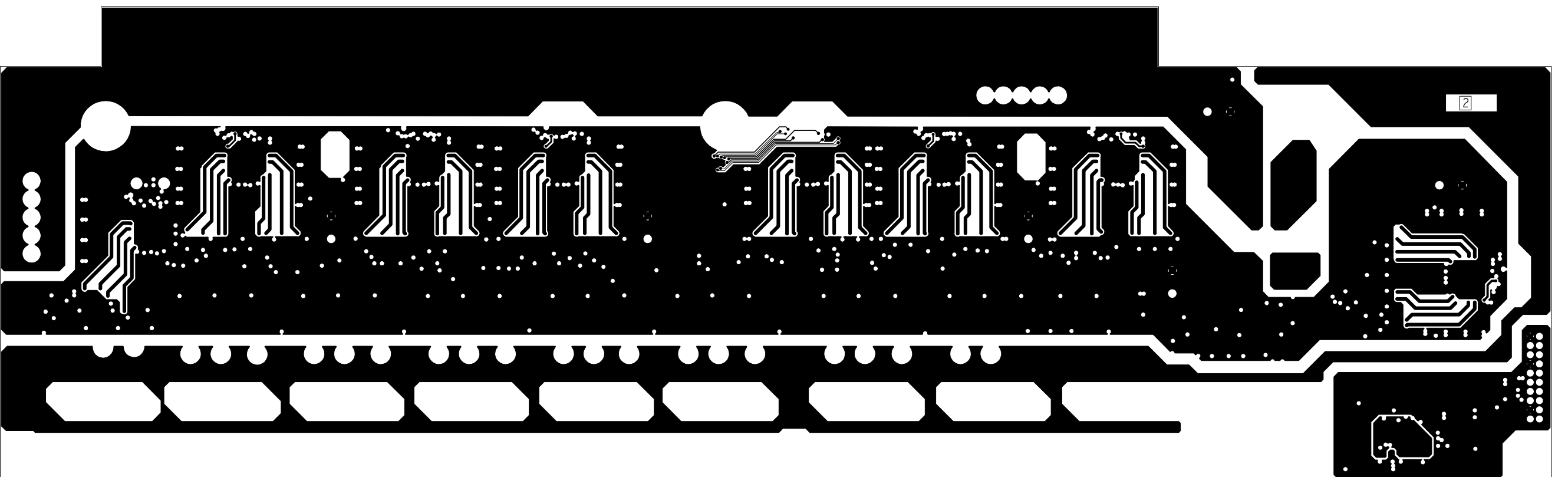


TOP

PART NO : 2976439602  
USED ON : AG6248C POE-R  
SHEET : 7 TO 8  
1ADFS-020011 REV.00

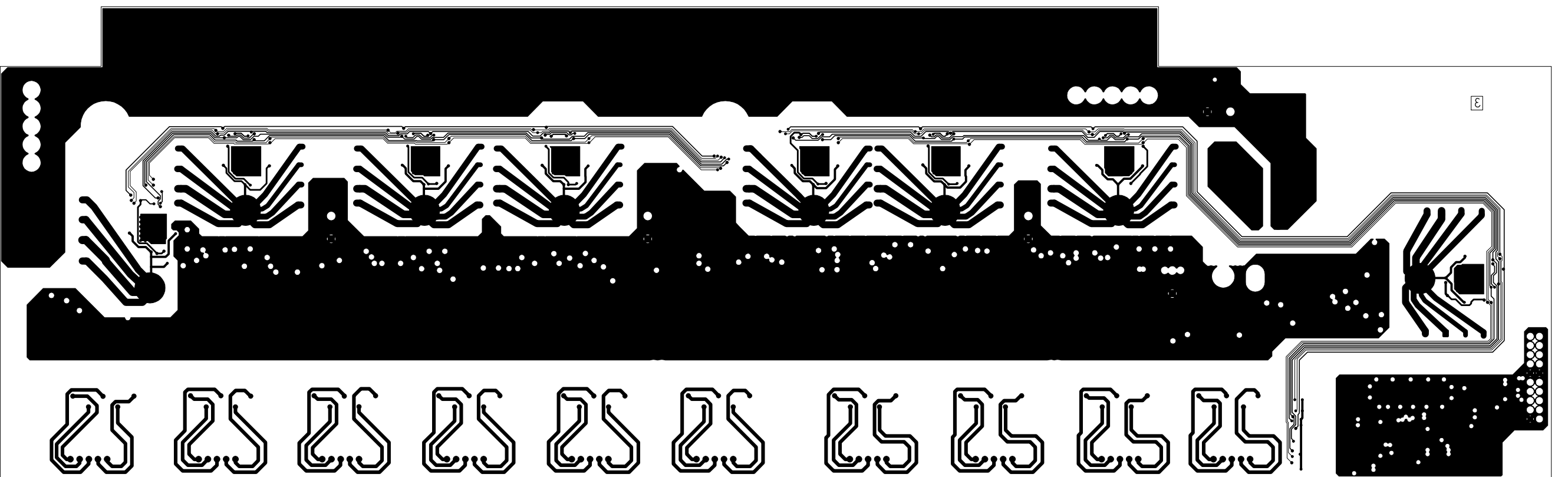
DRAWING NO : L1\_TOP.ART-00  
REV. : 00  
2016-04-07



