

8

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ECN NO.	REV.	DESCRIPTION OF CHANGE	ECN DATE	ORIGINATOR
2010199	0	New release	3/20/2010	Erwin Q.

Top view dimensions (mm):

- 23.00±0.23
- 21.60±0.22
- 18.542±0.19
- 18.106±0.18
- 16.734±0.17
- 15.464±0.15
- 12.094±0.15

Chamfers: (1.00X45°) INDEX, 3X (0.50X45°) (CHAMFER), 4X R 0.508, 5X R 0.762, 12X R 0.50.

Surface finish: 0.08, 0.05.

Detail D: 3.001±0.30, 0.10, 4X (0.20X45°) (CHAMFER).

Grid view dimensions (mm): 21.00, 1.00, 21.00, 1.00.

Grid labels: A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, T, U, V, W, Y, AA, AB.

Column numbers: 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.

Pad dimensions: 483X, Ø0.80±0.05, Ø0.15 (C) A (S) B (S).

ALUMINA COAT.

NOTES:

1. PLATING:
 TOP : ELECTROLESS Ni 3.20-8.89 MICRON.
 TOP : ELECTROLESS Au 2.50 MICRON MIN.
 BOTTOM : ELECTROLESS Ni 3.20-8.89 MICRON.
 BOTTOM : ELECTROLESS Au 2.50 MICRON MIN.
2. SEAL AREA TO BE METALLIZED.
3. DIE ATTACH AREA TO BE METALLIZED.
4. SEAL AREA, DIE ATTACH AREA AND FIDUCIAL MARK TO BE FLOATING FROM ANY PADS.
5. BOND FINGERS CONNECTION SHOULD BE VENDOR'S OPTION.
6. OPEN/SHORT CHECK TO BE PERFORMED ONLY TO LGA PADS.
7. NO VISUAL INSPECTION IS REQUIRED FOR THE FIDUCIAL MARK AND BOND FINGERS AREA.

DETAIL D: 1.529±0.15 (0.51X2+0.509), 0.406±0.05, 0.406±0.05, 0.660±0.07 (0.457+0.203), MP-1 (S/R), MP-5 (BF,D/A), MP-8 (LGA).

GENERAL TOLERANCE	PROJECTION	Actel ACTEL CORPORATION 2061 STIERLIN COURT MOUNTAIN VIEW, CA 94043-4655			
X.XX ± 0.20		TITLE CCGA483/CLGA483, 23 mm X 23 mm, 1.0 mm Pitch, 7-Layer Ceramic Land Grid Array, 483 Column Pads, Package Detail Drawing			
Unless Otherwise Specified	APPROVALS	DATE	VENDOR NAME: KYOCERA		
DIMENSIONS: Millimeters (mm)	DRAWN	CHECKED	ACTEL DWG. NUMBER 1-21-11754	REV 0	
	ENG'R ERWIN QUIOBO	3/20/2010	SIZE --	VENDOR DWG. NUMBER YPKG-48CG-6047DC	REV A
				SCALE: NONE	SHEET 1 OF 6

