

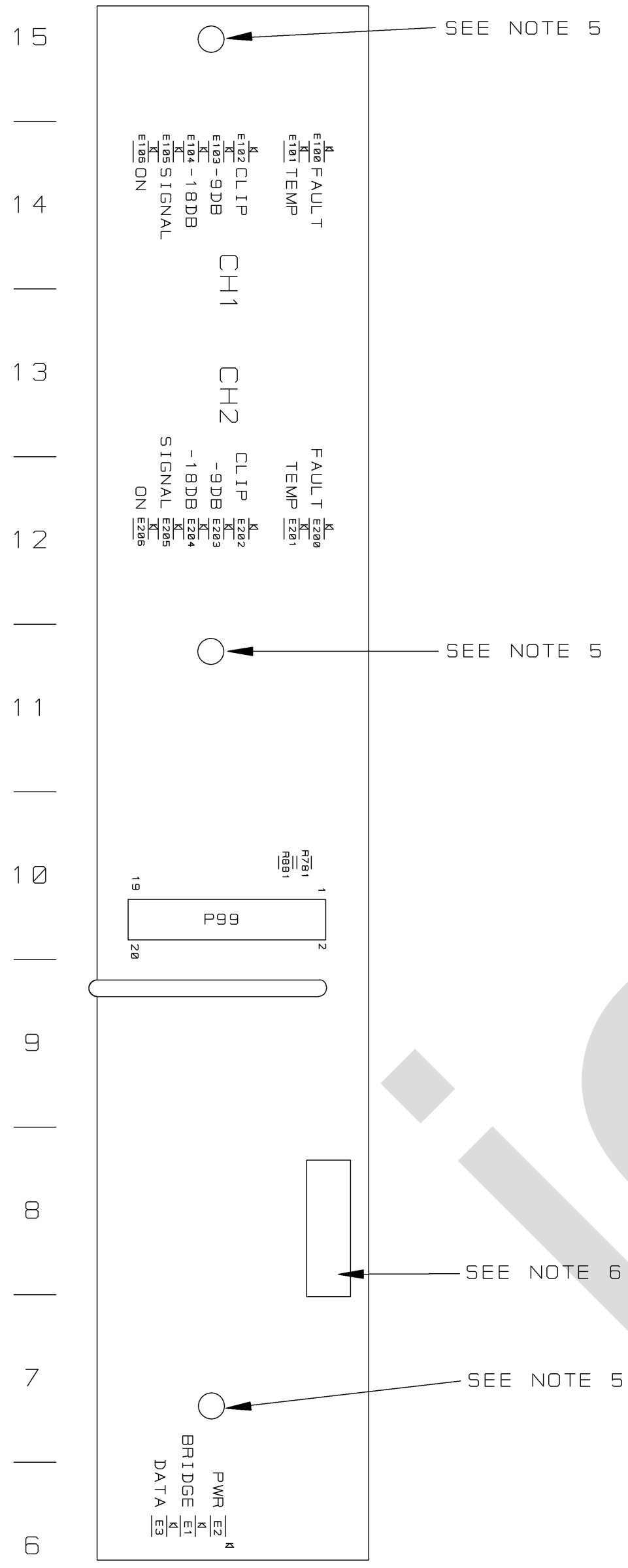
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3

2

1

REVISION HISTORY							
E. C. N.	ZONE	REV	DESCRIPTION	DATE	APPROVED		
					DWN	CM	PE
		A	SEE 134605-2_A.XLS FOR REVISION HISTORY AND PWA DATA.	4/08/02	KBZ	MMG	JRW



COMPONENT MAP
TOP SIDE

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DO NOT SCALE DRAWING

DISTRIBUTION	DWN	KBZ	4/08/02
K	CM	MMG	5-6-02
FILENAME	PE	JRW	4/19/02
134605-2_A.TIF			
TOLERANCE UNLESS OTHERWISE SPECIFIED			
.00 = ±.02"			
.000 = ±.010"			
DRILLS = ±.003"			