GND

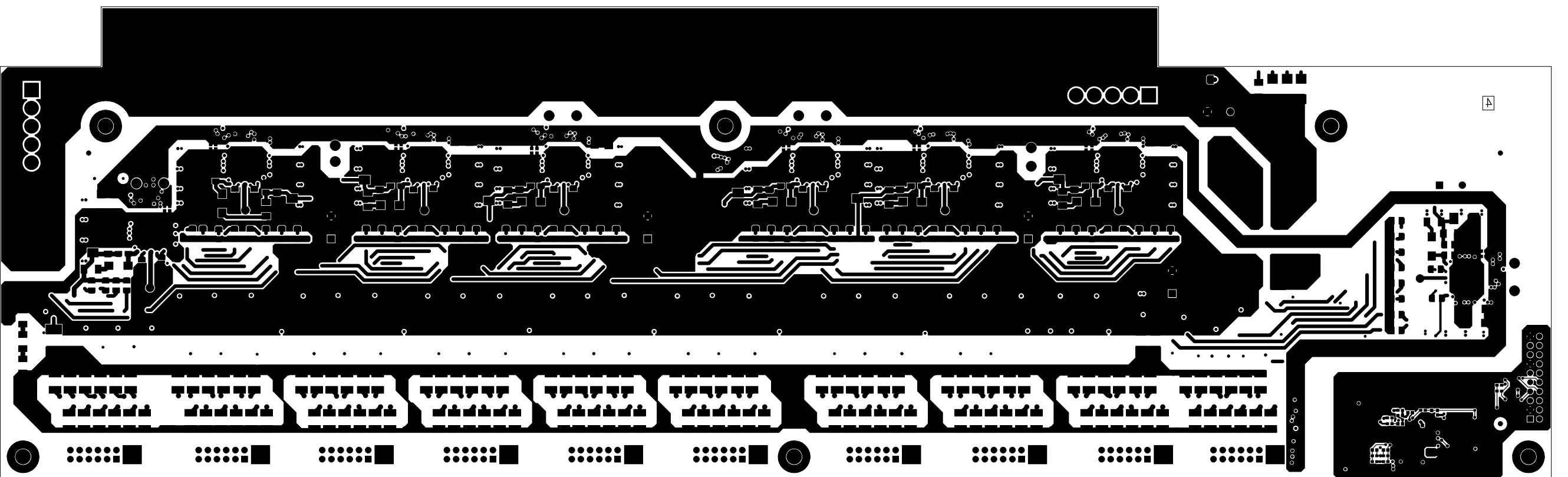
PART NO : 2976439602  
USED ON : AG6248C POE-R  
SHEET : 11 TO 12  
1ADFS-020011 REV.00

DRAWING NO : L2\_GND.ART-00  
REV. : 00  
2016-04-07



VCC

PART NO :	2976439602	DRAWING NO :	L3_VCC.ART-00
USED ON :	AG6248C POE-R	REV. :	00
SHEET :	12 TO End		
1ADFS-020011 REV.00		2016-04-07	



