

4

3

2

1

NOTES: UNLESS OTHERWISE SPECIFIED:

- 1. INTERPRET DIMENSIONS IN ACCORDANCE WITH ASME Y14.5M-1994.
- 2. DATUM A (SYSTEM INTERFACE PLANE) ESTABLISHED BY THREE DATUM AREAS SHOWN IN VIEW B (SHEET 2).
- 3. DATUM B ESTABLISHED BY TWO DATUM AREAS SHOWN IN VIEW B (SHEET 2).
- 4. DATUM C ESTABLISHED BY DATUM AREA SHOWN IN VIEW B (SHEET 2).
- 5. SUBSTRATE EDGE PERPENDICULARITY TOLERANCE APPLIES TO ENTIRE SURFACE
- 6. LOCALIZED BACKSIDE SURFACE FLATNESS APPLIES TO ENTIRE CERAMIC SURFACE.
- 7. DIE PARALLELISM TOLERANCE APPLIES TO DMD ACTIVE ARRAY ONLY.
- 8. DIE HEIGHT TOLERANCE APPLIES TO CENTER OF DMD ACTIVE ARRAY ONLY.
- 9. ROTATION ANGLE OF DMD ACTIVE ARRAY IS A REFINEMENT OF THE LOCATION TOLERANCE AND IS THE MAXIMUM VALUE ALLOWED.
- 10. SUBSTRATE INDEX MARK, SYMBOLIZATION PAD, SEAL RING, AND WINDOW FRAME TO BE ELECTRICALLY CONNECTED TO VSS PLANE IN SUBSTRATE.
- 11. WINDOW SHALL BE ORIENTED SUCH THAT WINDOW ID MARK ALIGNS WITH SUBSTRATE INDEX MARK AS SHOWN.
- 12. (DELETED)
- 13. DMD ACTIVE ARRAY DIMENSIONS ARE RELATED TO DATUM A (PRIMARY), DATUM B (SECONDARY), AND DATUM C (TERTIARY).
- 14. ? IS A WILD CARD CHARACTER AND CAN BE ANY LETTER.
- 15. SUBSTRATES PLATED WITH Ni/Au SHALL HAVE THE THREE-DIGIT NUMERICAL MARKING AS SHOWN ABOVE THE SYMBOLIZATION PAD. SUBSTRATES WITH Ni/Pd/Au SHALL HAVE MARKING IN THE ALTERNATE LOCATION BELOW THE SYMBOLIZATION PAD.

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REVISIONS

REV	DESCRIPTION	DATE	APPROVED
A	ECO 2086120, INITIAL RELEASE	01/14/08	MAA
B	ECO 2086464, CHG INDEX MARK TOP	01/21/08	MAA
C	ECO 2087635, CHG GDT SYM PARALLEL FROM .001 TO .0008 IN SECTION A-A	03/03/08	MAA
D	ECO 2088011, CORRECTED PARALLELISM TYPO FROM [.0254] TO [.02032]	03/17/08	MAA
E	ECO 2150557, ADD NOTE 15, UPDATE VIEW D-D SHEET 4.	05/06/15	MAA
F	ECO 2179888, DELETE NOTE 12	02/27/19	BMH

