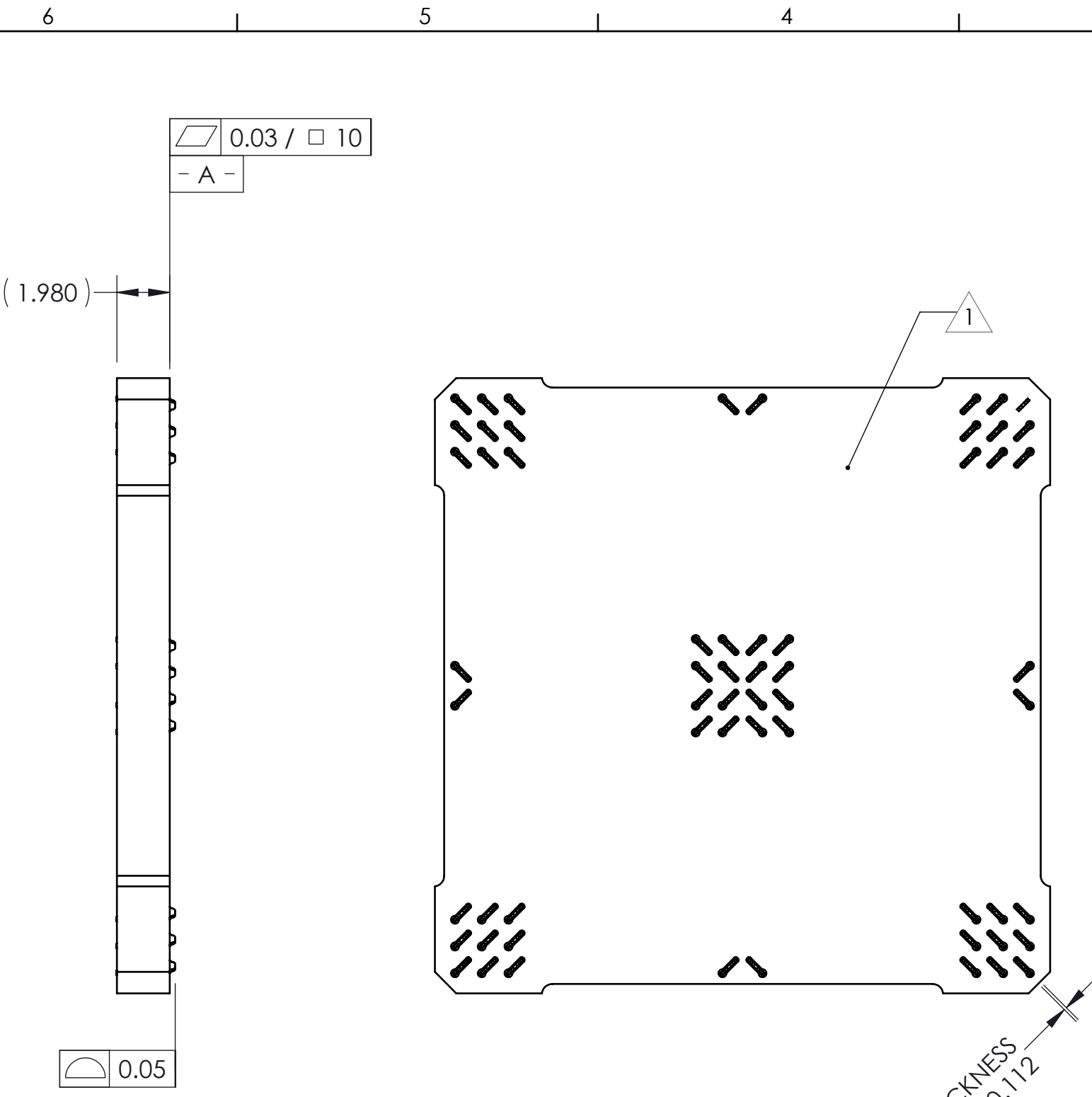
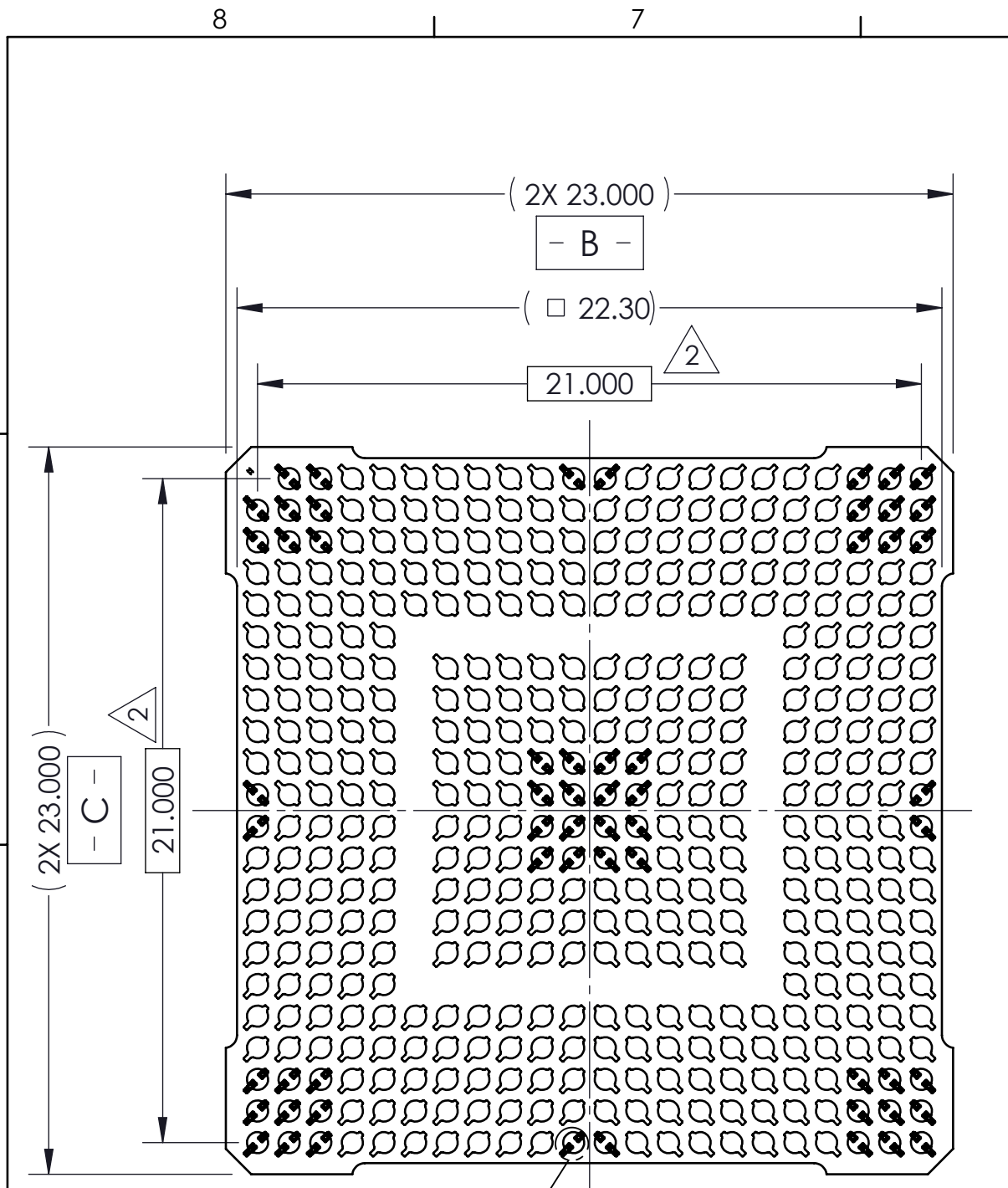
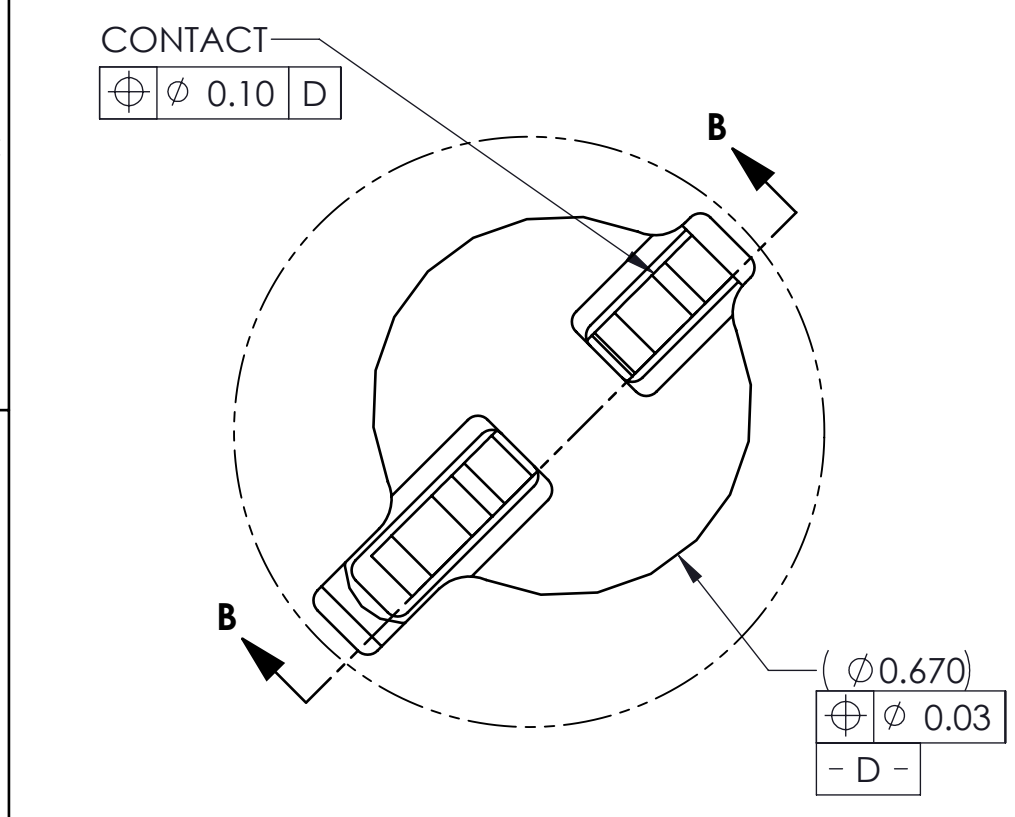


