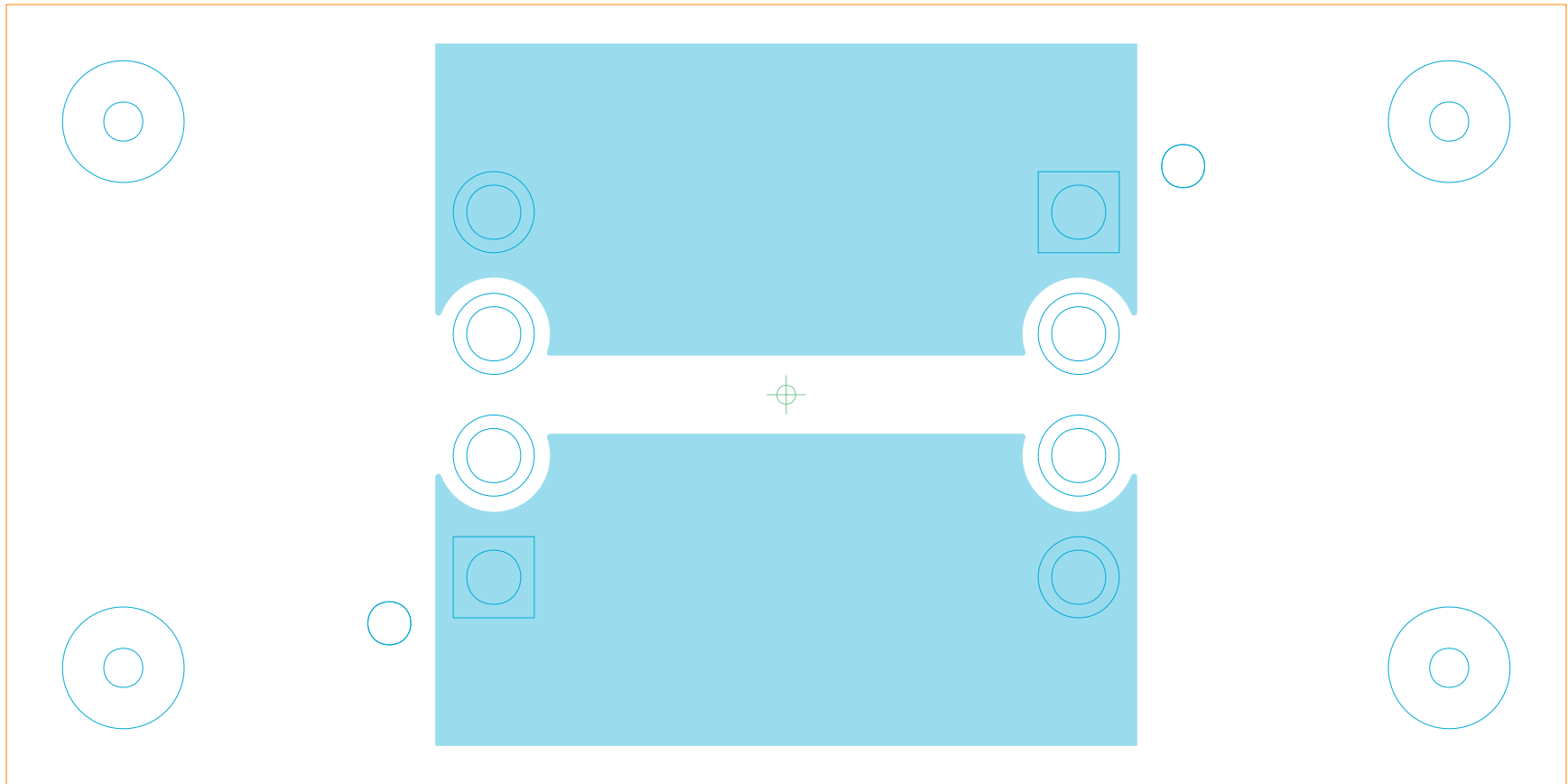