BOTTOM

PART NO : 2976439602  
USED ON : AG6248C POE-R  
SHEET : 8 TO 9  
1ADFS-020011 REV.00

DRAWING NO : L4\_BOT.ART-00  
REV. : 00  
2016-04-07

## P. W. B. Engineering Specification

1. Material-☒ FR-4, ☐ FR-4(Halogens free), ☐ CEM-3, ☐ \_\_\_\_\_  
 2. Thickness-  $1.6 \pm 0.15$  mm  
 3. Copper thickness-(1) External Layer Copper- ☐ 1/2oz, ☒ 1oz, ☐ 2oz, ☐ \_\_\_\_\_  
 (2) Internal Layer Copper- ☐ 1/2oz, ☒ 1oz, ☐ 2oz, ☐ No SYM, ☐ \_\_\_\_\_  
 4. PWB-☐ 2Layer, ☒ 4Layer, ☐ 6Layer, ☐ 8Layer, ☐ 10Layer, ☐ 12Layer, ☐ \_\_\_\_\_ Layer  
 5. Solder Mask-(1) ☒ Liquid photo, ☐ WET mask, ☐ DRY film, ☐ \_\_\_\_\_  
 (2) ☒ Green, ☐ Yellow, ☐ \_\_\_\_\_  
 6. Surface Finish- ☐ HASL(Pb), ☒ LF HASL, ☐ Im-Ag, ☐ OSP, ☐ OSP+ENIG.  
☐ ENIG(only for customer designation, ☐ \_\_\_\_\_  
 7. Golden Finger-(1) Thickness: \_\_\_\_\_ (Golden thickness > 30uin, Nickel thickness > 100uin)  
 (2) Bevel Angle  $\theta$ -☐ 20°, ☐ 30°, ☐ 45°, ☒ \_\_\_\_\_  
 (3) Bevel length L-☐ 0.5mm, ☐ 0.8mm, ☐ 1.1mm. (4) Bevel Width d- ☐ \_\_\_\_\_ mm  $\times$   
 8. Silkscreen-(1) Component side: ☒ White, ☐ \_\_\_\_\_ (2) Solder side: ☒ White, ☐ \_\_\_\_\_  
 9. V-CUT Angle  $\theta$ -☒ 30°, ☐ 45°, ☐ \_\_\_\_\_
- |                    |                         |                     |
|--------------------|-------------------------|---------------------|
| PWB thickness(T)   | $2.0 \leq T < 3.0$ (mm) | $T \leq 2.0$ (mm)   |
| Residual Thickness | $0.55 \sim 0.75$ (mm)   | $1/3T \pm 0.1$ (mm) |
10. Maximum Working frequency 25 MHz.  
 11. Vendor shall provide UL CARD for UL 94 V-0 compliance.  
☒ UL MARK(UL 94 V-0), ☒ Date Code, ☐ Country of Original \_\_\_\_\_ Location \_\_\_\_\_  
 12. PWB Acceptance criteria: Purchasing Specification for PWB 1ADSG-110001

13. The spec total page: 12

Drawing No.-(Version)

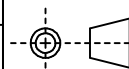
SHEET

(1) HISTORY CARD-----	//	//
(2) COVER SHEET-----	PWBES.ART-00	1 To 2
(3) Component Silkscreen-----	TOP_SILK.ART-00	2 To 3
(4) Solder Silkscreen-----	BOT_SILK.ART-00	3 To 4
(5) Component Mask-----	TOP_MASK.ART-00	4 To 5
(6) Solder Mask-----	BOT_MASK.ART-00	5 To 6
(7) Drill Drawing-----	DRILL.ART-00	6 To 7
(8) Mechanical Drawing-----	//	//
(9) Component Artwork-----	L1_TOP.ART-00	7 To 8
(10) Solder Artwork-----	L4_BOT.ART-00	8 To 9
(11) Paste Top-----	TOP_PASTE.ART-00	9 To 10
(12) Paste Bottom-----	BOT_PASTE.ART-00	10 To 11
(13) Assembly Top-----	//	//
(14) Assembly Bottom-----	//	//
(15) Layer 2-----	L2_GND.ART-00	11 To 12
(16) Layer 3-----	L3_VCC.ART-00	12 To End
(17) Layer 4-----	//	//
(18) Layer 5-----	//	//
(19) Layer 6-----	//	//
(20) Layer 7-----	//	//
(21) Layer 8-----	//	//
(22) Layer 9-----	//	//
(23) Layer 10-----	//	//
(24) Layer 11-----	//	//
(25) -----	//	//

## P. W. B. Engineering Specification

14. Vendor shall provide manufacture/type and specification of OSP.  
 (According to 1ADSG-110001 Purchasing Specification for PWB.)  
 (1) Td > 350°C ; (2) Resistance of IR reflow (260°C / 60 sec Min.) < 3times (Min.)  
 (3) OSP thickness : 0.2~0.4um (Min)  
 15. Vendor shall provide following specification for DNI approval.  
 (Template doc NO : 1ADFS-110001 DNI High Level PWB Stackup SPEC.)