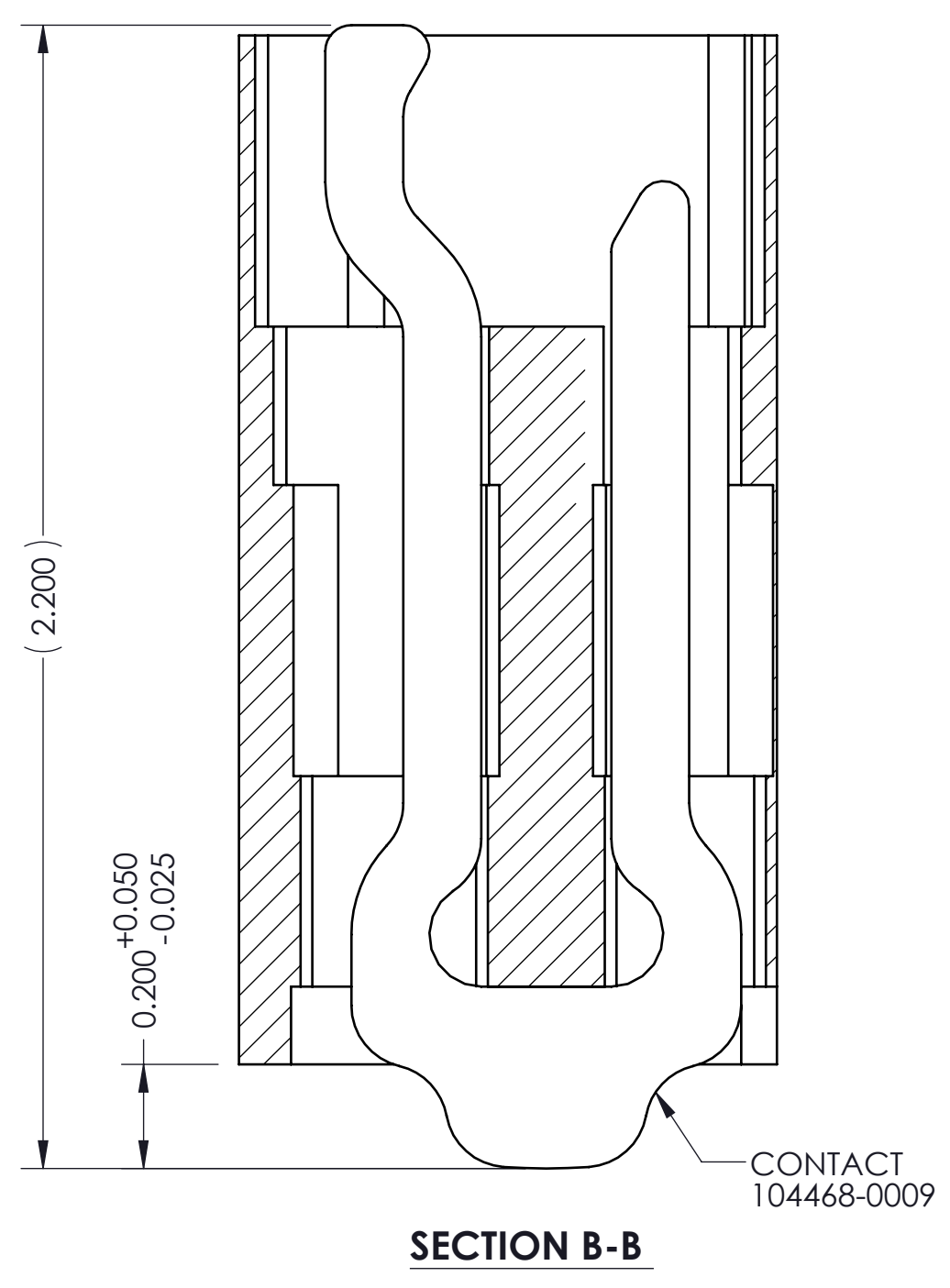
REV	ECO	BY	DESCRIPTION	APV	DATE
A	--	CW	Initial Design	MP	10/13/09



- Notes:
- Footprint part number is 104311-0178.
  - Dimension locates the center of the slots/contacts.
  - Press size is 23.0 x 23.0
  - Not all slots and contacts shown due to file size. See footprint for full pattern definition.



