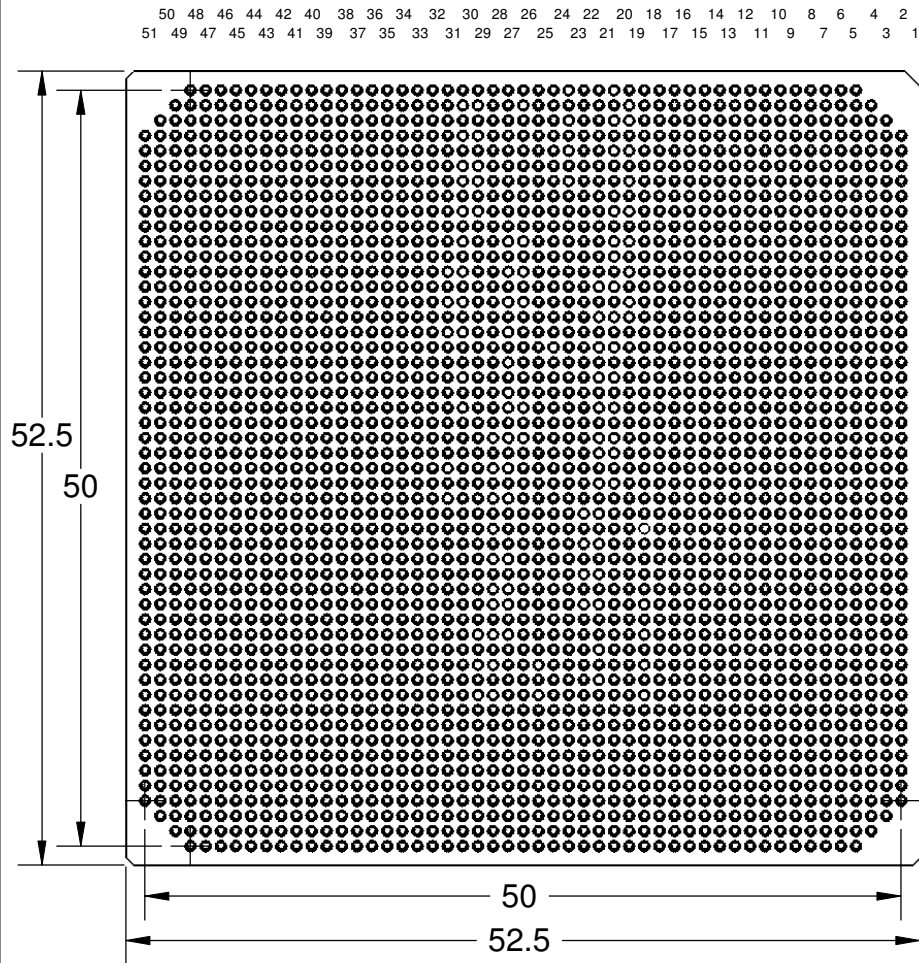
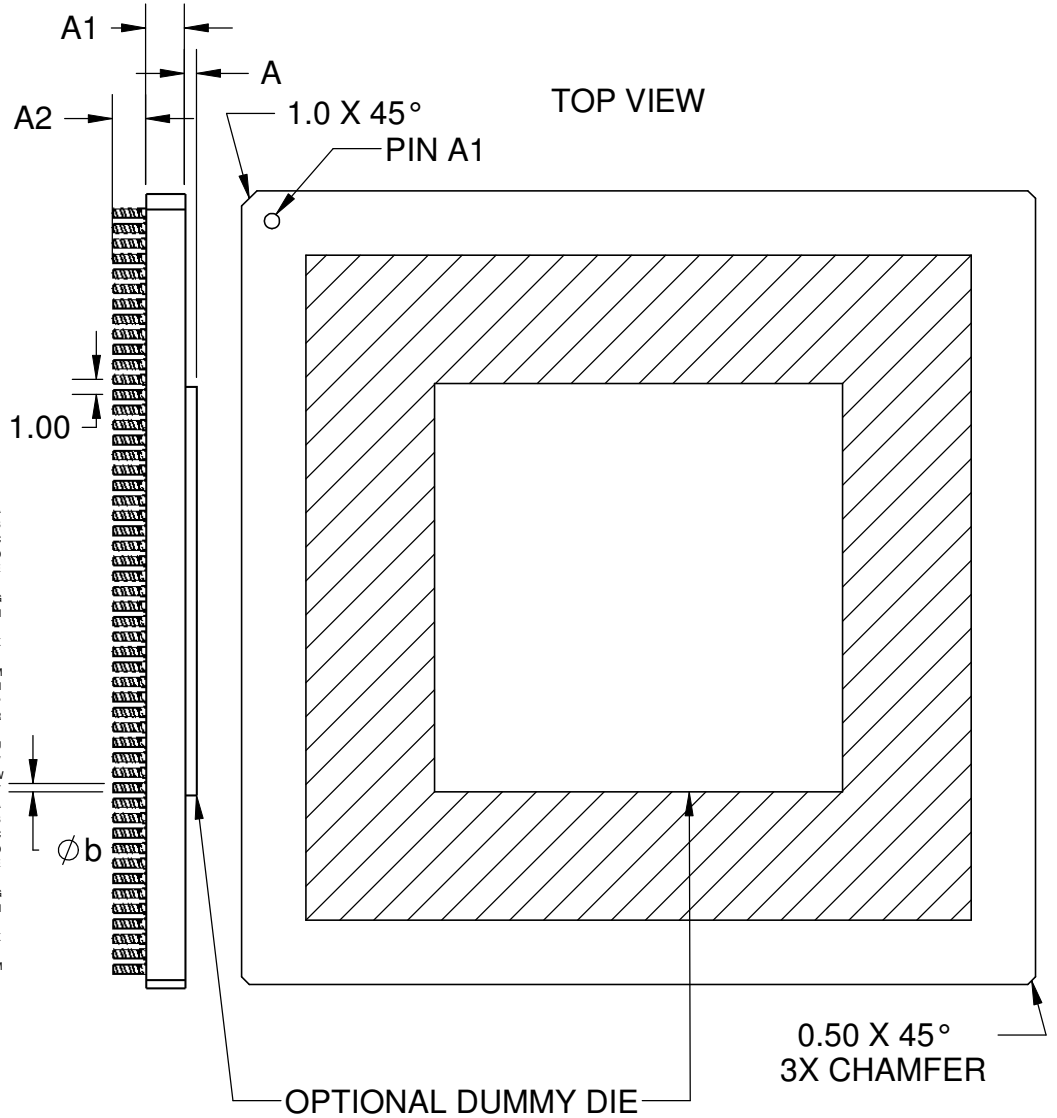