1-06-13016 Rev. 2

CONNECTION TABLE

function: SIGNAL

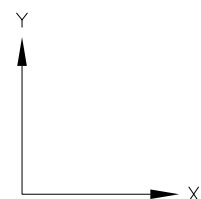
LGA No.	LGA No.	LGA No.	LGA No.	LGA No.	LGA No.	LGA No.	LGA No.	LGA No.	LGA No.
A2	AB8	C14	E18	G22	K4	M8	P17	U3	W11
A3	AB9	C15	F18	H22	L4	N8	R17	V3	W12
A4	AB10	C16	E20	H2	K6	M10	P19	U5	W13
A5	AB11	C17	F20	J2	L6	N10	R19	V5	W14
A6	AB12	C18	E22	H4	K8	M13	P21	U7	W15
A7	AB13	C19	F22	J4	L8	N13	R21	U8	W16
A8	AB14	C20	F2	H6	K10	M15	R1	U9	W17
A9	AB15	D20	G2	J6	L10	N15	T1	U10	W18
A10	AB16	C22	F4	H8	K11	M17	R3	U11	W20
A11	AB17	D22	G4	J8	L12	N17	T3	U12	Y20
A12	AB18	D2	F6	H9	K13	M19	R5	U13	W22
A13	AB19	E2	G6	H10	L13	N19	T5	U14	Y22
A14	AB20	D4	F7	H11	K15	M21	R7	U15	Y2
A15	AB21	E4	F8	H12	L15	N21	T7	U16	AA2
A16	B2	D5	F9	H13	K17	N1	R9	U18	Y4
A17	C2	D6	F10	H14	L17	P1	R10	V18	Y5
A18	B3	D7	F11	H15	K19	N3	R11	U20	Y6
A19	B4	D8	F12	J15	L19	P3	R12	V20	Y7
A20	B5	D9	F13	H17	K21	N5	R13	U22	Y8
A21	B6	D10	F14	J17	L21	P5	R14	V22	Y9
A22	B7	D11	F15	H19	L1	N7	R16	V2	Y10
B22	B8	D12	F16	J19	M1	P7	T16	W2	Y11
AA1	B9	D13	F17	H21	L3	N9	R18	V4	Y12
AB1	B10	D14	G17	J21	M3	P9	T18	W4	Y13
AA3	B11	D15	F19	J1	L5	N11	R20	V6	Y14
AA4	B12	D16	G19	K1	M5	N12	T20	V7	Y15
AA5	B13	D17	F21	J3	L7	N14	R22	V8	Y16
AA6	B14	D18	G21	K3	M7	P14	T22	V9	Y17
AA7	B15	D19	G1	J5	L9	N16	T2	V10	Y18
AA8	B16	E19	H1	K5	M9	P16	U2	V11	Y19
AA9	B17	D21	G3	J7	L11	N18	T4	V12	Y21
AA10	B18	E21	H3	K7	M11	P18	U4	V13	AA21
AA11	B19	E1	G5	J9	L12	N20	T6	V14	
AA12	B20	F1	H5	K9	M12	P20	U6	V15	
AA13	B21	E3	G7	J10	L14	N22	T8	V16	
AA14	C21	F3	H7	J11	M14	P22	T9	V17	
AA15	C1	E5	G8	J12	L16	P2	T10	V19	
AA16	D1	F5	G9	J13	M16	R2	T11	W19	
AA17	C3	E6	G10	J14	L18	P4	T12	V21	
AA18	D3	E7	G11	K14	M18	R4	T13	W21	
AA19	C4	E8	G12	J16	L20	P6	T14	W1	
AA20	C5	E9	G13	K16	M20	R6	T15	Y1	
AA22	C6	E10	G14	J18	L22	P8	T17	W3	
AB22	C7	E11	G15	K18	M22	R8	U17	Y3	
AB2	C8	E12	G16	J20	M2	P10	T19	W5	
AB3	C9	E13	H16	K20	N2	P11	U19	W6	
AB4	C10	E14	G18	J22	M4	P12	T21	W7	
AB5	C11	E15	H18	K22	N4	P13	U21	W8	
AB6	C12	E16	G20	K2	M6	P15	U1	W9	
AB7	C13	E17	H20	L2	N6	R15	V1	W10	