**DETAIL A (439X)**  
Scale 15:1



**SECTION B-B**

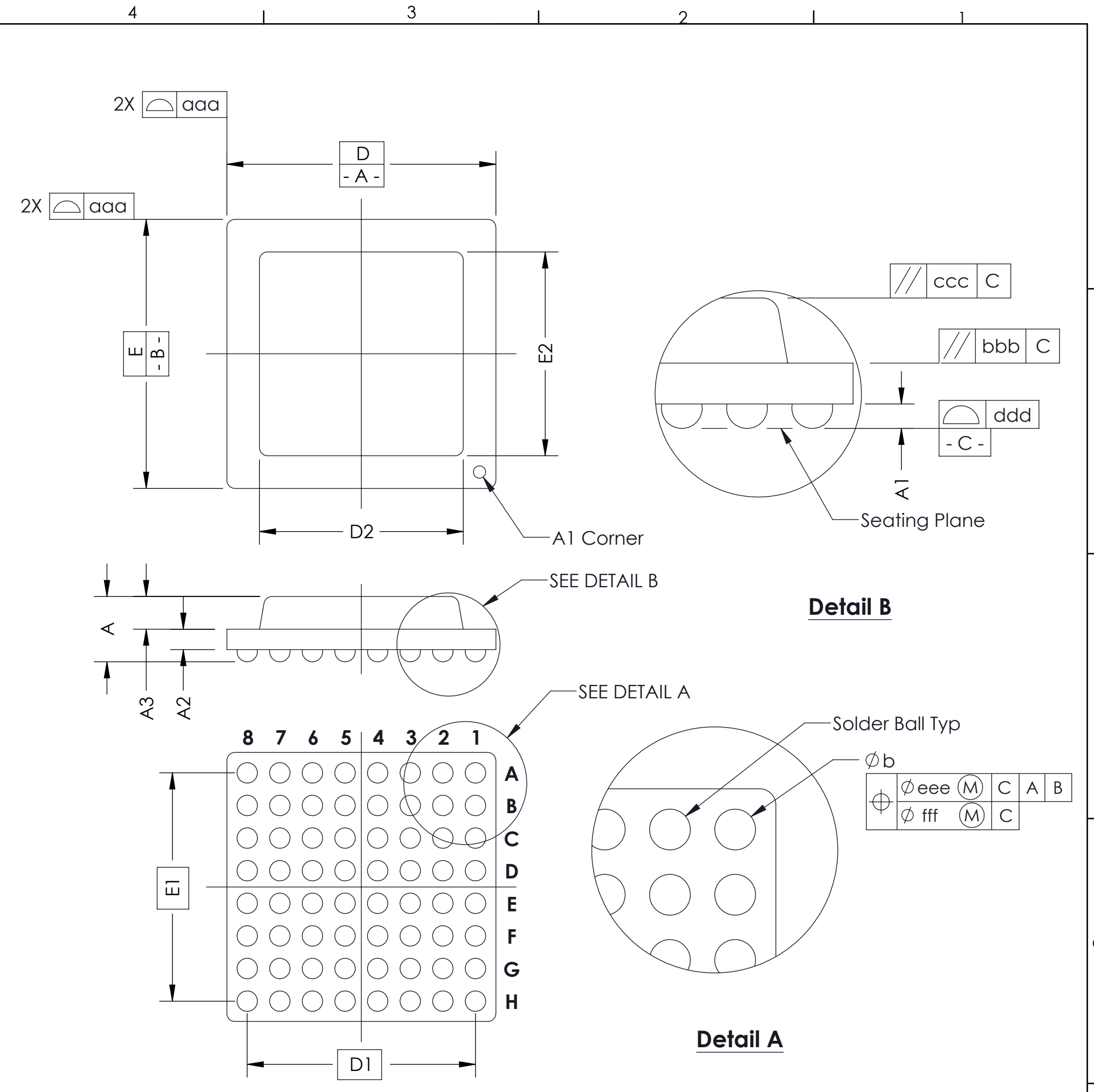
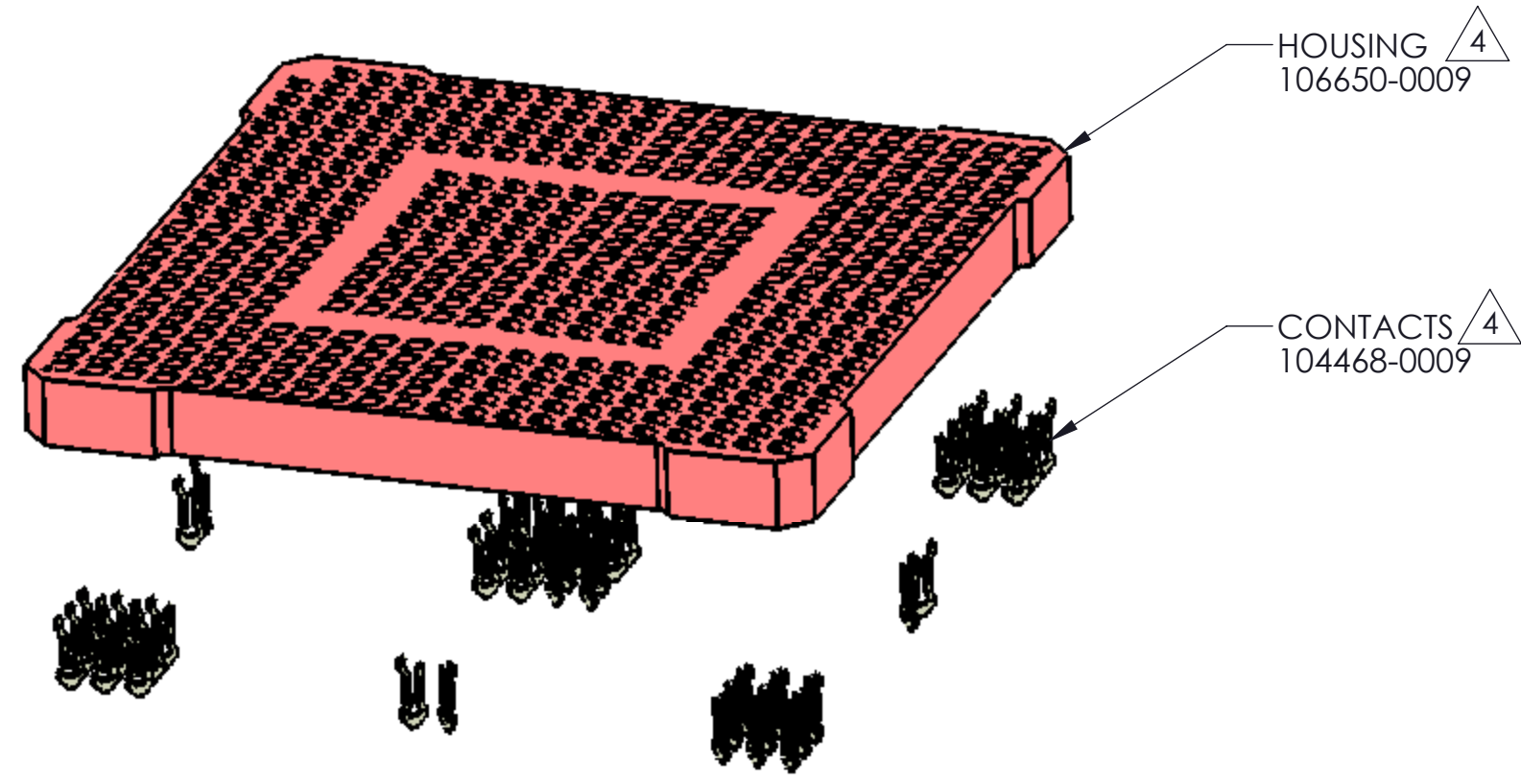
CONTACT THICKNESS WITH PLATING IS 0.112

PARTS LIST		
PART NUMBER	QTY	DESCRIPTION
106652-0003	-	SCKT, 438G8023-1.00
106651-0009	1	CS, 439G8023-1.00
103864-0098	1	PRESS, 23 X23 POCKETED (SOLD SEPARATELY)
104553-0154	1	STENCIL, 439G8023-1.00 (SOLD SEPARATELY)

UNLESS OTHERWISE SPECIFIED - DIMENSIONS ARE IN MILLIMETERS - DIMS APPLY AFTER PLATING - TOLERANCES UNLESS OTHERWISE NOTED:		THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF CASCADE MICROTECH, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF CASCADE MICROTECH, INC. IS PROHIBITED.																																									
ANGLES ±1°	DECIMALS X.X ±0.25 X.XX ±0.10 X.XXX ±0.050	<table border="1"> <tr> <td colspan="2">CAD GENERATED DRAWING DO NOT MANUALLY UPDATE</td> <td rowspan="2"> </td> <td rowspan="2">           7115 NORTHLAND TERRACE SUITE 400            BROOKLYN PARK, MN 55428            (763) 509-0066         </td> </tr> <tr> <td colspan="2">DRAWING APPROVALS</td> <td colspan="2"> <b>TITLE</b>  <b>SCKT, 439G8023-1.00</b> </td> </tr> <tr> <td>LEGEND:</td> <td></td> <td> <table border="1"> <tr> <td>NAME</td> <td>DATE</td> </tr> <tr> <td>C. Wymer</td> <td>10/09/09</td> </tr> <tr> <td>M. Peery</td> <td>10/13/09</td> </tr> </table> </td> <td> <table border="1"> <tr> <td>SIZE</td> <td>CAD FORMAT</td> <td>DRAWING NO.</td> <td>REV.