BOTTOM VIEW

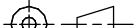


DIMENSIONS			
SYMBOL	MIN.	NOM.	MAX.
A	2.30	3.00	3.30
A ₁	2.30	2.56	2.82
A ₂	2.10	2.20	2.30
ϕb	0.51	0.54	0.57
DIE	OPTIONAL	15X15	17X17

PART NUMBER OPTIONS		
PART NUMBER	DUMMY DIE	SOLDER PIN
CCGA2577T1.0-DC517	NO	Pb80/Sn20 Cu RIBBON
CCGA2577T1.0-DC517D	YES	
CCGA2577T1.0A-DC517	NO	Pb90/Sn10
CCGA2577T1.0A-DC517D	YES	



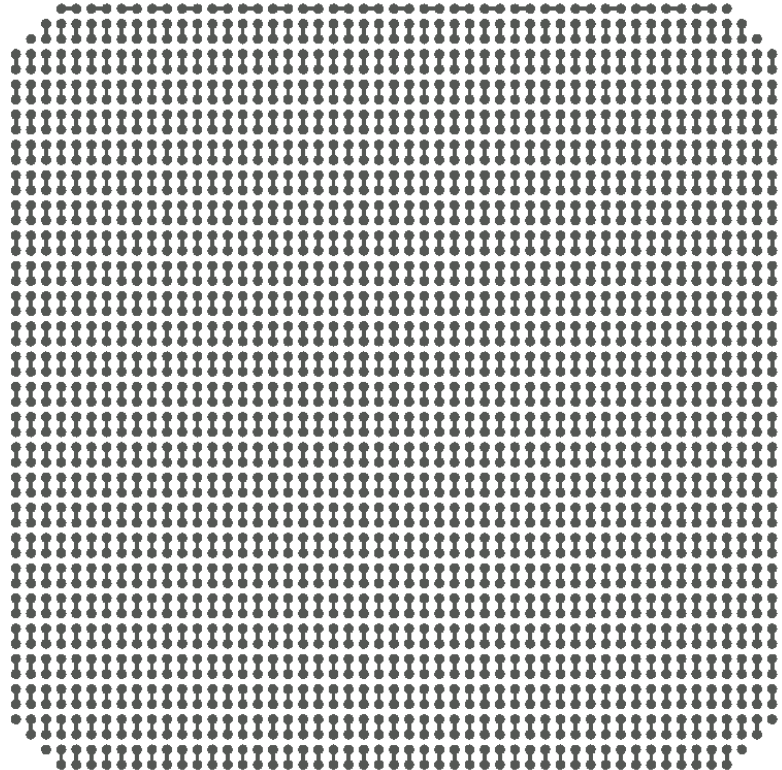
Notes: (Unless Otherwise Specified).
1) DIMENSIONS ARE IN MM.