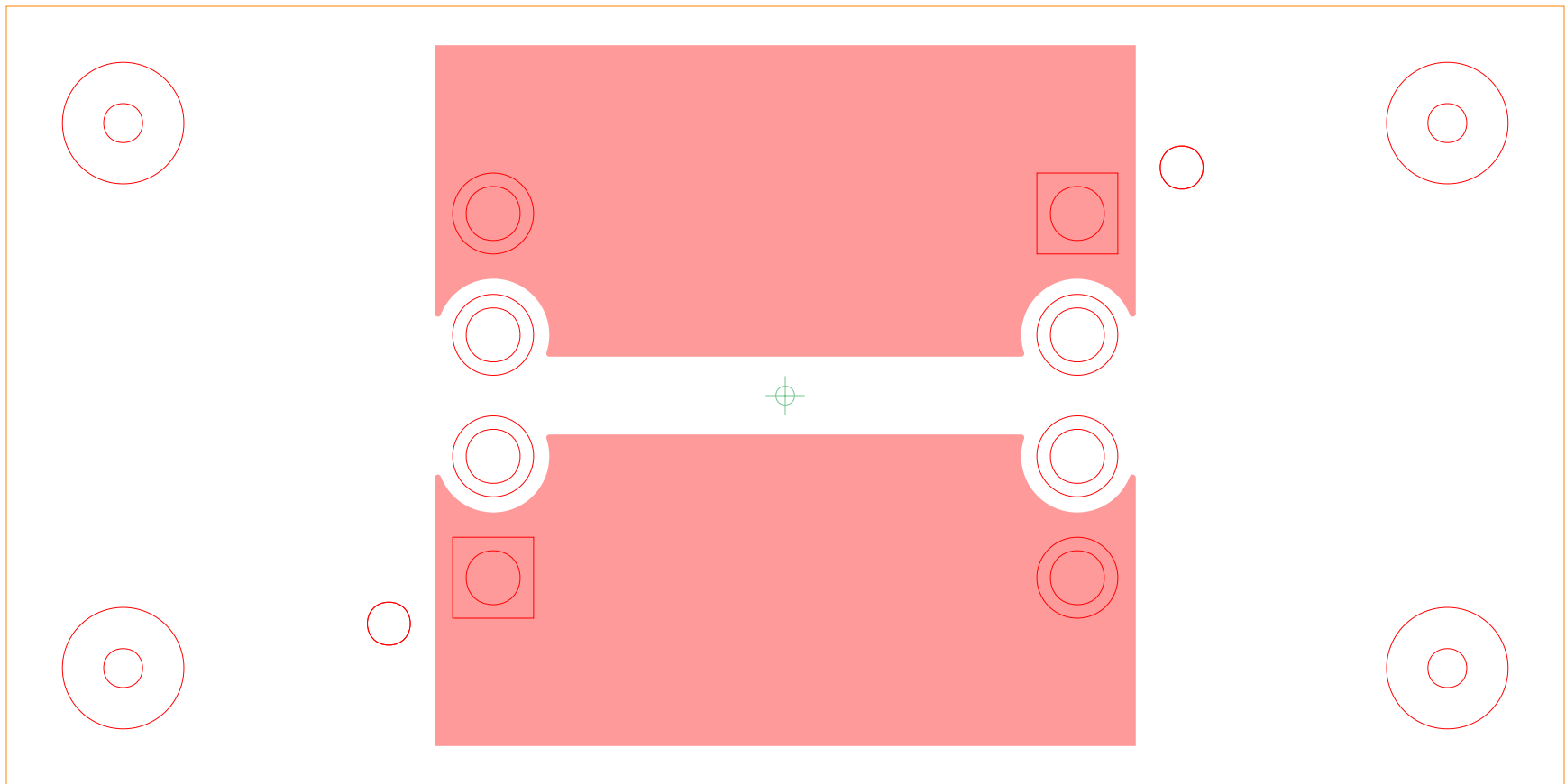