NC

LGA No.
B1

NC

OTHER
D/A
S/R



SIZE --	ACTEL DWG. NUMBER 1-21-11754	REV 0
	VENDOR DWG. NUMBER KD-NB0164	REV A
SCALE: None		SHEET 2 OF 6

8

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6

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1

F

F

E

E

D

D

C

C

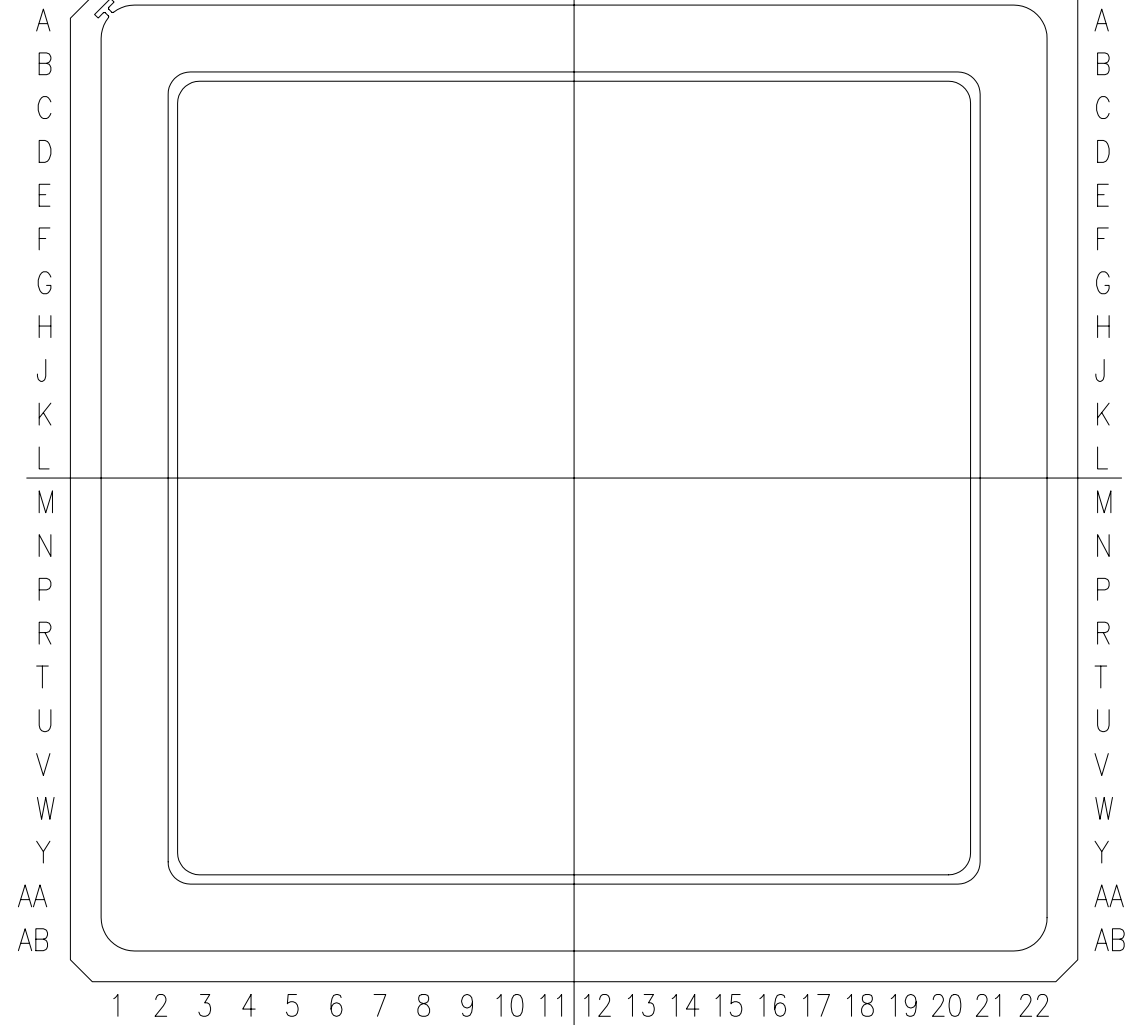
B

B

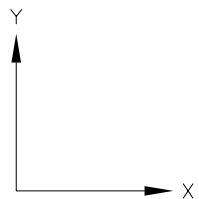
A

A

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22



MP-1
(S/R)