</td> </tr> <tr> <td>C</td> <td>SOLIDWORKS</td> <td>106652-0003</td> <td>A</td> </tr> </table> </td> </tr> <tr> <td> <table border="1"> <tr> <td>⊗</td> <td>NOTE CALLOUT</td> </tr> <tr> <td>Ⓜ</td> <td>REVISION CHANGE</td> </tr> <tr> <td>Ⓧ</td> <td>ITEM NUMBER</td> </tr> </table> </td> <td>THIRD ANGLE PROJECTION</td> <td>SCALE: C</td> <td>MATERIAL: SEE BOM</td> </tr> <tr> <td colspan="2"></td> <td colspan="2">SHEET 1 of 1</td> </tr> </table>		CAD GENERATED DRAWING DO NOT MANUALLY UPDATE			7115 NORTHLAND TERRACE SUITE 400 BROOKLYN PARK, MN 55428 (763) 509-0066	DRAWING APPROVALS		<b>TITLE</b> <b>SCKT, 439G8023-1.00</b>		LEGEND:		<table border="1"> <tr> <td>NAME</td> <td>DATE</td> </tr> <tr> <td>C. Wymer</td> <td>10/09/09</td> </tr> <tr> <td>M. Peery</td> <td>10/13/09</td> </tr> </table>	NAME	DATE	C. Wymer	10/09/09	M. Peery	10/13/09	<table border="1"> <tr> <td>SIZE</td> <td>CAD FORMAT</td> <td>DRAWING NO.</td> <td>REV.</td> </tr> <tr> <td>C</td> <td>SOLIDWORKS</td> <td>106652-0003</td> <td>A</td> </tr> </table>	SIZE	CAD FORMAT	DRAWING NO.	REV.	C	SOLIDWORKS	106652-0003	A	<table border="1"> <tr> <td>⊗</td> <td>NOTE CALLOUT</td> </tr> <tr> <td>Ⓜ</td> <td>REVISION CHANGE</td> </tr> <tr> <td>Ⓧ</td> <td>ITEM NUMBER</td> </tr> </table>	⊗	NOTE CALLOUT	Ⓜ	REVISION CHANGE	Ⓧ	ITEM NUMBER	THIRD ANGLE PROJECTION	SCALE: C	MATERIAL: SEE BOM			SHEET 1 of 1	
CAD GENERATED DRAWING DO NOT MANUALLY UPDATE			7115 NORTHLAND TERRACE SUITE 400 BROOKLYN PARK, MN 55428 (763) 509-0066																																								