TOLERANCE UNLESS NOTED		APPROVALS		DATE		TopLine®							
X.XX	+/- 0.01	DRAWN J. Hines		1/22/2011		CCTA2577T1.0-DC517 DUMMY COLUMN GRID ARRAY							
X.XXX	+/- 0.005												
X.XXXX	+/- 0.0005												
ANGLES	+/- 0.5°	ENG											
ALL DIMENSIONS IN		MFG											
☐ INCHES ☒ MILLIMETERS						SCALE 2:1		SIZE A		DRAWING NO. 160210		REV A	
THIRD ANGLE PROJECTION		QA				DO NOT SCALE DRAWING		SHEET 1 OF 3					
		CUST											
		REVISED											

DAISY CHAIN PATTERN

COLUMN (BALL) VIEW

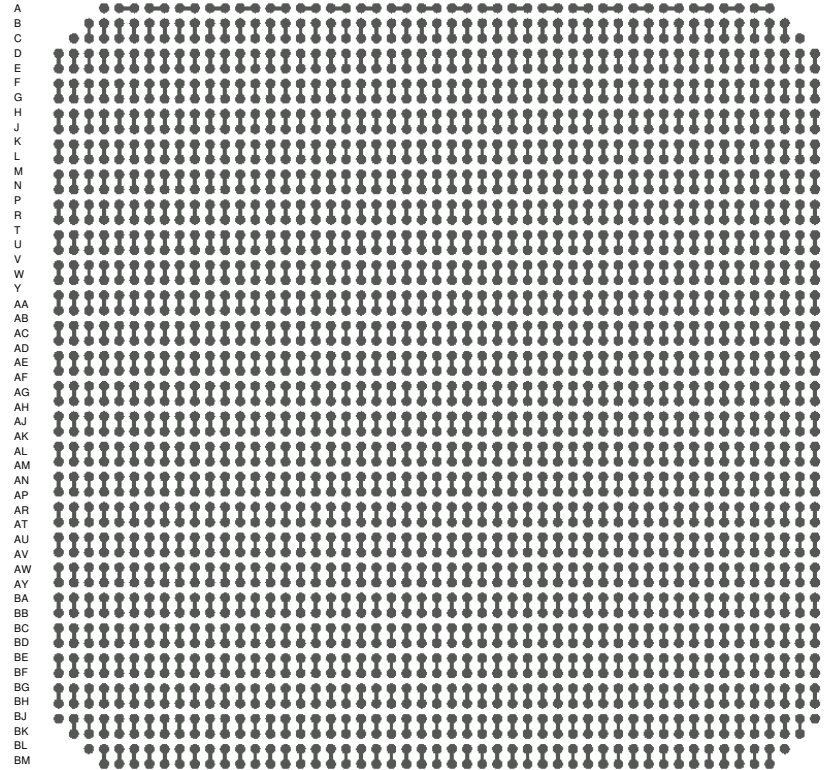
50 48 46 44 42 40 38 36 34 32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2
51 49 47 45 43 41 39 37 35 33 31 29 27 25 23 21 19 17 15 13 11 9 7 5 3 1



A
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BM

BOTTOM X-RAY VIEWED FROM TOP

2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51



A
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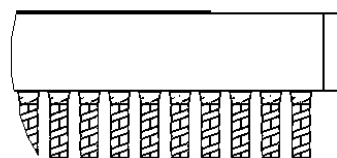
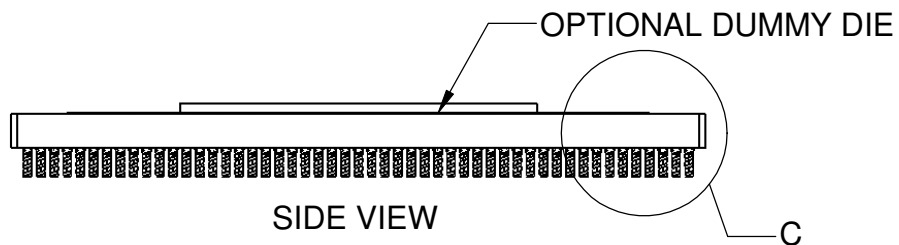
TopLine®