ART FILM - top

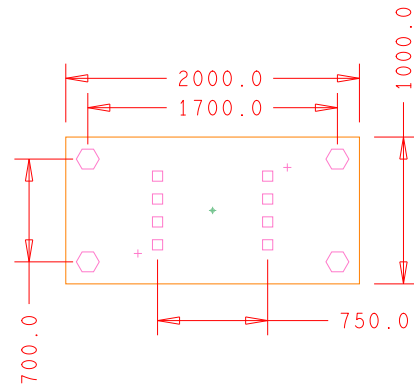


ART FILM - top

ART FILM - bottom



ART FILM - bottom



## FABRICATION NOTES (UNLESS OTHERWISE SPECIFIED):

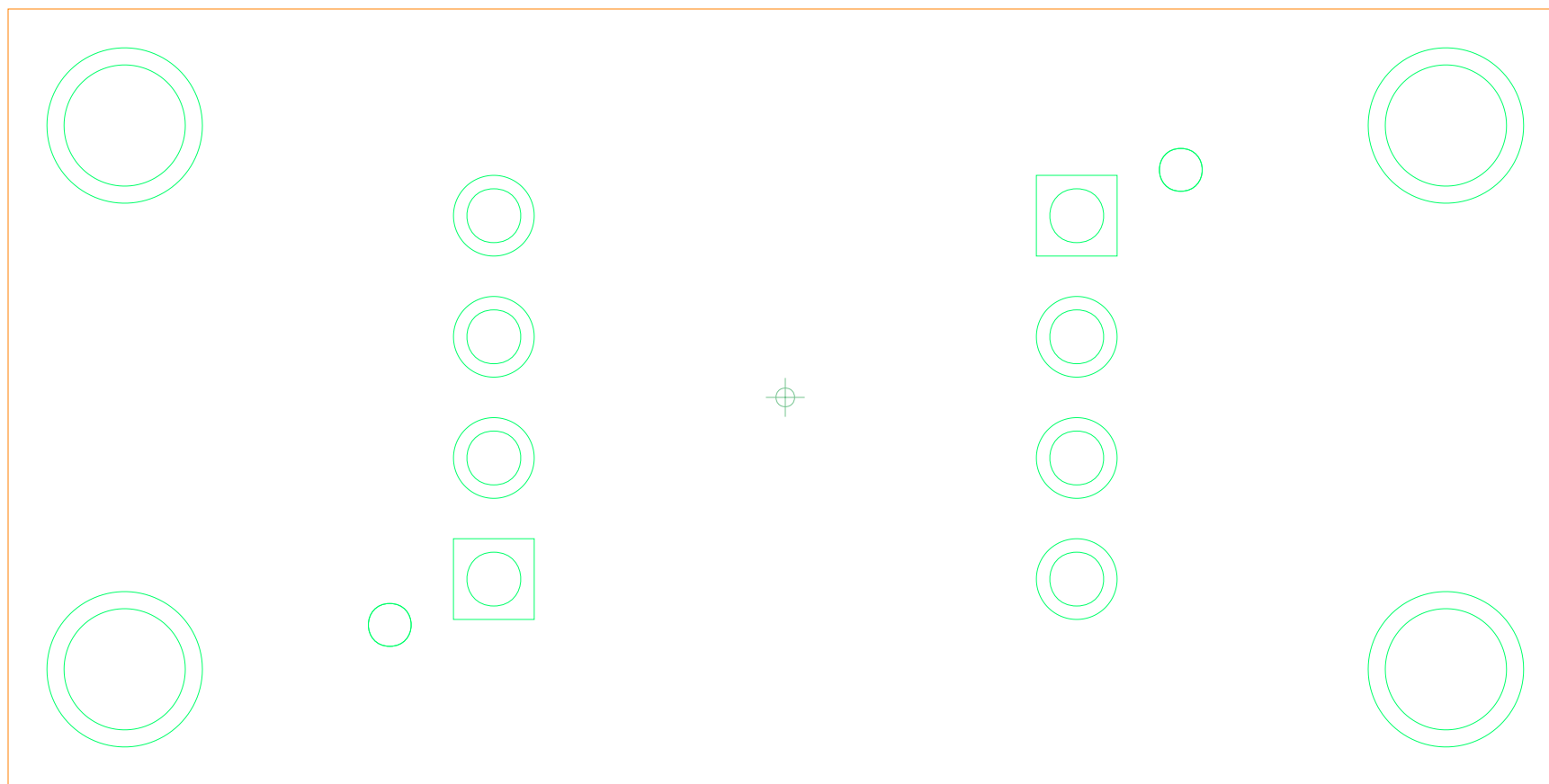
1. TOP SIDE SHOWN.
2. BUILD IN ACCORDANCE WITH ALL IPC STANDARDS RELEVANT TO PRINTED CIRCUIT BOARD FABRICATION.
3. DIELECTRIC MATERIAL SHALL MEET THE REQUIREMENTS TYPE 370HR PER STACKUP DETAIL OR EQUIVALENT AND SATISFY ANY IMPEDANCE REQUIREMENTS.
4. DRILL HOLE, SLOT, AND CUTOUT DIMENSIONS ARE SHOWN AFTER PLATING.
5. SILKSCREEN BOTH SIDES USING EPOXY OR ACRYLIC BASED WHITE NON-CONDUCTIVE SILKSCREEN. SILKSCREEN TO BE REMOVED FROM ANY CONDUCTIVE SURFACE.
6. ETCH VENDOR ID, UL DESIGNATION, AND DATECODE ON THE BACKSIDE.
7. SOLDER MASK BOTH SIDES GREEN. NO SOLDERMASK ON COMPONENT PINS.
8. IMPEDANCE REQUIREMENTS ARE AS FOLLOWS:  $\pm 7-10\%$   
 IF PRESENT: ALL OUTER 6-30 MIL WIDE TRACES 50 OHM SINGLE ENDED;  
 IF PRESENT: ALL INNER 6-30 MIL WIDE TRACES 50 OHM SINGLE ENDED;  
 TRACE WIDTHS SHALL NOT BE MODIFIED WITHOUT APPROVAL.
9. NO CHANGES WILL BE ALLOWED TO DESIGN WITHOUT SPECIFIC APPROVAL.
10. ALL MATERIALS ARE TO BE ROHS AND WEEE COMPLIANT.
11. LAYER STACKUP INFORMATION INCLUDED IN THIS DRAWING SHOWS OUTER LAYER THICKNESS AFTER PLATING AND SUPERSEDES ANY OTHER DESIGN DOCUMENTATION.
12. ELECTRICALLY DISCONNECTED COPPER THIEVING IS ACCEPTABLE TO HELP MAINTAIN COPPER PLATING DISTRIBUTION IN LOW PRESSURE AREAS TO AVOID DELAMINATION.
13. ~~DO NOT PROVIDE BOARDS IN ARRAY FORMAT. ARRAYS SHOULD HAVE MINIMUM OF 250 MILS ON ALL SIDES.~~