D

D

C

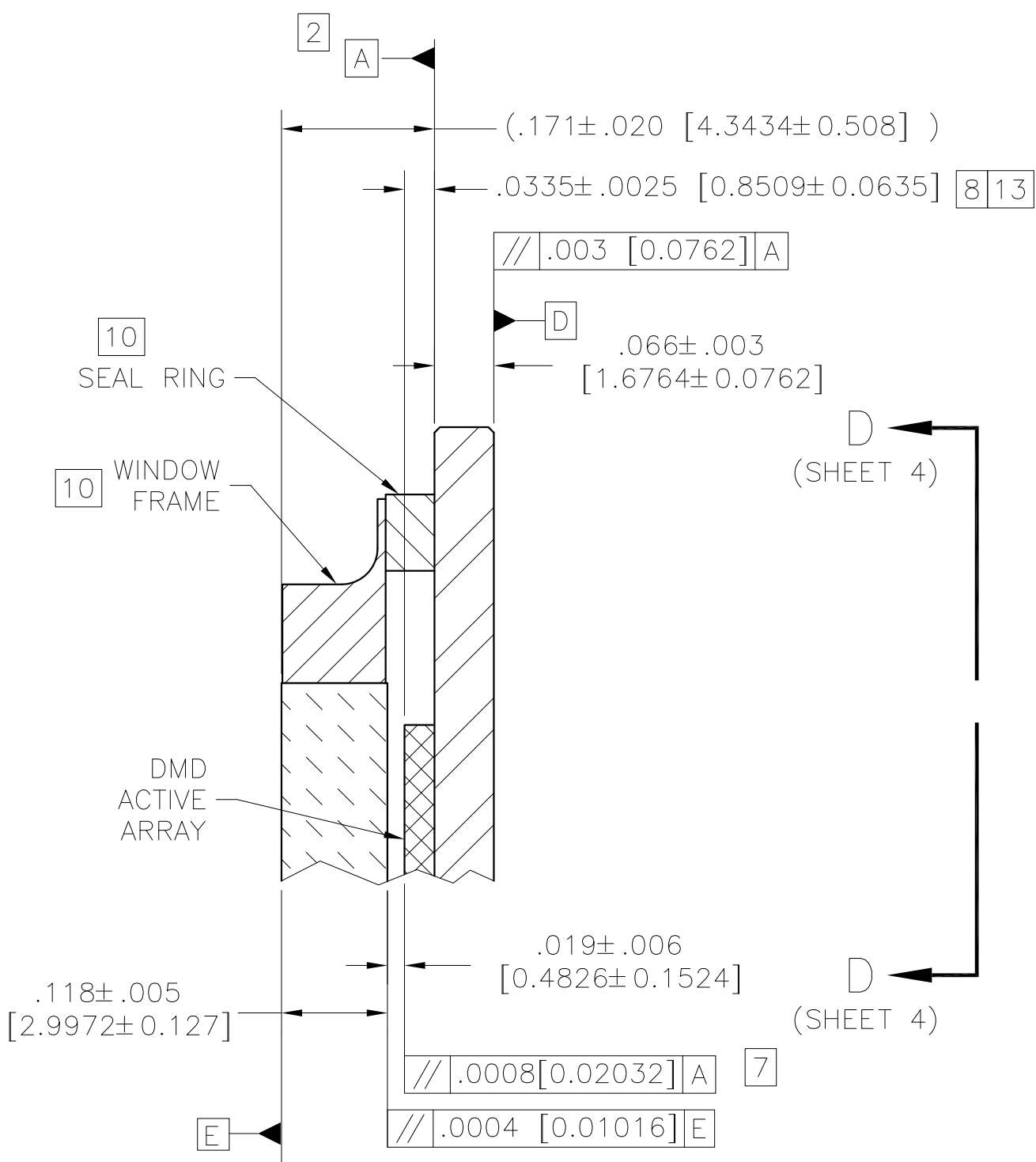
