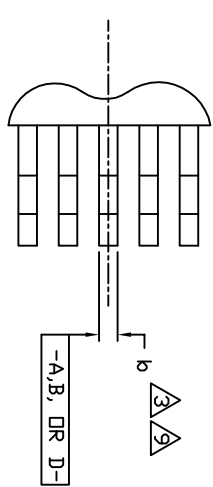
-DRAWING NOT TO SCALE-



- TAB : EXPOSED PART OF CONNECTION BAR OR TIE BAR (actual dimension is dependent on Lf design)
- EXPOSED PAD SIZE IS AFFECTED BY MOLD FLASH AND MOLD FLASH IS CONTROLLED BY FV(FINAL VISUAL INSPECTION) SPEC



EVEN LEAD SIDES



TITLE:		PACKAGE OUTLINE, 176L LQFP, 20x20x1.4mm EXPOSED PAD	
APPROVAL	DOCUMENT CONTROL NO.	REV.	1/2
	21-0471	A	

NOTES:

1. ALL DIMENSIONING AND TOLERANCES CONFIRM TO ASME Y14.5-1994.
2. DATUM PLANE [H] LOCATED AT MOLD PARTING LINE AND COINCIDENT WITH LEAD, WHERE LEAD EXITS PLASTIC BODY AT BOTTOM OF PARTING LINE.
3. DATUMS [A-B] AND [D] TO BE DETERMINED AT CENTERLINE BETWEEN LEADS WHERE LEADS EXIT PLASTIC BODY AT DATUM PLANE [H].
4. TO BE DETERMINED AT SEATING PLANE C.
5. DIMENSIONS D1 AND E1 DO NOT INCLUDE MOLD PROTRUSION.
ALLOWABLE MOLD PROTRUSION IS 0.254 MM PER SIDE.
6. DIMENSION D1 AND E1 INCLUDE MOLD MISMATCH AND ARE DETERMINED AT DATUM PLANE [H].
DIMENSION D1 AND E1 INCLUDE MOLD MISMATCH AND ARE DETERMINED AT DATUM PLANE [H].
N IS NUMBER OF TERMINALS.
7. PACKAGE TOP DIMENSIONS ARE SMALLER THAN THE BOTTOM BY 0.10 MILLIMETERS.
DIMENSIONS AND TOP OF PACKAGE WILL NOT OVERHANG BOTTOM OF PACKAGE.
8. DIMENSION b DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL BE 0.08mm TOTAL IN EXCESS OF THE b DIMENSION AT MAXIMUM MATERIAL CONDITION. DAMBAR CAN NOT BE LOCATED ON THE LOWER RADIUS OR THE FOOT.
9. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE.
10. THE EXPOSED PAD IS COINCIDENT WITH THE TOP OR BOTTOM SIDE OF THE PACKAGE AND NOT ALLOWED TO PROTRUDE BEYOND THAT SURFACE.
11. THESE DIMENSIONS APPLY TO THE FLAT SECTION OF THE LEAD BETWEEN 0.10 MM AND 0.25 MM FROM THE LEAD TIP.
12. THIS OUTLINE CONFORMS TO JEDEC PUBLICATION 95 REGISTRATION MS-026-D, VAR. BFC.
13. BUT THE EXPOSED PAD DIMENSION WAS NOT SPECIFIED ON JEDEC.
14. A1 IS DEFINED AS THE DISTANCE FROM THE SEATING PLANE TO THE LOWEST POINT OF THE PACKAGE BODY.
15. DIMENSION D2 AND E2 REPRESENT THE SIZE OF THE EXPOSED PAD. THE ACTUAL DIMENSIONS ARE SPECIFIED ON THE BONDING DIAGRAM, AND IS DEPENDENT ON THE DIE SIZE.
16. EXPOSED PAD SHALL BE COPLANAR WITH BOTTOM OF PACKAGE WITHIN 0.05.
17. MARKING IS FOR PACKAGE ORIENTATION REFERENCE ONLY.
18. LEADS SHALL BE COPLANAR WITHIN 0.08mm.
19. MATERIAL MUST COMPLY WITH BANNED AND RESTRICTED SUBSTANCES SPEC# 10-0131
20. ALL DIMENSIONS APPLY TO BOTH LEADED (-) AND P0FREE (+) PKG. CODES.

SYMBOL	JEDEC VARIATION)			N D T E
	MIN.	NOM.	MAX.	
A	~	~	1.60	
A1	0.05	~	0.15	13
A2	1.35	1.40	1.45	
D		22.00 BSC.		4
D1		20.00 BSC.		7.8
E		22.00 BSC.		4
E1		20.00 BSC.		7.8
L	0.45	0.60	0.75	
N		176 LD		
e		0.40 BSC.		
b	0.13	0.18	0.23	9
b1	0.13	0.16	0.19	
ccc	~	~	0.08	
ddd	~	~	0.07	
PKG CODE	C176LE-1			



TITLE: PACKAGE DUTLINE, 176L LQFP, 20x20x1.4mm EXPOSED PAD

APPROVAL DOCUMENT CONTROL NO. 21-0471 REV. A 2/2