Note:

BASIC RANGE	X.X	X.XX			Agema Systems, INC.	
0-10	$\pm 0.2$	$\pm 0.08$	DRAWN BY			
10-20	$\pm 0.3$	$\pm 0.15$		PART NAME PWB	THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF DELTA NETWORKS. AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SELL OF APPARATUSES OR DEVICES WITHOUT PERMISSION	
ABOVE 20	$\pm 0.5$	$\pm 0.25$		USED ON:		
ANGULAR	SCALE 1:1		THREE ANGLE PROJECTION	AG6248C POE-R	PART NO. 2976439602	REV.
DIMS $\pm 1/2$ DEG	UNIT			EDM Doc name:	SHEET 1 TO 2	00

1ADFS-020009 REV.07(Page1/2)

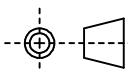
PWB

1ADFS-020009\_ AG6248C POE-R

- A00

PART NO : 2976439602  
 USED ON : AG6248C POE-R  
 SHEET : 1 TO 2  
 1ADFS-020011 REV.00

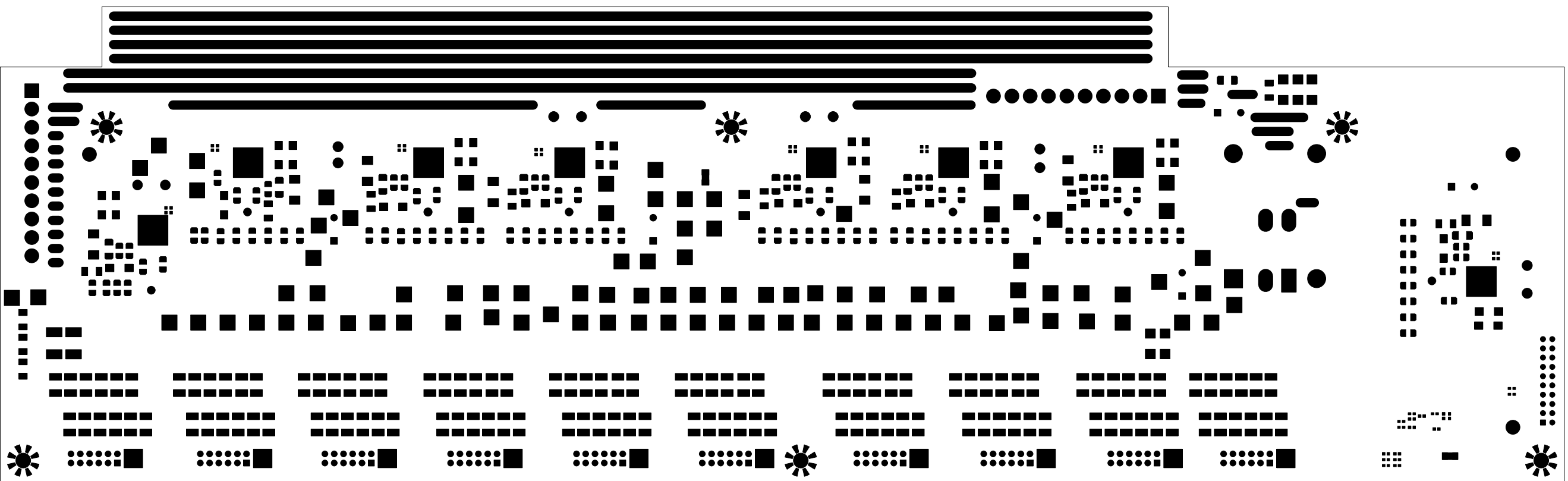
DRAWING NO : PWBES.ART-00  
 REV. : 00  
 2016-04-07

BASIC RANGE	X.X	X.XX			Agema Systems, INC.	
0-10	$\pm 0.2$	$\pm 0.08$	DRAWN BY			
10-20	$\pm 0.3$	$\pm 0.15$		PART NAME PWB	THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF DELTA NETWORKS. AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SELL OF APPARATUSES OR DEVICES WITHOUT PERMISSION	
ABOVE 20	$\pm 0.5$	$\pm 0.25$		USED ON:		
ANGULAR	SCALE 1:1		THREE ANGLE PROJECTION	AG6248C POE-R	PART NO. 2976439602	REV.
DIMS $\pm 1/2$ DEG	UNIT			EDM Doc name:	SHEET 2 TO 2	00

1ADFS-020009 REV.07(Page2/2)