CROWN INTERNATIONAL, INC. 1718 W. MISHAWAKA RD. ELKHART IN, 46517 PHONE (219) 294-8000 WWW.CROWNINTL.COM

TITLE
PWA, BCA DISPLAY

SIZE DWG NO. REV
C 134605-2 A

SCALE NONE PROJ NO. MD433D0 SHEET 1 OF 2

4

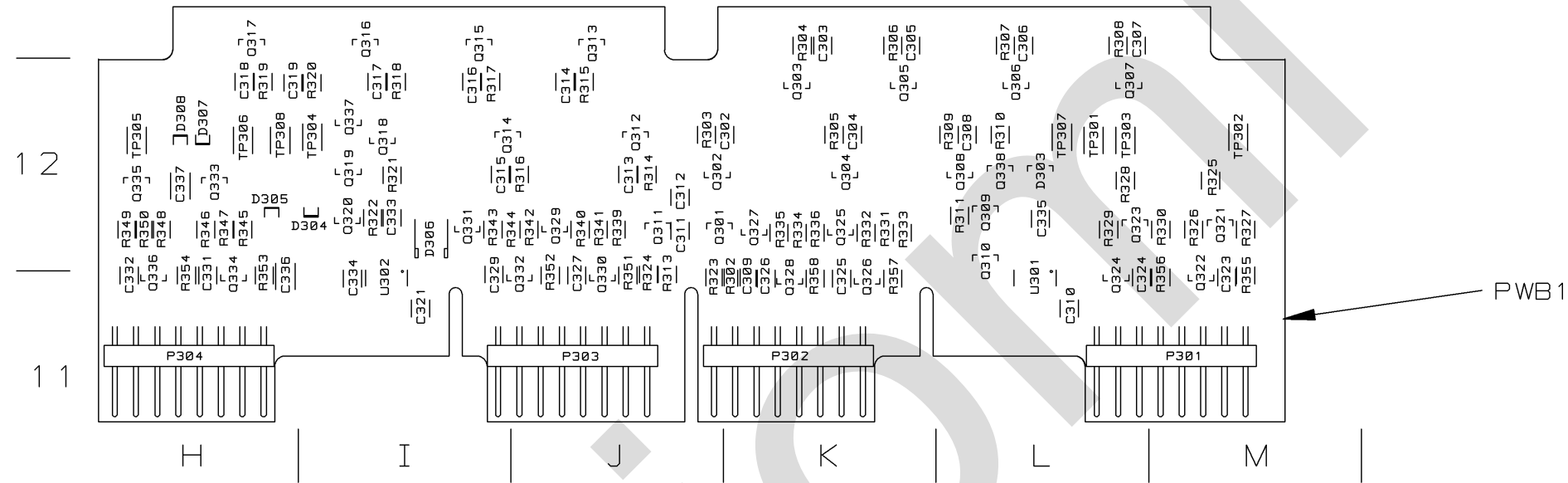
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2

1

REVISION HISTORY

E. C. N.	ZONE	REV	DESCRIPTION	DATE	APPROVED		
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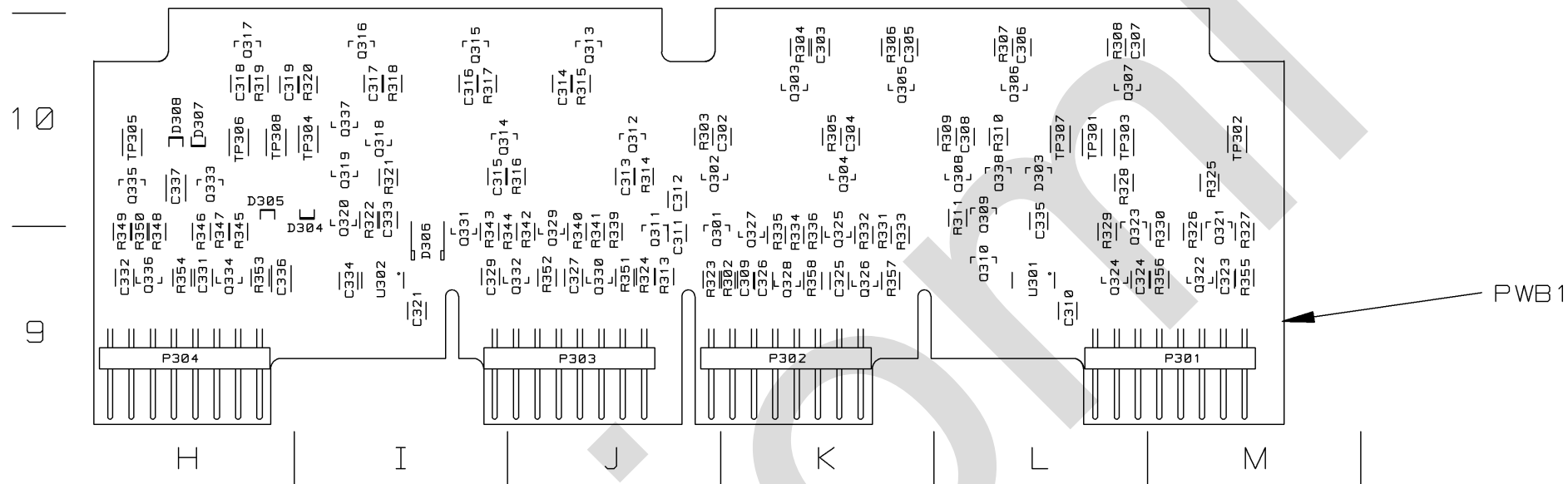


COMPONENT MAP
TOP SIDE
(TOP BOARD ON PANEL 134579-2)

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DISTRIBUTION	DWN	KBZ	04/08/02	 1718 W. MISHAWAKA RD. ELKHART IN. 46517 PHONE (219)294-8000 WWW.CROWNINTL.COM
K	CM	MMG	6/7/02	
FILENAME	PE	JRW	04/19/02	TITLE
131050-2_A.TIF				PWA, BCA GATE DRIVE
TOLERANCE UNLESS OTHERWISE SPECIFIED				SIZE
.00 = ±.02"				B
.000 = ±.010"				DWG NO.
DRILLS = ±.003"				131050-2
DO NOT SCALE DRAWING				REV
				A
	SCALE	NONE	PROJ NO.	MD433D0
			SHEET	1 OF 3