STACKUP TABLE				
Unit = Mils				
#	NAME	TYPE	MATERIAL	THICKNESS
		SURFACE	AIR	0
1	TOP	CONDUCTOR	COPPER	1.7
		DIELECTRIC	FR-4	58
2	BOTTOM	CONDUCTOR	COPPER	1.7
		SURFACE	AIR	0
TOTAL THICKNESS				61.4

DRILL CHART: TOP to BOTTOM			
ALL UNITS ARE IN MILS			
FIGURE	FINISHED SIZE	PLATED	QTY
+	55.1	PLATED	2
□	69.3	PLATED	8
⬡	156.0	NON-PLATED	4

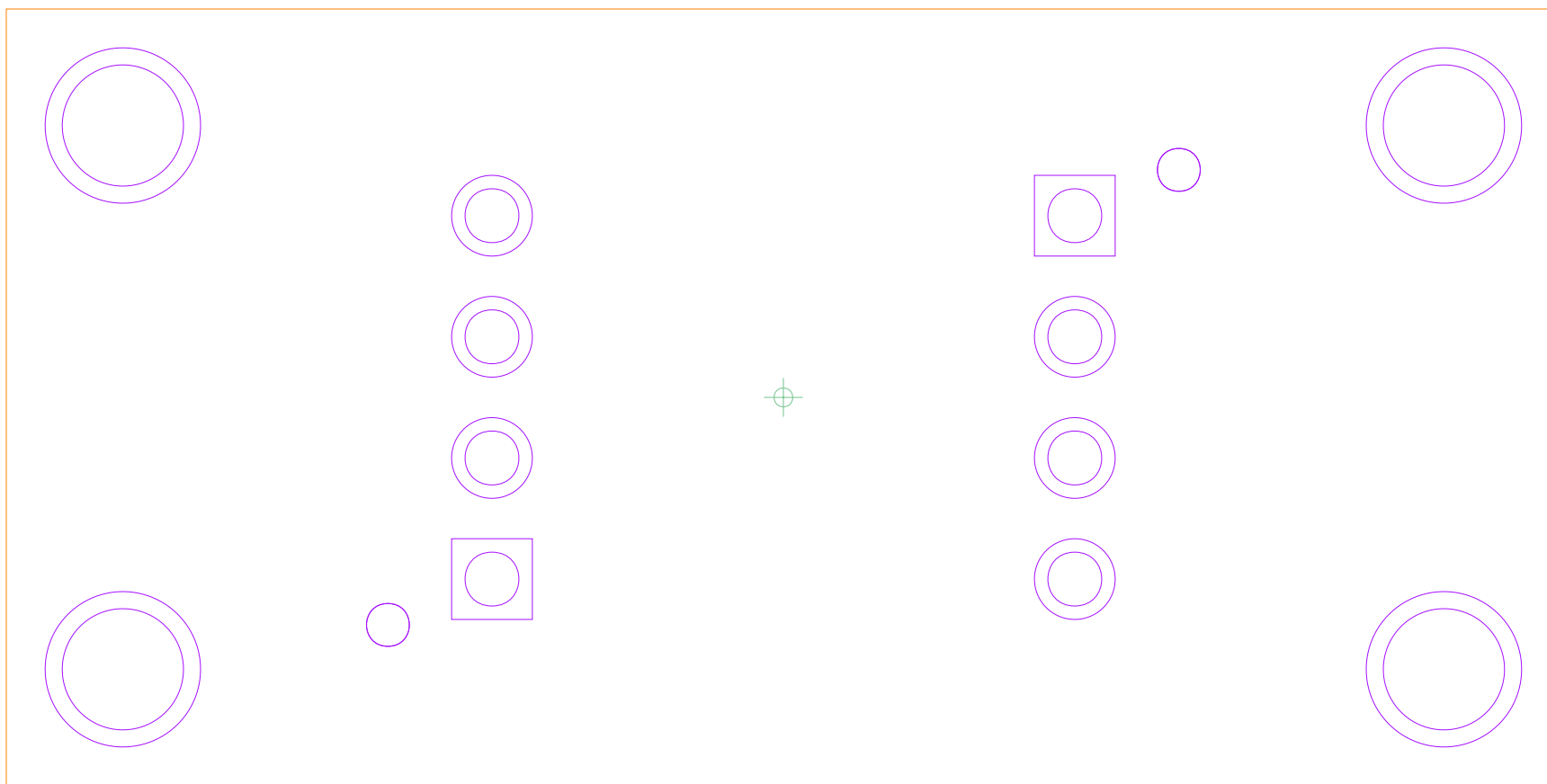
UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE	ALWAYS HARDCORE DESIGN			
DIMENSIONS ARE IN MILS  TOLERANCES ON:	DRAWN: ARIC BEAVER	10/29/19	RELAY PCB			
	CHECKED: ARIC BEAVER	10/29/19				
	ENGRG: ARIC BEAVER	10/29/19				
	ISSUED: ARIC BEAVER	10/29/19				
			SIZE A	REVISION REVO	DWG NO AHC-19-001	
		SCALE 1 / 1	DRAWING FABRICATION		SHEET 1 OF 3	