DRAWING APPROVALS				<b>TITLE</b> <b>SCKT, 439G8023-1.00</b>																																							
LEGEND:		<table border="1"> <tr> <td>NAME</td> <td>DATE</td> </tr> <tr> <td>C. Wymer</td> <td>10/09/09</td> </tr> <tr> <td>M. Peery</td> <td>10/13/09</td> </tr> </table>	NAME	DATE	C. Wymer	10/09/09	M. Peery	10/13/09	<table border="1"> <tr> <td>SIZE</td> <td>CAD FORMAT</td> <td>DRAWING NO.</td> <td>REV.</td> </tr> <tr> <td>C</td> <td>SOLIDWORKS</td> <td>106652-0003</td> <td>A</td> </tr> </table>	SIZE	CAD FORMAT	DRAWING NO.	REV.	C	SOLIDWORKS	106652-0003	A																										
NAME	DATE																																										
C. Wymer	10/09/09																																										
M. Peery	10/13/09																																										
SIZE	CAD FORMAT	DRAWING NO.	REV.																																								
C	SOLIDWORKS	106652-0003	A																																								
<table border="1"> <tr> <td>⊗</td> <td>NOTE CALLOUT</td> </tr> <tr> <td>Ⓜ</td> <td>REVISION CHANGE</td> </tr> <tr> <td>Ⓧ</td> <td>ITEM NUMBER</td> </tr> </table>	⊗	NOTE CALLOUT	Ⓜ	REVISION CHANGE	Ⓧ	ITEM NUMBER	THIRD ANGLE PROJECTION	SCALE: C	MATERIAL: SEE BOM																																		
⊗	NOTE CALLOUT																																										
Ⓜ	REVISION CHANGE																																										
Ⓧ	ITEM NUMBER																																										
		SHEET 1 of 1																																									

SOCKET FOR DEVICES THAT ARE WITHIN THESE SPECIFICATIONS				