SIZE --	ACTEL DWG. NUMBER 1-21-11754	REV 0
	VENDOR DWG. NUMBER KD-NB0164	REV A
SCALE: None		SHEET 3 OF 6

8

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F

F

E

E

D

D

C

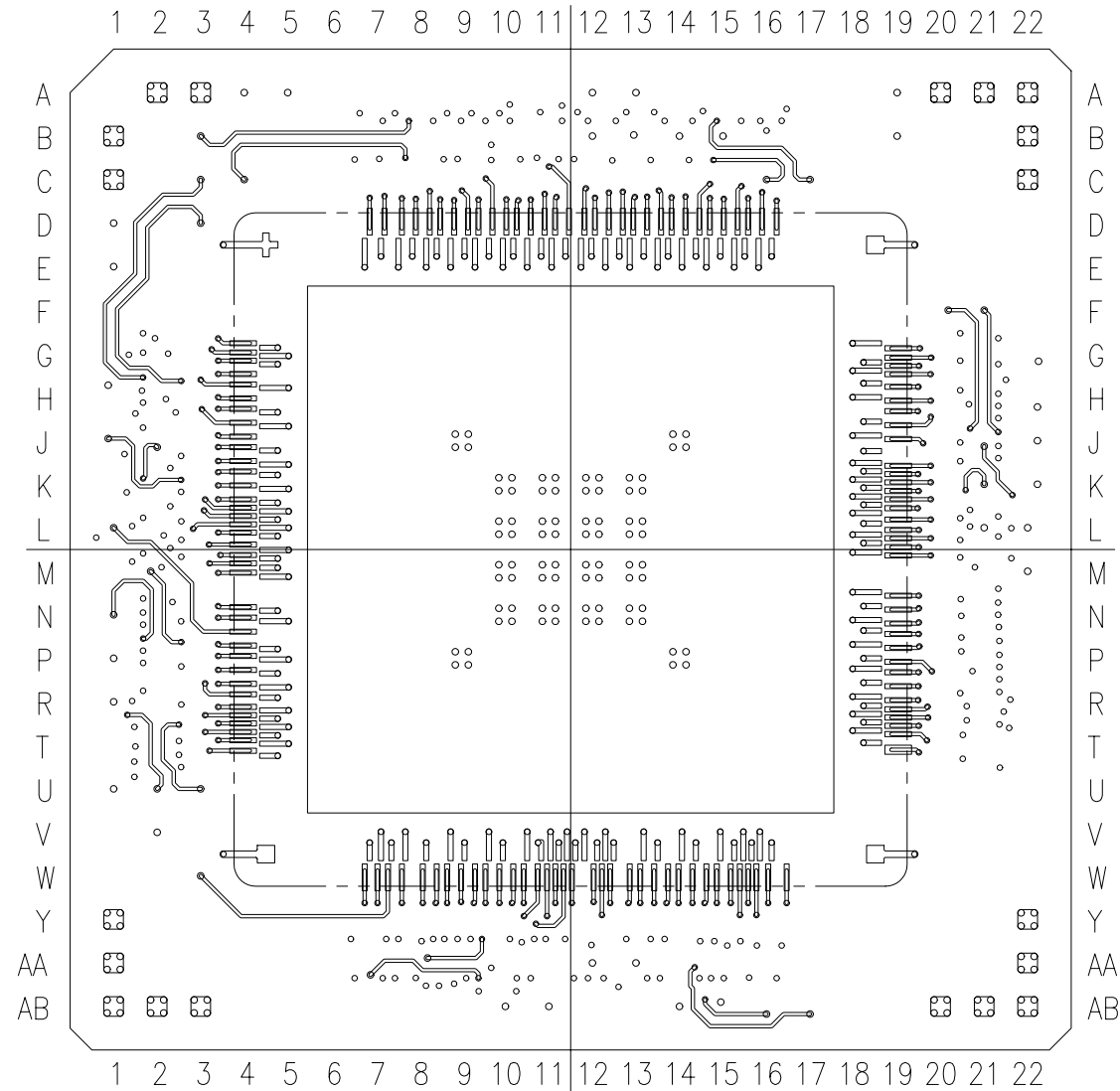
C

B

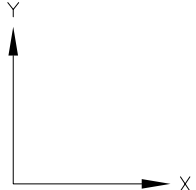
B

A

A



MP-5
 (BF,D/A)