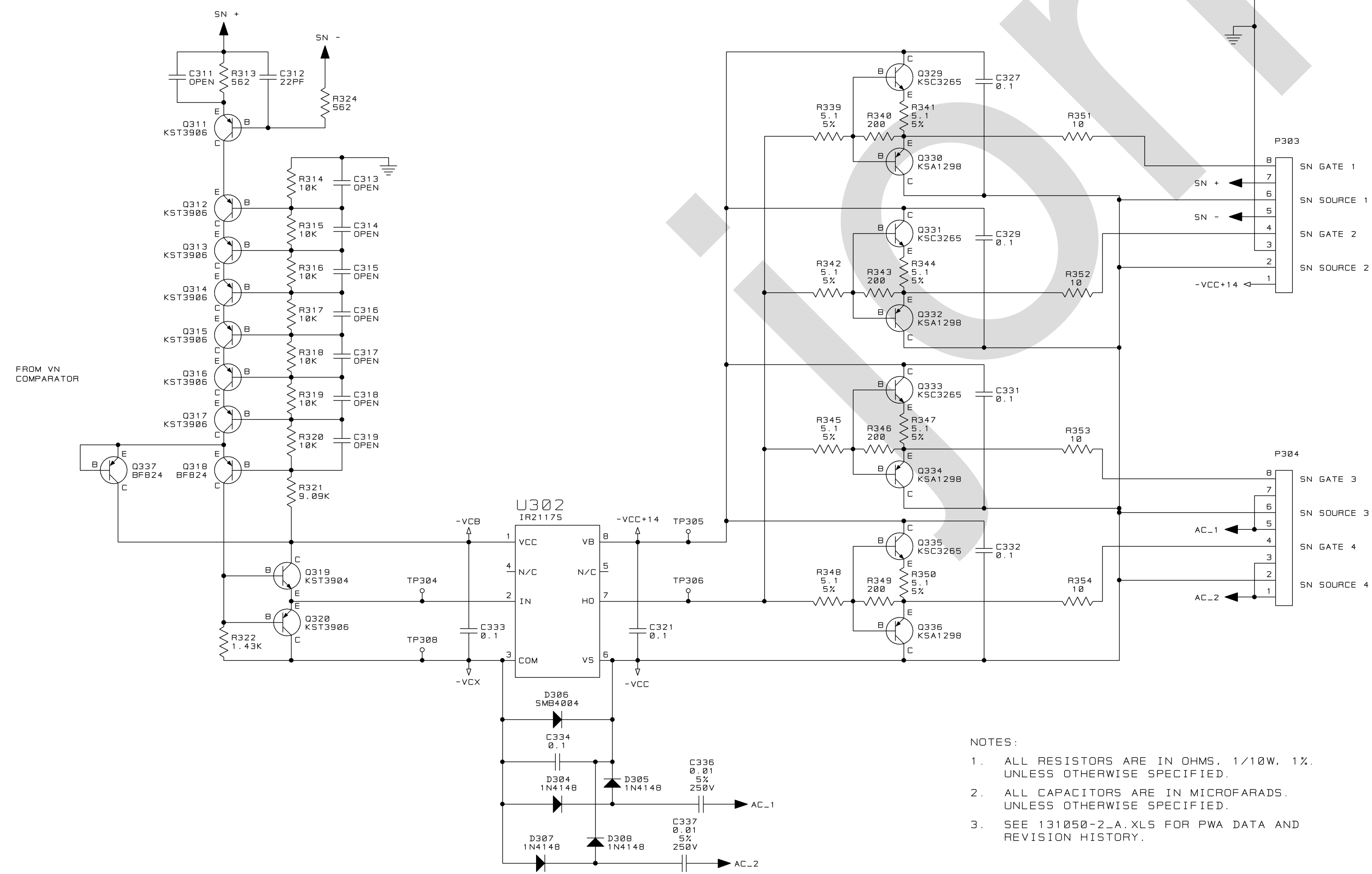
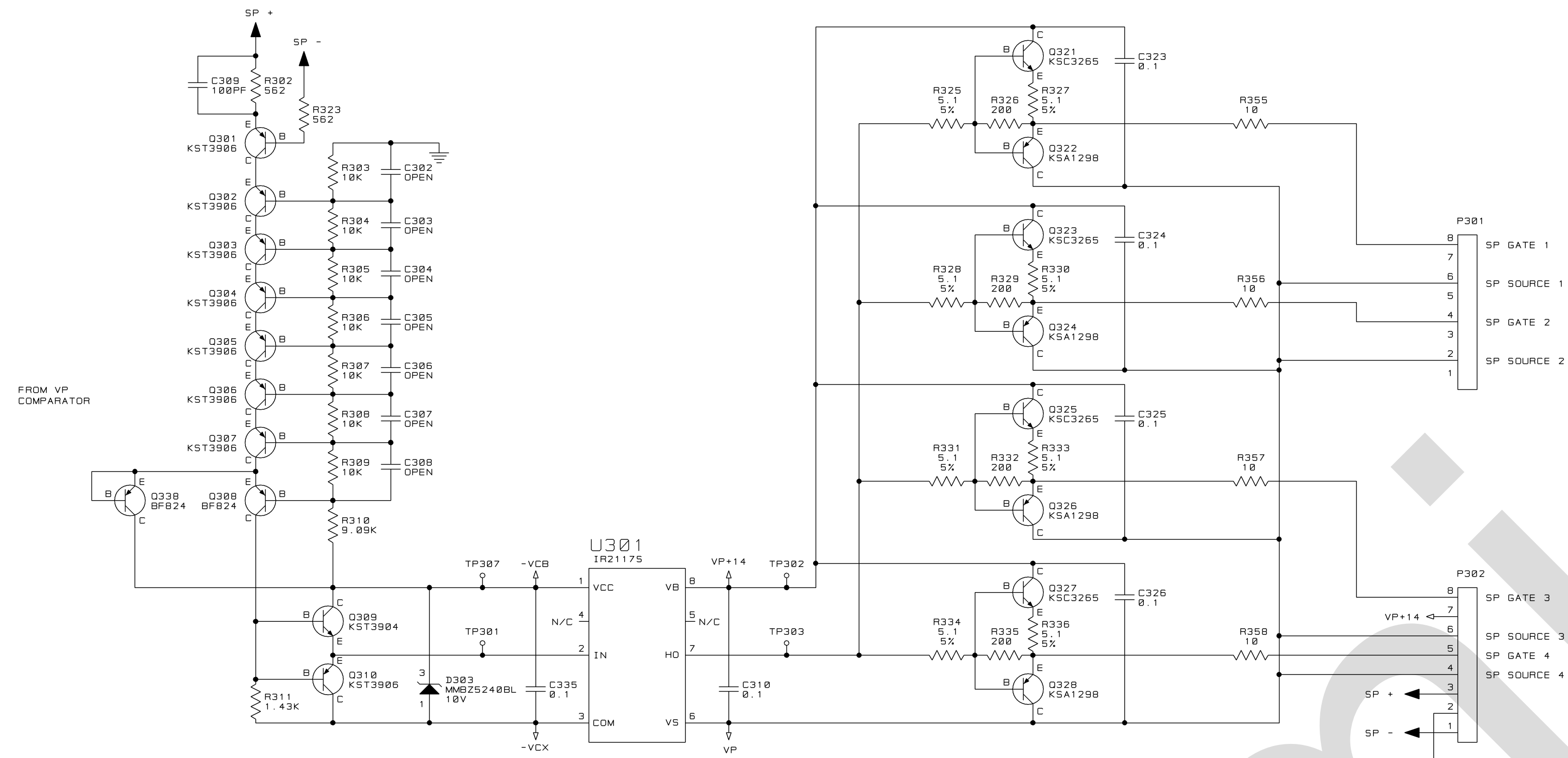
COMPONENT MAP
 TOP SIDE
 (BOTTOM BOARD ON PANEL 134579-2)