1ADFS-020009\_ AG6248C POE-R

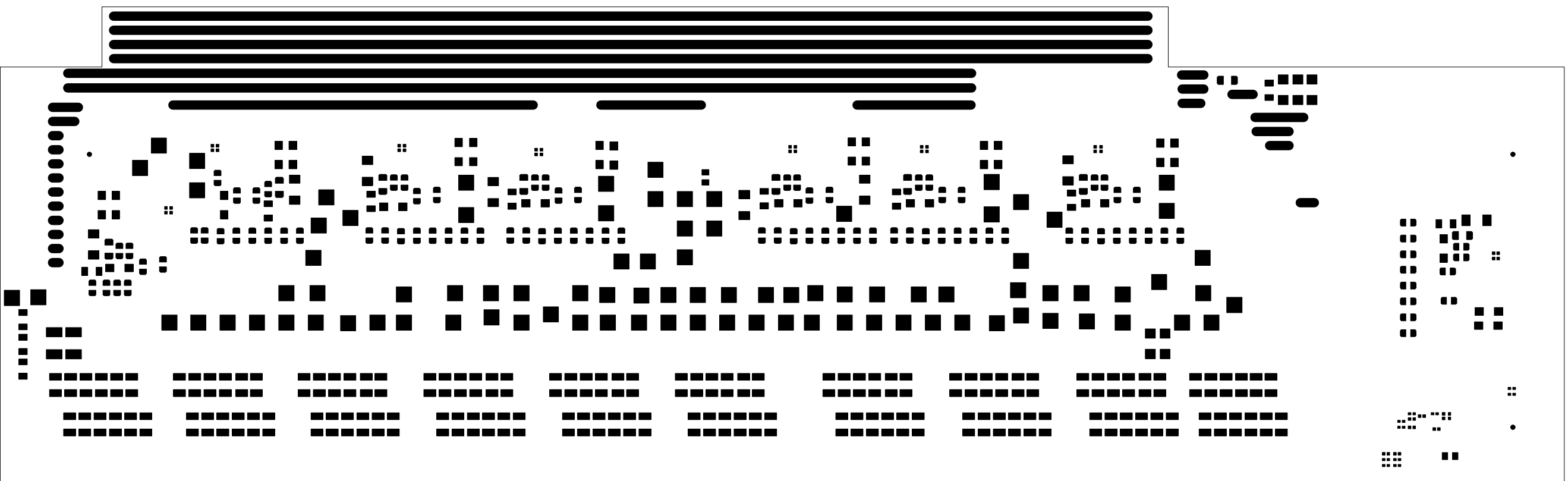
- A00



SOLDER MASK BOTTOM

PART NO : 2976439602  
USED ON : AG6248C POE-R  
SHEET : 5 TO 6  
1ADFS-020011 REV.00

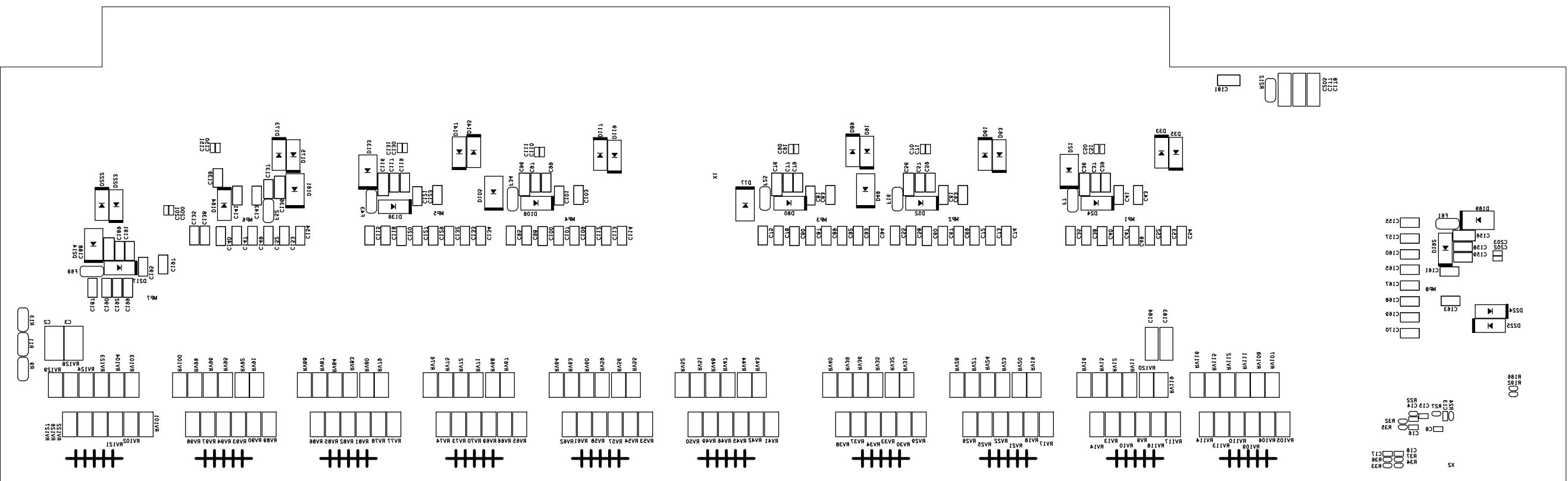
DRAWING NO : BOT\_MASK.ART-00  
REV. : 00  
2016-04-07