SIZE --	ACTEL DWG. NUMBER 1-21-11754	REV 0
	VENDOR DWG. NUMBER KD-NB0164	REV A
SCALE: None		SHEET 4 OF 6

F

F

E

E

D

D

C

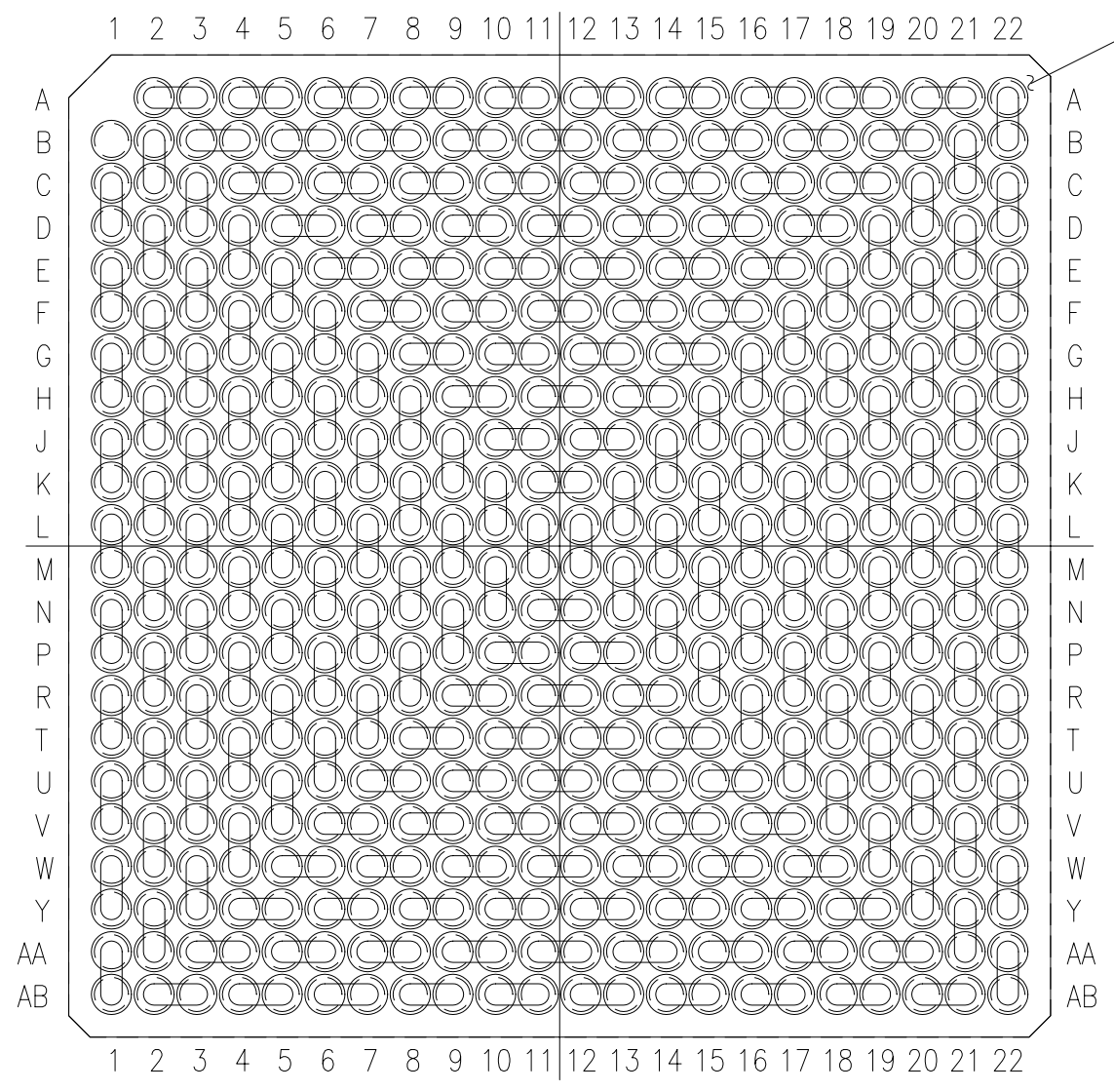
C

B

B

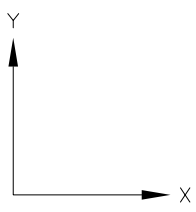
A

A



ALUMINA COAT

MP-8
 (LGA)
 (TOP VIEW)