PWA, BCA GATE DRIVE

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SIZE B	DWG NO. 131050-2	REV A
SCALE NONE	PROJ NO. MD433D0	SHEET 2 OF 3



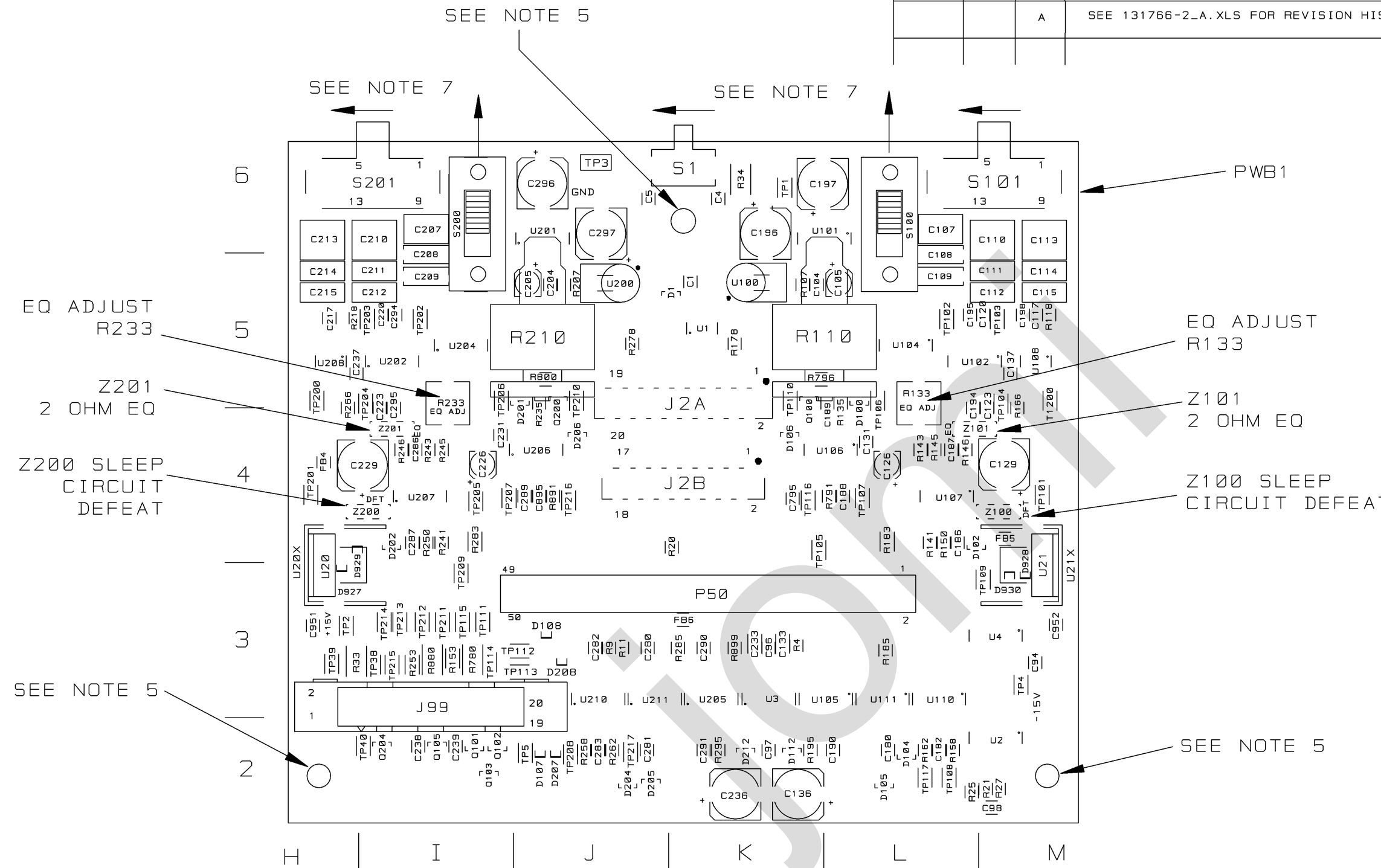
- NOTES:
1. ALL RESISTORS ARE IN OHMS. 1/10W. 1%. UNLESS OTHERWISE SPECIFIED.
 2. ALL CAPACITORS ARE IN MICROFARADS. UNLESS OTHERWISE SPECIFIED.
 3. SEE 131050-2.A.XLS FOR PWA DATA AND REVISION HISTORY.