Lead Count	<b>N</b>	439	Package Size	<b>D</b> 23.00
Columns	<b>ND</b>	22		<b>E</b> 23.00
Rows	<b>NE</b>	22	Ball Spacing	<b>D1</b> 21.000
Pitch	<b>e</b>	1.00		<b>E1</b> 21.000
Ball Size	<b>b</b>	0.60±0.05	Encapsulant/ Top Size	<b>D2</b> 20.0 min
Total Thickness	<b>A</b>	n/a		<b>E2</b> 20.0 min
Ball Height	<b>A1</b>	0.375 MIN	Pattern Style	Irregular*
Substrate Thickness	<b>A2</b>	n/a	Perimeter Rows	5
Top Thickness	<b>A3</b>		Center Array	10
Form Tolerances				
Edge	<b>aaa</b>	0.20	Bottom	<b>ddd</b> 0.15
Substrate	<b>bbb</b>	0.20	Position	<b>eee</b> 0.20
top	<b>ccc</b>	0.20	Position	<b>fff</b> 0.08

All dimensions are in millimeters.  
\* See footprint for pattern details.



Generic Representation with Full Grid Array

<small>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF CASCADE MICROTECH, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF CASCADE MICROTECH, INC. IS PROHIBITED.</small>			
<small>UNLESS OTHERWISE SPECIFIED - DIMENSIONS ARE IN MILLIMETERS - DIMS APPLY AFTER PLATING TOLERANCES UNLESS OTHERWISE NOTED: DECIMALS ANGLES X.X ±0.25 ±1° X.XX ±0.10 X.XXX ±0.050</small>		<b>7115 NORTHLAND TERRACE SUITE 400 BROOKLYN PARK, MN 55428 (763) 509-0066</b>	
<b>SCKT, 439G8023-1.00</b>			
<small>LEGEND: △ NOTE CALLOUT Ⓜ REVISION CHANGE Ⓧ ITEM NUMBER</small>	<small>SIZE C</small> <small>CAD FORMAT SOLIDWORKS</small> <small>SCALE</small>	<small>DRAWING NO.</small> <b>106652-0003</b> <small>MATERIAL</small> See Page 1	<small>REV.</small> <b>A</b> <small>SHEET</small> 2 of 2