PASTE MASK BOTTOM

PART NO : 2976439602  
USED ON : AG6248C POE-R  
SHEET : 10 TO 11  
1ADFS-020011 REV.00

DRAWING NO : BOT\_PASTE.ART-00  
REV. : 00  
2016-04-07



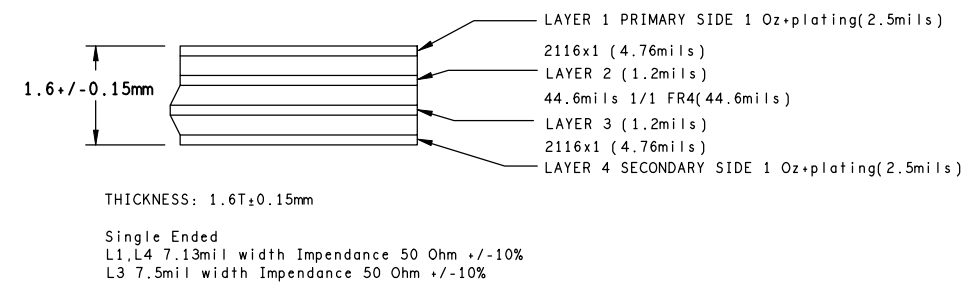
SILKSCREEN BOTTOM

PART NO : 2976439602  
USED ON : AG6248C POE-R  
SHEET : 3 TO 4  
1ADFS-020011 REV.00

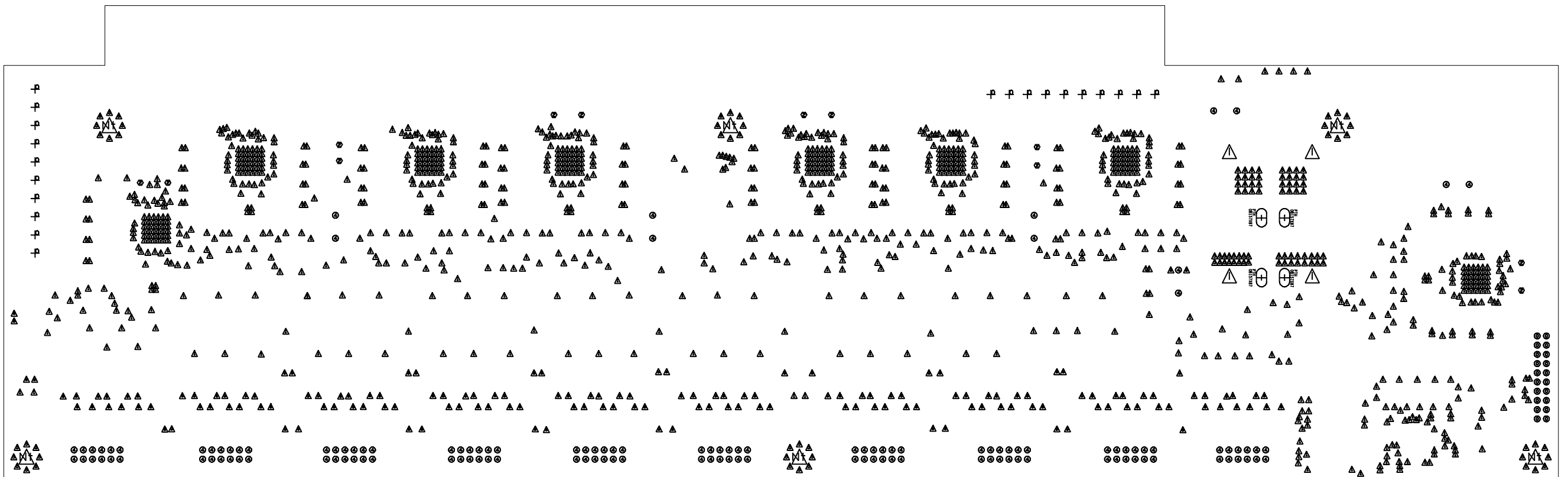
DRAWING NO : BOT\_SILK.ART-00  
REV. : 00