BCA GATE DRIVE

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UNLESS OTHERWISE MARKED IN RED INK BY CM AS A CONTROLLED COPY. COPIES OF THESE DOCUMENTS INCLUDING ASSOCIATED ELECTRONIC REPRODUCTIONS ARE FOR REFERENCE ONLY.		SCALE NONE	PROJ NO. MD433DB	SHEET 3 OF 3		

REVISION HISTORY

E. C. N.	ZONE	REV	DESCRIPTION	DATE	APPROVED		
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		A	SEE 131766-2_LA.XLS FOR REVISION HISTORY AND PWA DATA.	4/08/02	KBZ	MMG	JRW



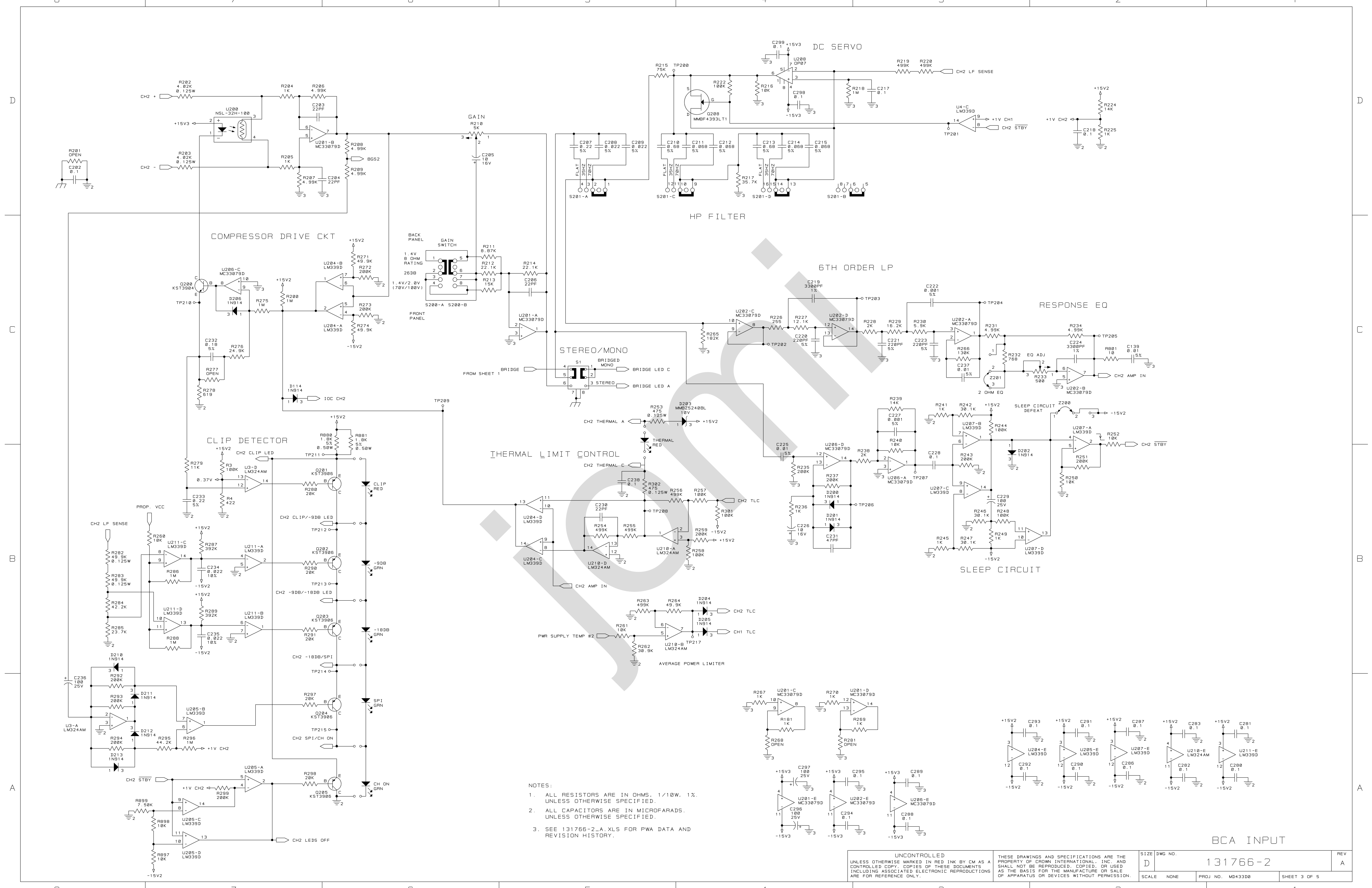
COMPONENT MAP
TOP SIDE

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FILENAME	PE	JRW	04/19/02
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TOLERANCE UNLESS OTHERWISE SPECIFIED			
.00 = ±.02"			
.000 = ±.010"			
DRILLS = ±.003"			
DO NOT SCALE DRAWING			

		1718 W. MISHAWAKA RD. ELKHART IN. 46517 PHONE (219)294-8000 WWW.CROWNINTL.COM	
TITLE			
PWA, BCA INPUT			
SIZE	DWG NO.	REV	
B	131766-2	A	
SCALE NONE	PROJ NO. MD433D0	SHEET 1 OF 5	



- NOTES:
1. ALL RESISTORS ARE IN OHMS, 1/10W, 1%. UNLESS OTHERWISE SPECIFIED.
 2. ALL CAPACITORS ARE IN MICROFARADS, UNLESS OTHERWISE SPECIFIED.
 3. SEE 131766-2.A.XLS FOR PWA DATA AND REVISION HISTORY.