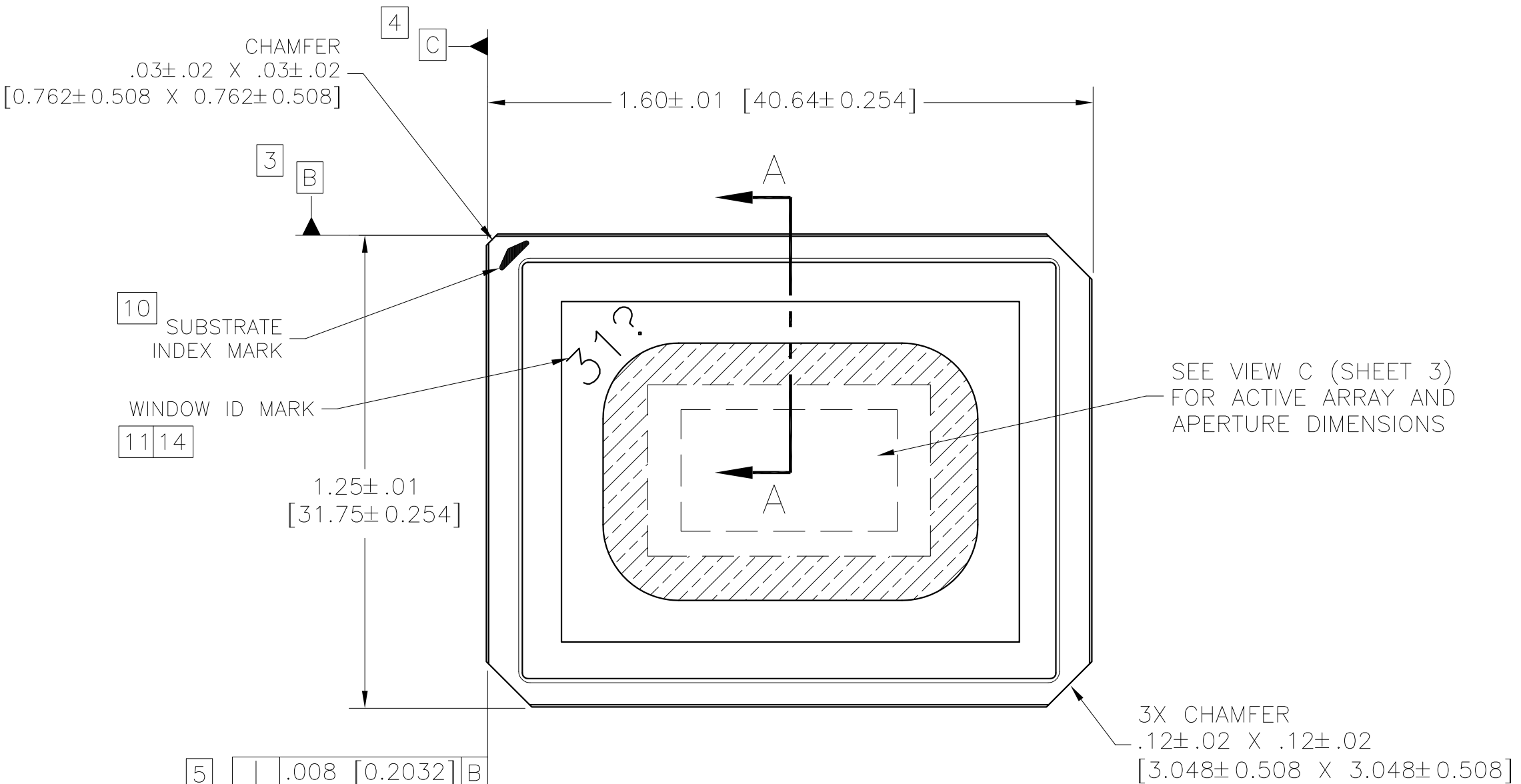
C