2016-04-07





DRILL CHART: TOP to BOTTOM			
ALL UNITS ARE IN MILS			
FIGURE	FINISH SIZE	PLATED	QTY
▲	12.0	PLATED	1102
▲	16.0	PLATED	112
▲	20.0	PLATED	156
●	31.0	PLATED	20
●	35.0	PLATED	132
●	43.0	PLATED	12
⊕	71.0	PLATED	20
△	118.0	PLATED	4
⊗	126.0	NON-PLATED	6
⊕	157.0x87.0	PLATED	4



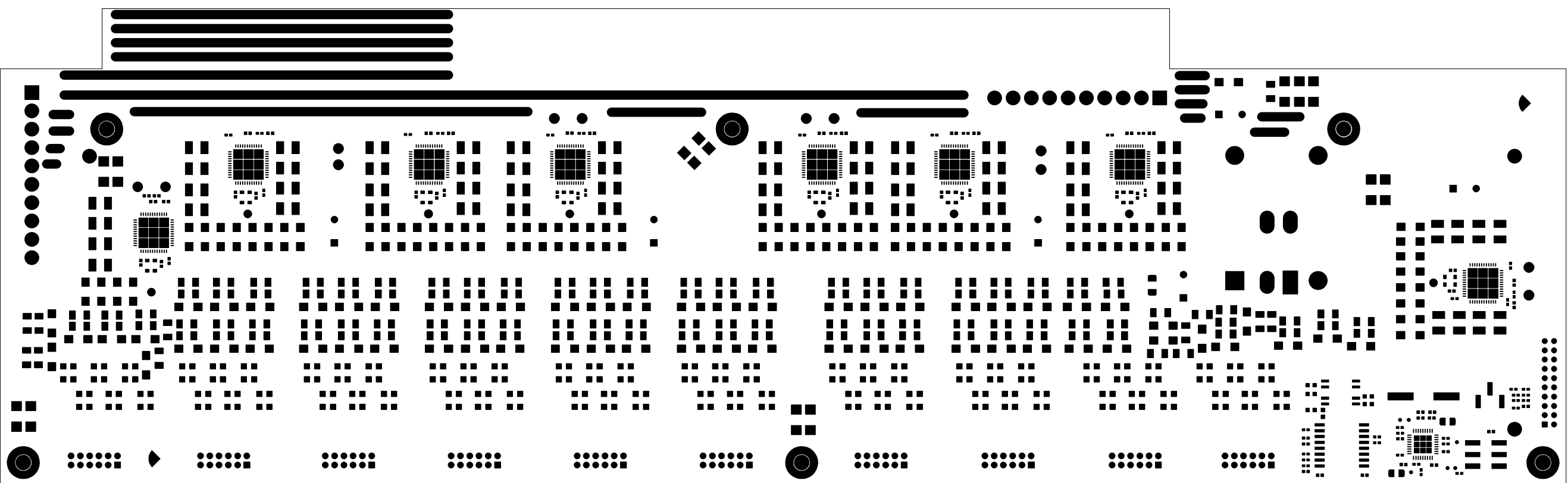
DRILL MAP

PART NO : 2976439602  
USED ON : AG6248C POE-R  
SHEET : 6 TO 7

DRAWING NO : DRILL.ART-00  
REV. : 00

1ADFS-020011 REV.00

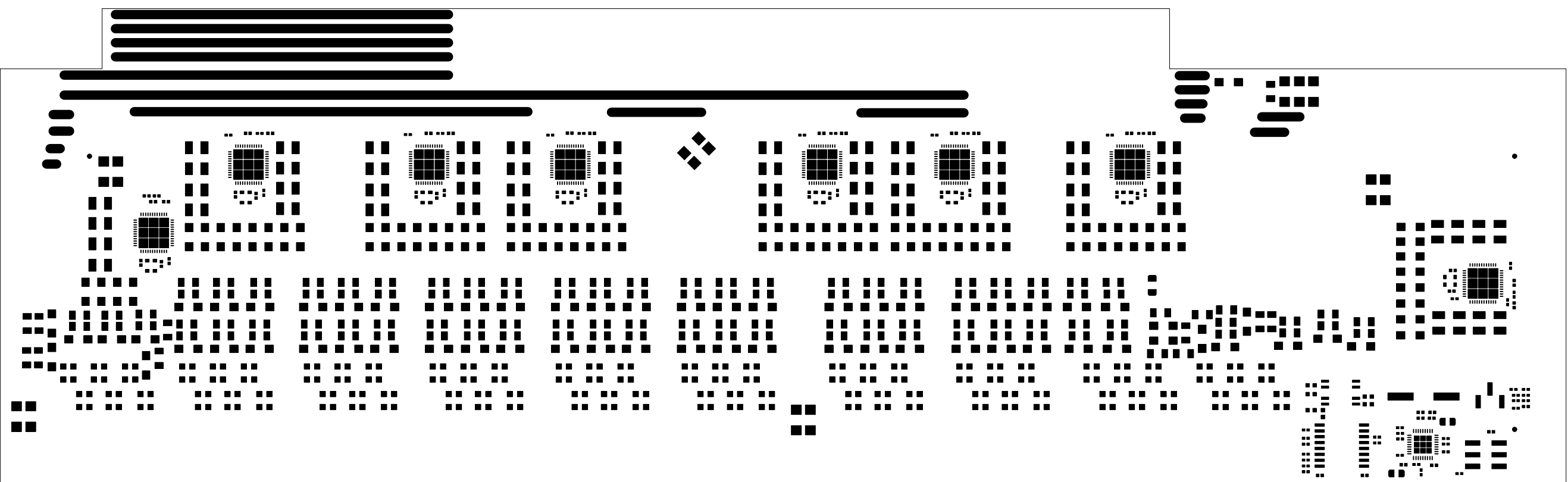