D

D

C

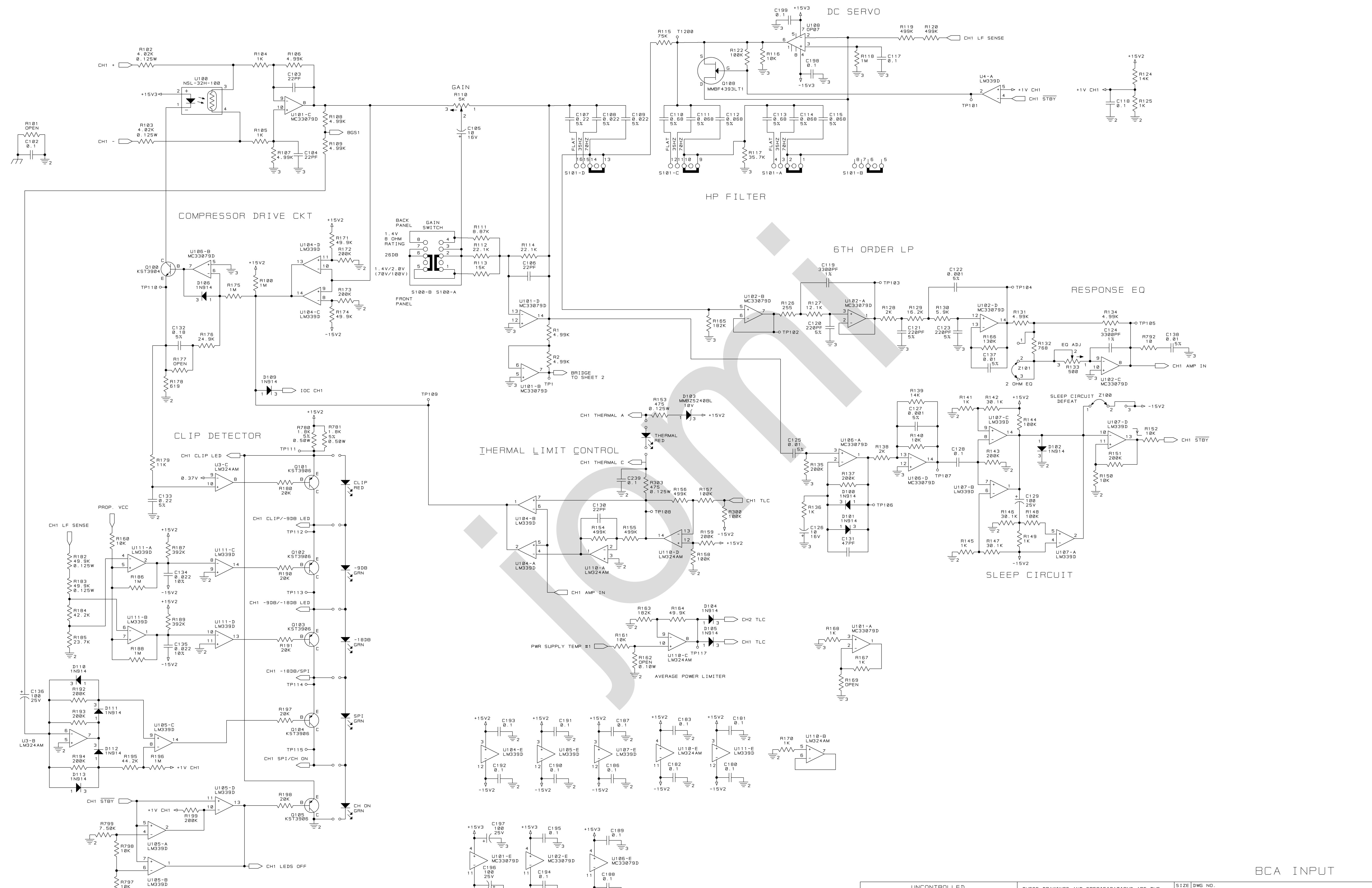
C

B

B

A

A



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SCALE NONE	PROJ NO. MD43300	SHEET 4 OF 5				