ART FILM - soldermask\_top



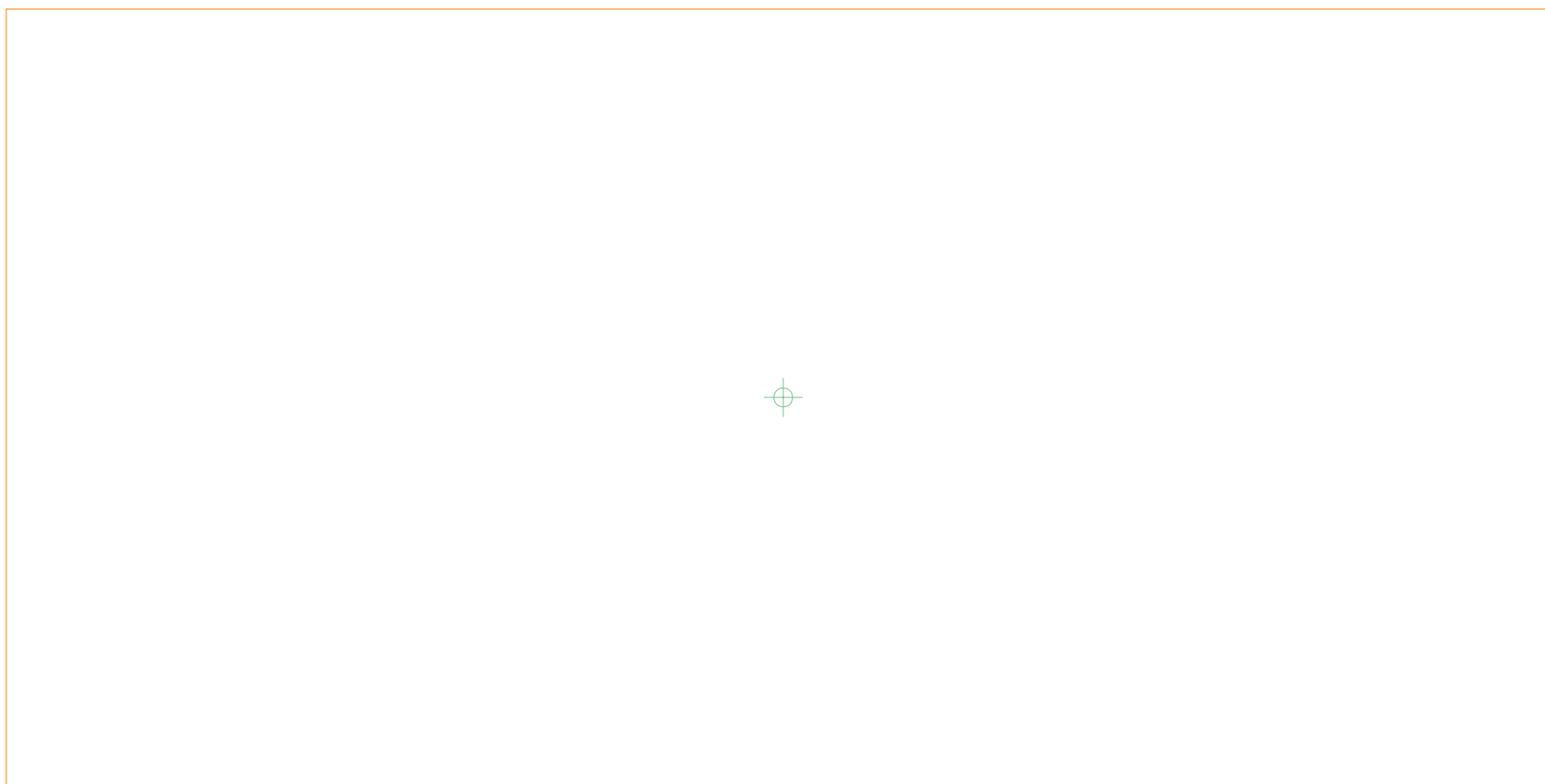
ART FILM - soldermask\_top

ART FILM - soldermask\_bottom



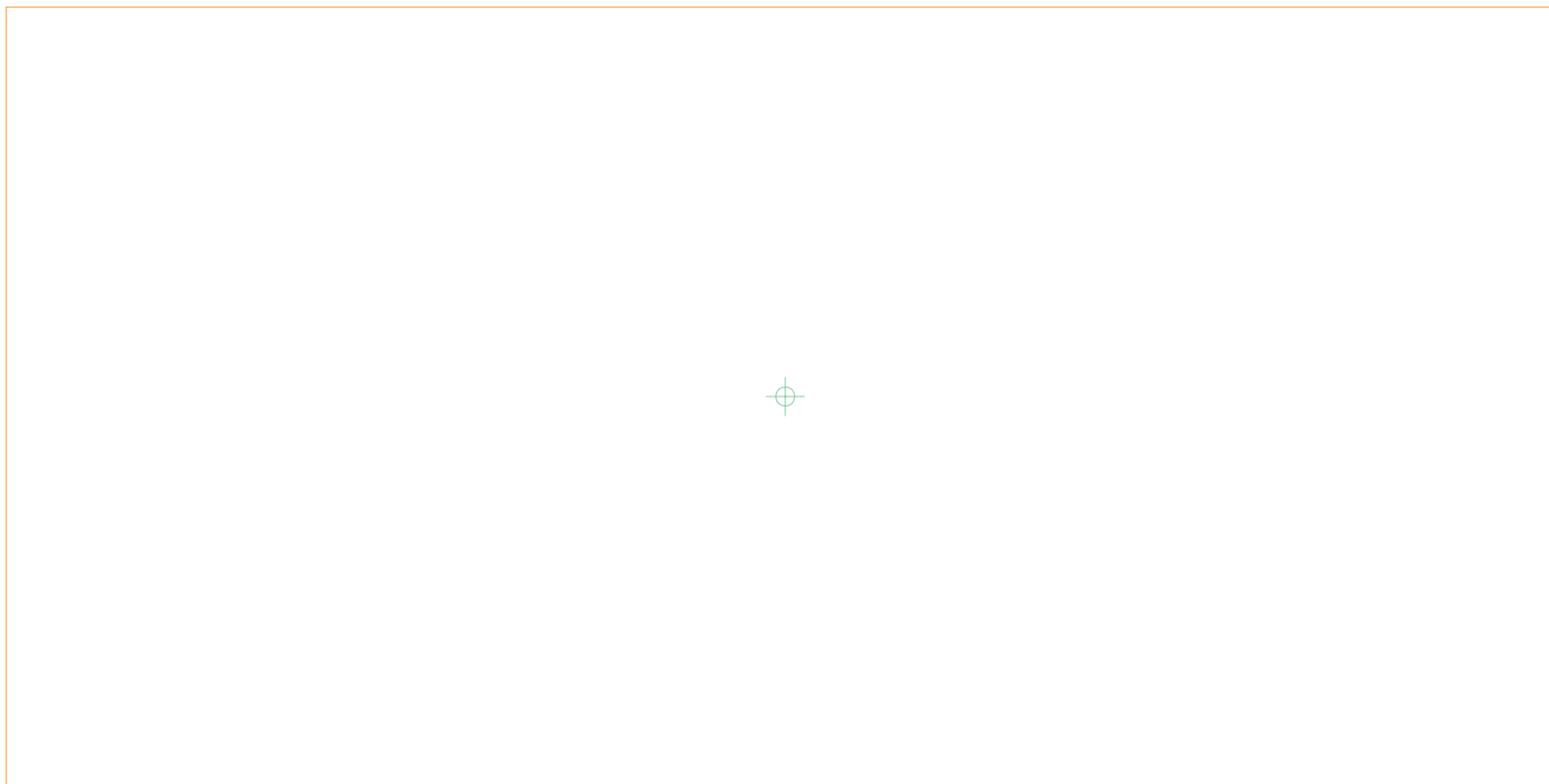
ART FILM - soldermask\_bottom

ART FILM - pastemask\_top



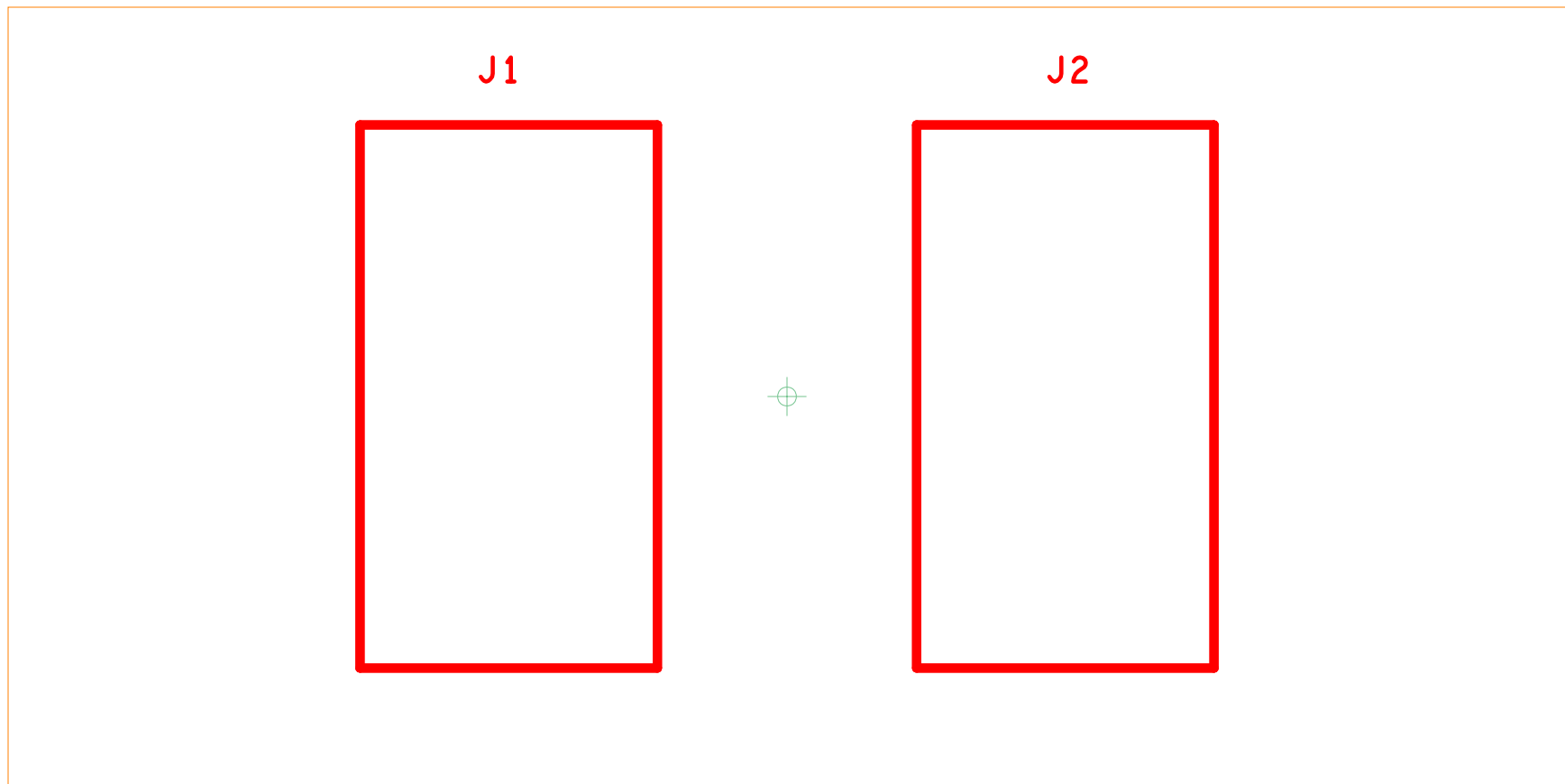
ART FILM - pastemask\_top

ART FILM - pastemask\_bottom



ART FILM - pastemask\_bottom

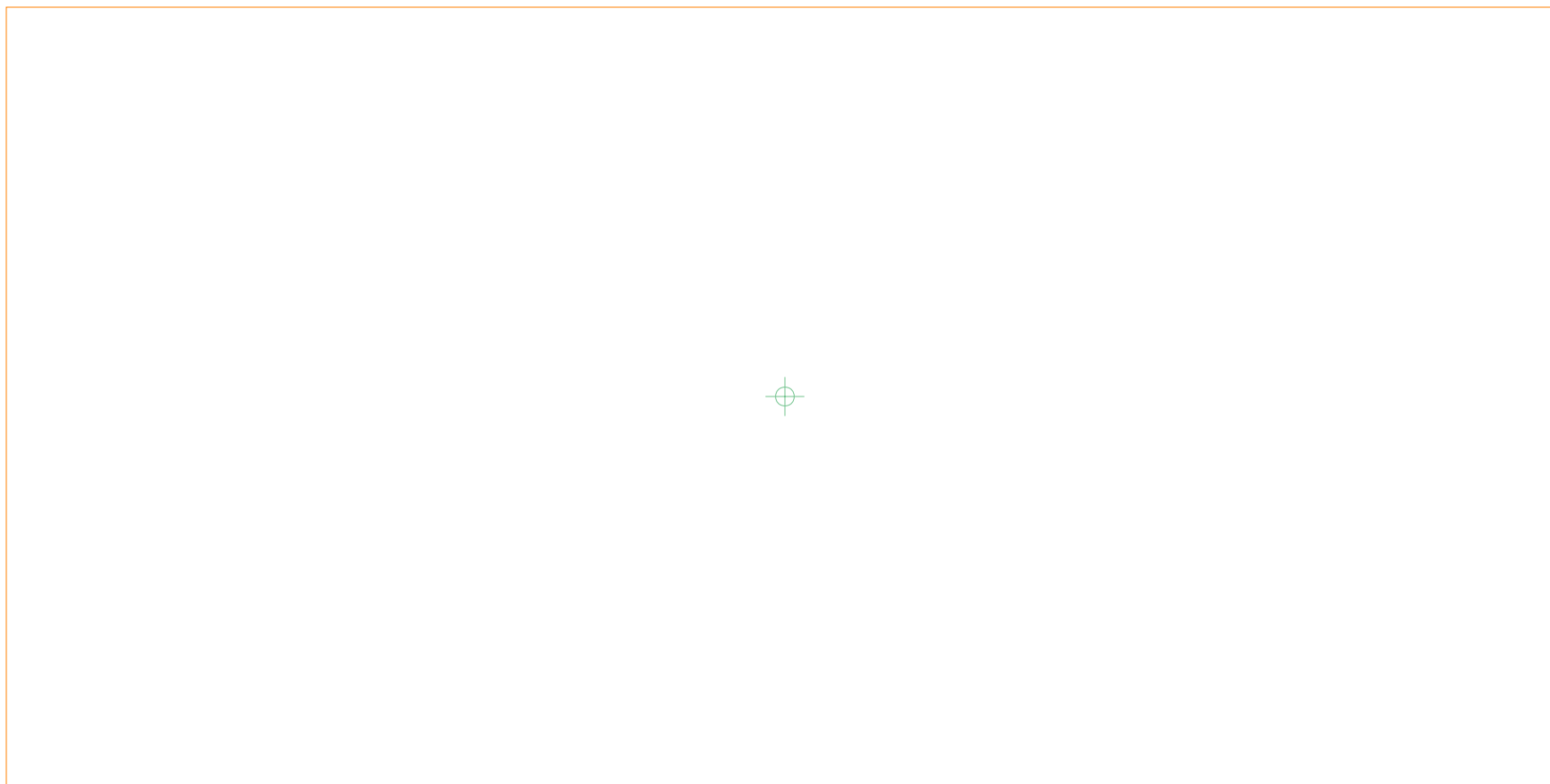
ART FILM - silkscreen\_top



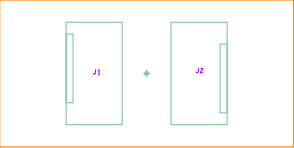
ART FILM - silkscreen\_top



ART FILM - silkscreen\_bottom



ART FILM - silkscreen\_bottom