B

B

A

A



SECTION A-A
SCALE 6/1

-1 QTY	ITEM NO	PART OR IDENTIFYING NUMBER	NOMENCLATURE OR DESCRIPTION	NOTES
PARTS LIST				
			DWN M. AVERY	DATE 01/01/08
			ENGR M. AVERY	01/01/08
			PA B. KONRAD	01/01/08
			APVD	
UNLESS OTHERWISE SPECIFIED • DIMENSIONS ARE IN INCHES (MILLIMETERS) • TOLERANCES: ANGLES ± 1° 3 PLACE DECIMALS ± .005 [0.127] 2 PLACE DECIMALS ± .01 [0.254]			TEXAS INSTRUMENTS Dallas, Texas	
• REMOVE ALL BURRS AND SHARP EDGES • CONCENTRICITY-MACHINED DIAMETERS-.010 FIM • DIMENSIONAL LIMITS APPLY BEFORE PROCESSES • PARENTHEICAL INFO FOR REF ONLY			ICD, MECHANICAL, DMD .65" 1080P TYPE A (FLQ PKG)	
HOLE TOLERANCE .013 ± .004 THRU .125 .125 ± .001 THRU .250 .250 ± .001 THRU .500 .501 ± .008 THRU .750 .751 ± .010 THRU 1.000 1.001 ± .012 THRU 2.000 2.000 ± .001 THRU			SIZE C	DRAWING NO 2509321
THIRD ANGLE PROJECTION NONE 0314DA NEXT ASSY USED ON APPLICATION			SCALE 3/1	REV F SHEET 1 OF 4