D

D

C

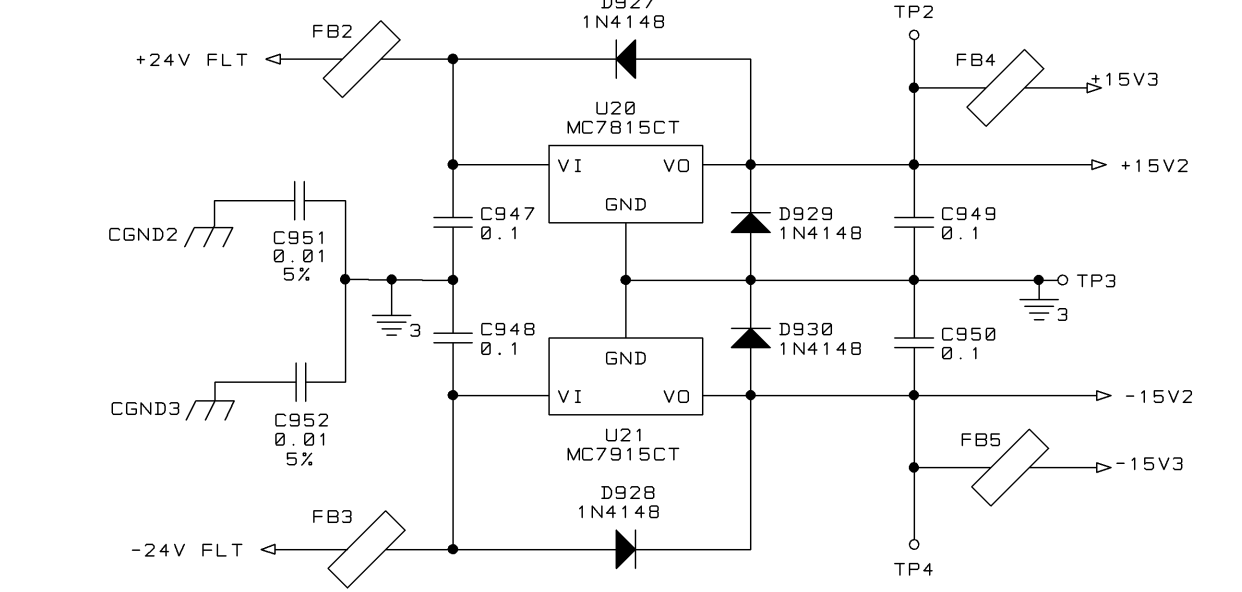
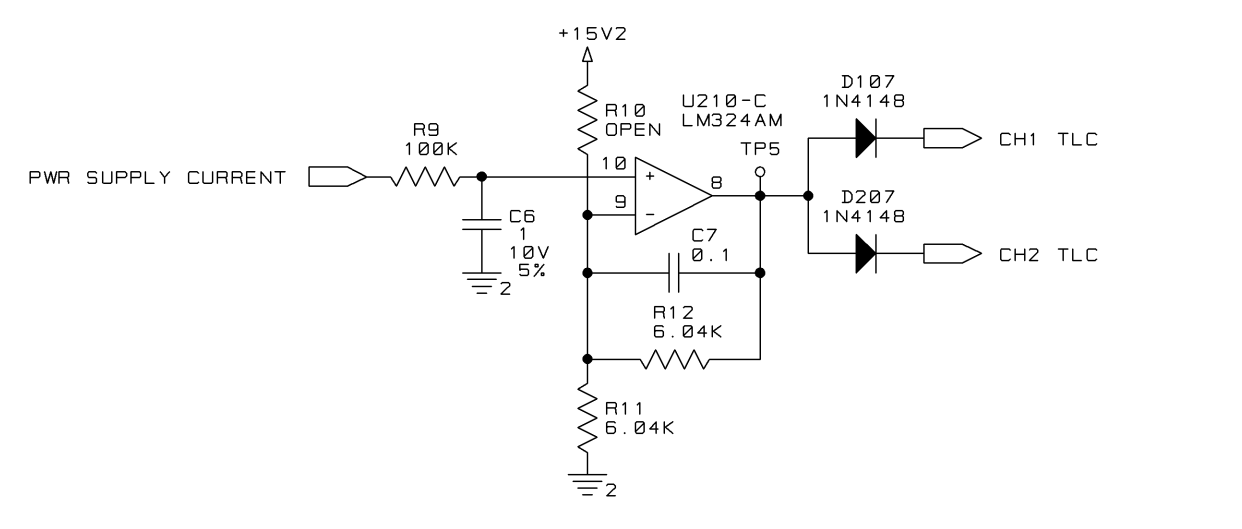