- ASSEMBLY TOP NOTES (UNLESS OTHERWISE SPECIFIED):
1. ASSEMBLE AND INSPECT IN ACCORDANCE WITH ALL IPC STANDARDS RELEVANT TO PRINTED CIRCUIT BOARD ASSEMBLY.
  2. ALL MATERIALS ARE TO BE ROHS AND WEEE COMPLIANT.
  - ~~3. IF BARE BOARDS ARE SUPPLIED THEY WILL BE AN <ARRAY OR INDIVIDUAL PEICES>.~~
  4. ONLY PARTS CONTAINED IN BILL OF MATERIALS SHALL USED FOR TURN-KEY ASSEMBLY UNLESS EQUIVALENT PART IS APPROVE.
  5. REMOVE ANY KAPTON TAPE COVERING COMPONENTS.
  6. 'DNI' REFERENCE IN BILL OF MATERIALS MEANS DO NOT INSTALL ON PCB.
  7. RETURN ANY UNASSEMBLED OR EXTRA COMPONENTS WITH ASSEMBLED PCBs.
  8. REFLOW HEAT PROFILE ARE REQUIRED TO PROPERLY ATTACH COMPONENTS.
  9. HIDDEN PINS ON BGA OR CSP PACKAGES ARE REQUIRED TO BE X-RAY'ED FOR PROPER SOLDER ATTACH.
  10. REMOVE ARRAY MOUSE BITES ON EDGE OF FINISHED PCB WITH PLUNGE ROUTER.
  11. SOLDERMASK BARREL RELIEF TO AVOID ASSEMBLY ISSUES ON LARGE SURFACE MOUNT PADS IS ACCEPTABLE.
  - ~~13. ASSEMBLY VARIATIONS EXIST IN THIS DESIGN AND A BILL OF MATERIALS FOR EACH VARIANT IS PROVIDED.~~

UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE	ALWAYS Hardcore DESIGN			
DIMENSIONS ARE IN MILS TOLERANCES ON:	DRAWN: ARIC BEAVER	10/29/19	RELAY PCB			
	CHECKED: ARIC BEAVER	10/29/19				
	ENGRG: ARIC BEAVER	10/29/19				
	ISSUED: ARIC BEAVER	10/29/19	SIZE A	REVISION REVO	DWG NO AHC-19-001	
			SCALE 1/1	DRAWING ASSEMBLY TOP	SHEET 2 OF 3	

UNLESS OTHERWISE SPECIFIED		SIGNATURES		DATE	ALWAYS 2 HARDCORE DESIGN	
DIMENSIONS ARE IN MILS TOLERANCES ON:		DRAWN:	10\5a\1a		RELAY PCB	
		ARIC BEAVER				
		CHECKED:	10\5a\1a			
		ARIC BEAVER				
ENGRD:		10\5a\1a		SIZE	REVISION	DWG NO
ARIC BEAVER				A	REVO	AHC-1a-001
ISSUED:		10\5a\1a		3 OF 3		
ARIC BEAVER				ASSEMBLY BOTTOM		
		SCALE		DRAWING		
		1\1		SHEET		