SIZE --	ACTEL DWG. NUMBER 1-21-11754	REV 0
	VENDOR DWG. NUMBER KD-NB0164	REV A
SCALE: None		SHEET 5 OF 6

F

F

E

E

D

D

C

C

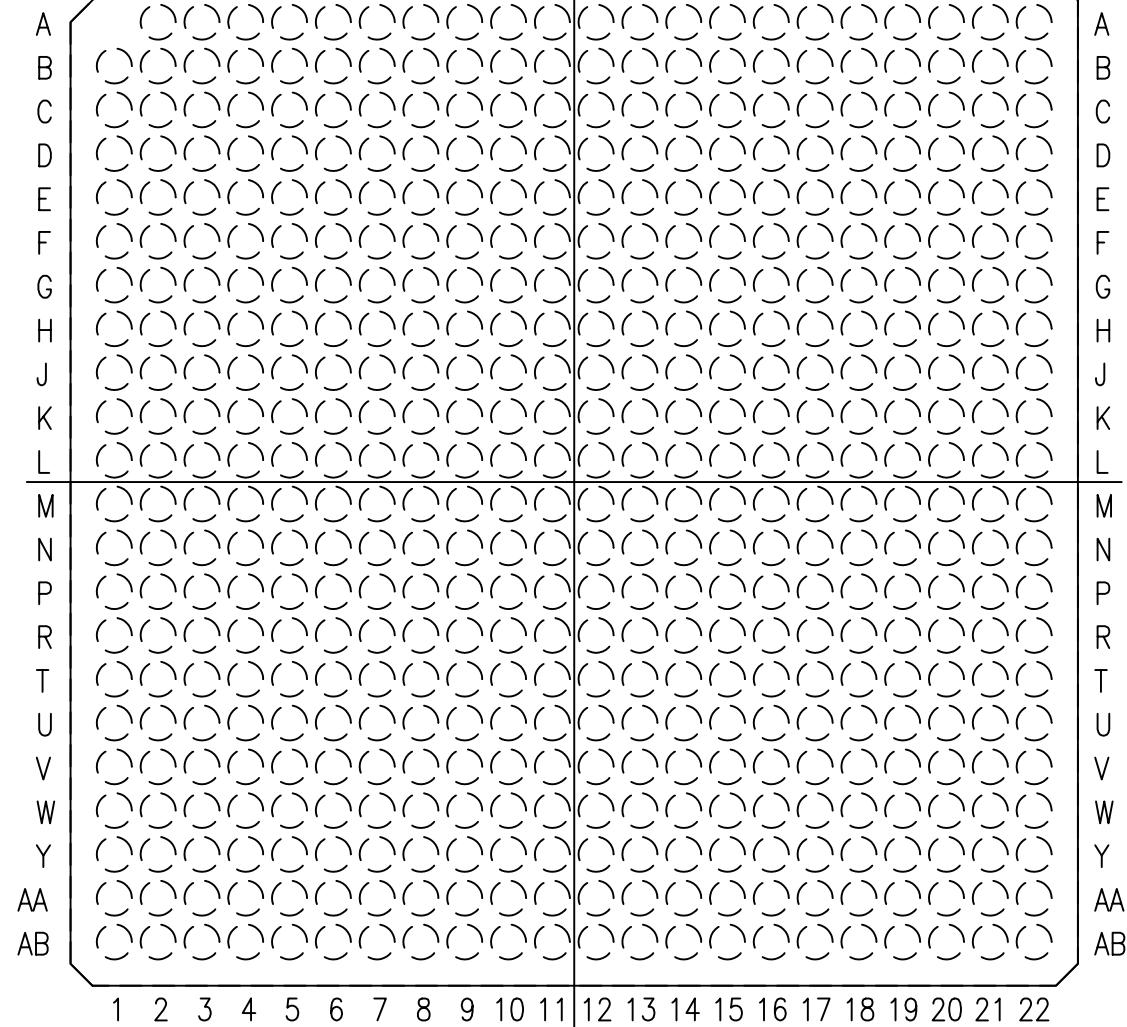
B

B

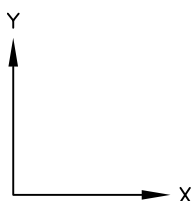
A

A

1 2 3 4 5 6 7 8 9 10 11 | 12 13 14 15 16 17 18 19 20 21 22



ALUMINA COAT
 (MP-8)
 (TOP VIEW)



SIZE --	ACTEL DWG. NUMBER 1-21-11754	REV 0
	VENDOR DWG. NUMBER KD-NB064	REV A
SCALE: None		SHEET 6 OF 6