TITLE CCGA2577T1.0-DC517
DUMMY COLUMN GRID ARRAY

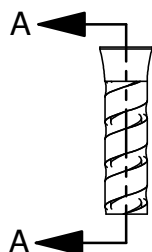
SCALE 2:1	SIZE A	DRAWING NO. 160210	REV A
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DO NOT SCALE DRAWING

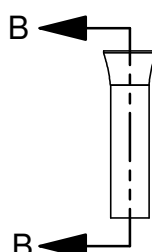
SHEET 2 OF 3



DETAIL C
SCALE 4 : 1

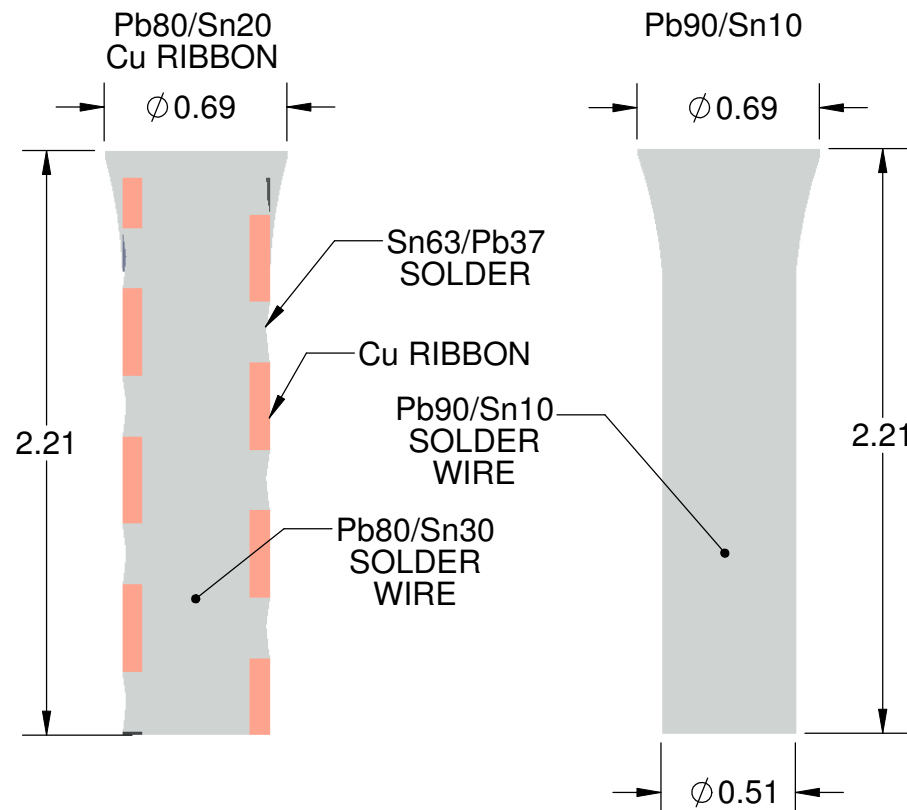


Pb80/Sn20
Cu RIBBON
SCALE 10:1



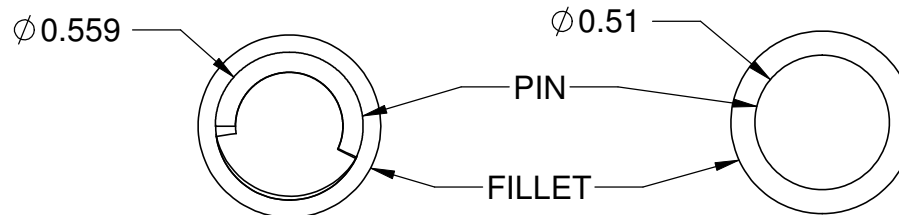
Pb90/Sn10
SCALE 10:1

SOLDER PIN OPTIONS SECTION DETAIL



SECTION A-A
SCALE 35 : 1

SECTION B-B
SCALE 35 : 1



PART NUMBER OPTIONS		
PART NUMBER	DUMMY DIE	SOLDERPIN
CCGA2577T1.0-DC517	NO	Pb80/Sn20 Cu RIBBON
CCGA2577T1.0-DC517D	YES	
CCGA2577T1.0A-DC517	NO	Pb90/Sn10
CCGA2577T1.0A-DC517D	YES	

TopLine

TITLE CCGA2577T1.0-DC517
DUMMY COLUMN GRID ARRAY

SCALE	SIZE	DRAWING NO.	REV
1.75:1	A	160210	A

DO NOT SCALE DRAWING

SHEET 3 OF 3