2016-04-07



SOLDER MASK TOP

PART NO : 2976439602  
USED ON : AG6248C POE-R  
SHEET : 4 TO 5  
1ADFS-020011 REV.00

DRAWING NO : TOP\_MASK.ART-00  
REV. : 00  
2016-04-07

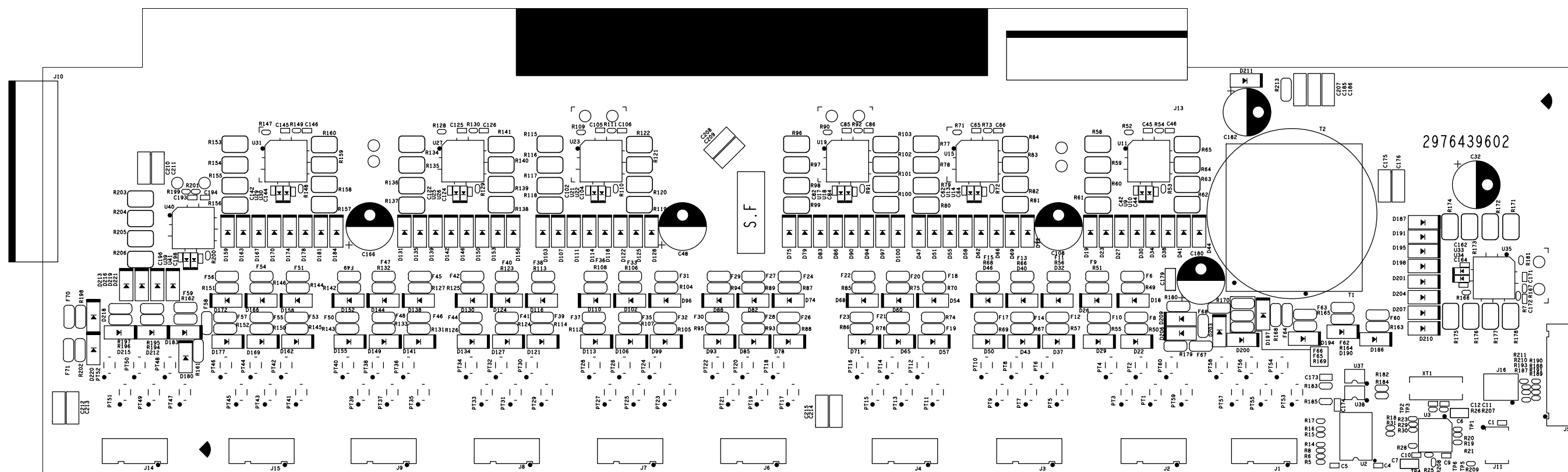


## PASTE MASK TOP

PART NO : 2976439602  
USED ON : AG6248C POE-R  
SHEET : 9 TO 10

DRAWING NO : TOP\_PASTE.ART-00  
REV. : 00

2016-04-07



## SILKSCREEN TOP

PART NO : 2976439602

DRAWING NO : TOP\_SILK.ART-00

USED ON : AG6248C POE-R

REV. : 00

SHEET : 2 TO 3

16FS-020011 REV.00

2016-04-07