DWG NO 2509321 SH 1

4

3

2

1

4

3

2

1

D

D

C

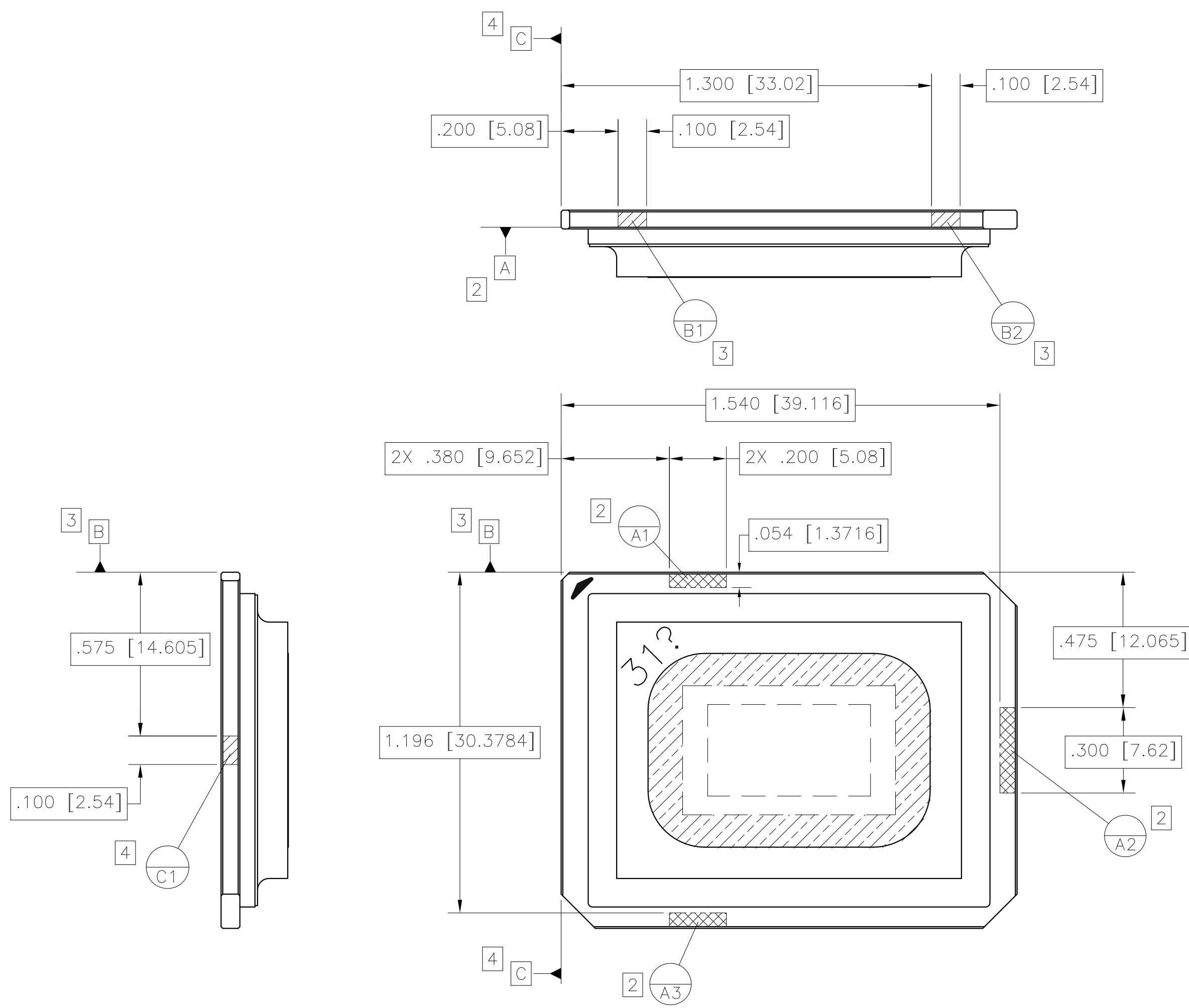
C

B

B

A

A



VIEW B (SHEET 1 NOTES)
DATUMS A, B, AND C

DWG NO 2509321 SH 2

<p>TEXAS INSTRUMENTS Dallas, Texas</p>	DWN	DATE	SIZE	DRAWING NO	REV
	ISSUE DATE	SCALE	3/1	2509321	F
			SHEET	2	

4

3

2

1

D

D

C

C

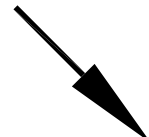
B

B

A

A

INCIDENT LIGHT



13

.5143±.006
[13.06322±0.1524]

(.57146 [14.5152])
DMD ACTIVE ARRAY

B 3

4 C

9 13

0.0°±0.8°
(ANGLE)

.4643±.006
[11.79322±0.1524]

13

(.3214 [8.1648])
DMD ACTIVE ARRAY

.0699±.0105 [1.7744±0.2667]

.4530±.0020
[11.5062±0.0508]

WINDOW SHIELD
APERTURE

DMD
ACTIVE ARRAY

.0918±.0105 [2.33124±0.2667]

.7470±.0020 [18.9738±0.0508]

VIEW C (SHEET 1)
DMD ACTIVE ARRAY AND
WINDOW SHIELD APERTURE


ACEC2c

4

3

2

1

 TEXAS INSTRUMENTS <i>Dallas, Texas</i>	DWN	DATE	SIZE	DRAWING NO	REV
	ISSUE DATE	SCALE	3/1	2509321	F
			SHEET	3	

DWG NO 2509321 SH 3

4

3

2

1

D

D

203X $\varnothing.054 \pm .003$ [1.3716 \pm 0.0762]

\varnothing	$\varnothing.020$	[0.508]	D	B	C
\varnothing	$\varnothing.010$	[0.254]	D		

29X .050 [1.27] = 1.450 [36.83]

.075 [1.905]

(.100 [2.54])

15

(.050 [1.27])

.075 [1.905]

.365 \pm .010 [9.271 \pm 0.254]

.52 \pm .01 [13.208 \pm 0.254]

(.050 [1.27])

(.100 [2.54])

22X .050 [1.27] = 1.100 [27.94]

\square .0004 [0.01016] / .05X.05 [1.27X1.27]

SYMBOLIZATION PAD

10

A
B
C
D
E
F
G
H
J
K
L
M
N
P
R
T
U
V
W
Y
AA
AB
AC

30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

.72 \pm .01 [18.288 \pm 0.254]

.44 \pm .01 [11.176 \pm 0.254]

210

210

VIEW D-D (SHEET 1)
SCALE 6/1

SH 4

DWG NO 2509321

DWG NO

 TEXAS INSTRUMENTS Dallas, Texas	DWN	DATE	SIZE C	DRAWING NO 2509321	REV F
	ISSUE DATE	SCALE 3/1	SHEET 4		

4

3

2

1

A

A

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