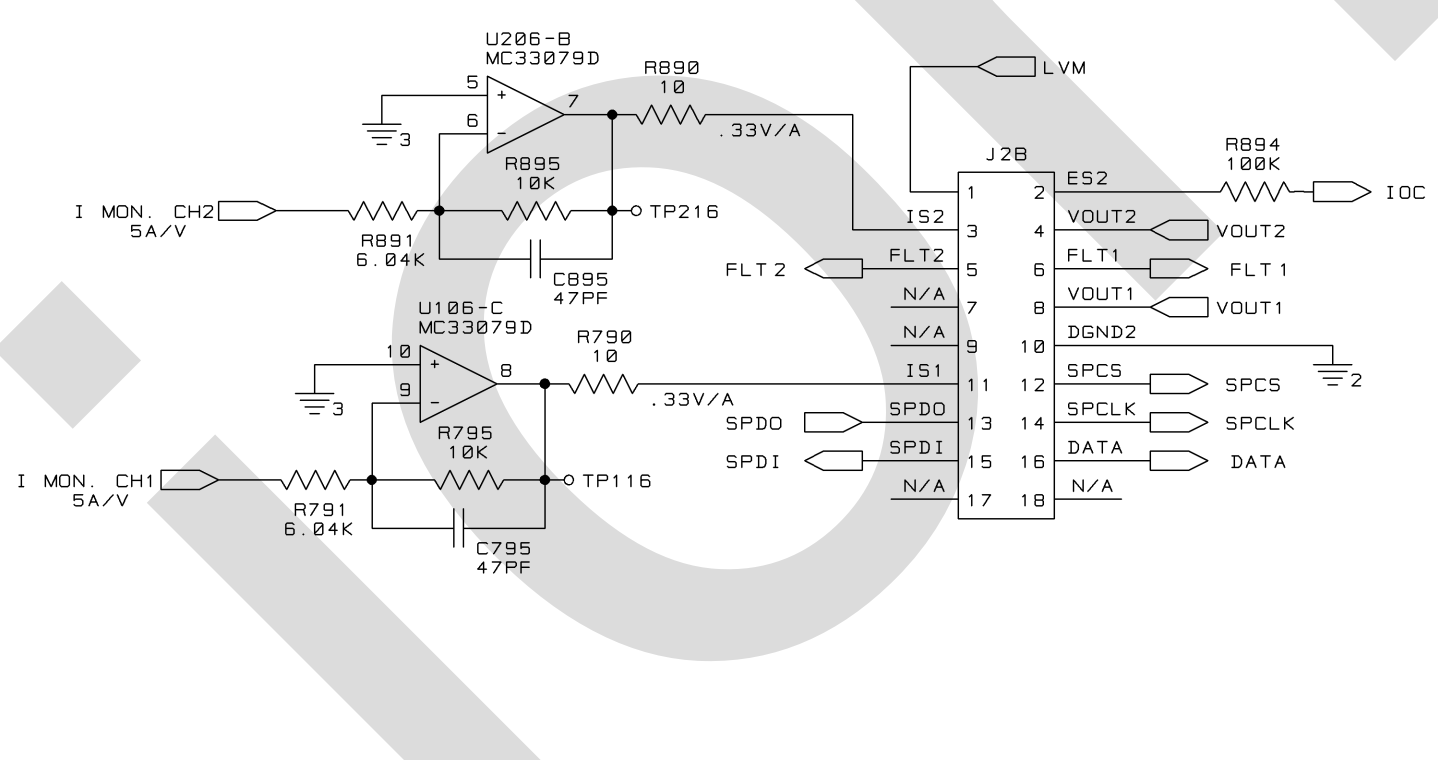
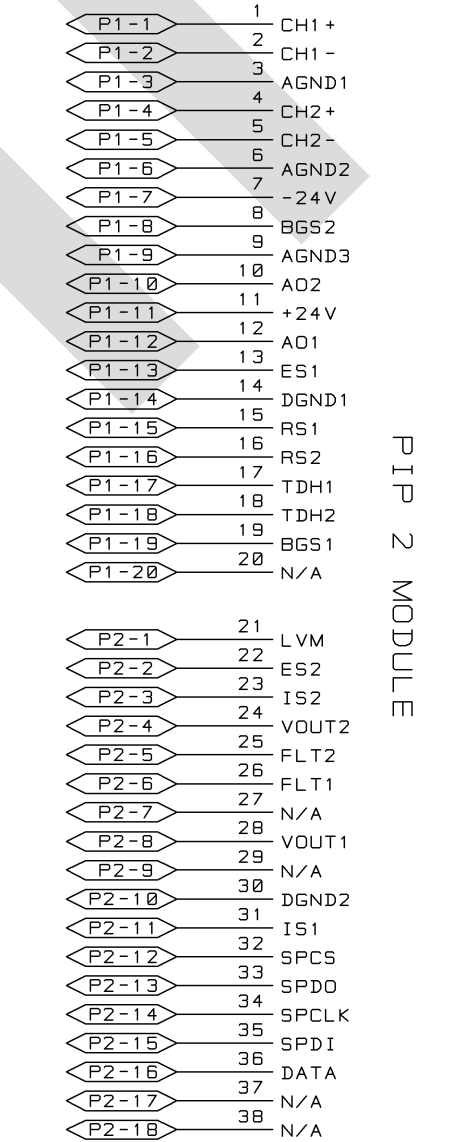
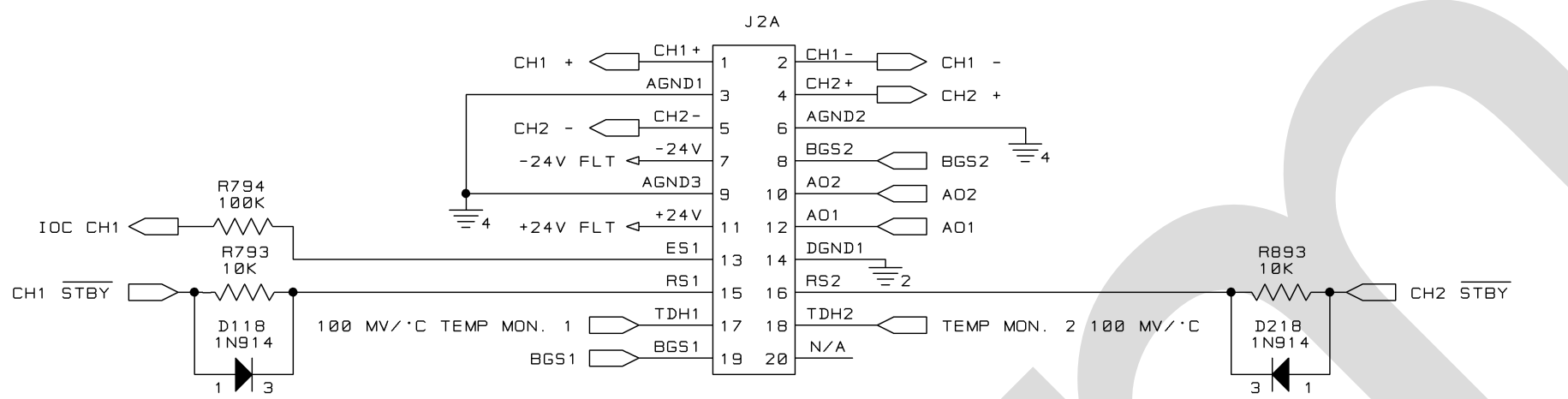
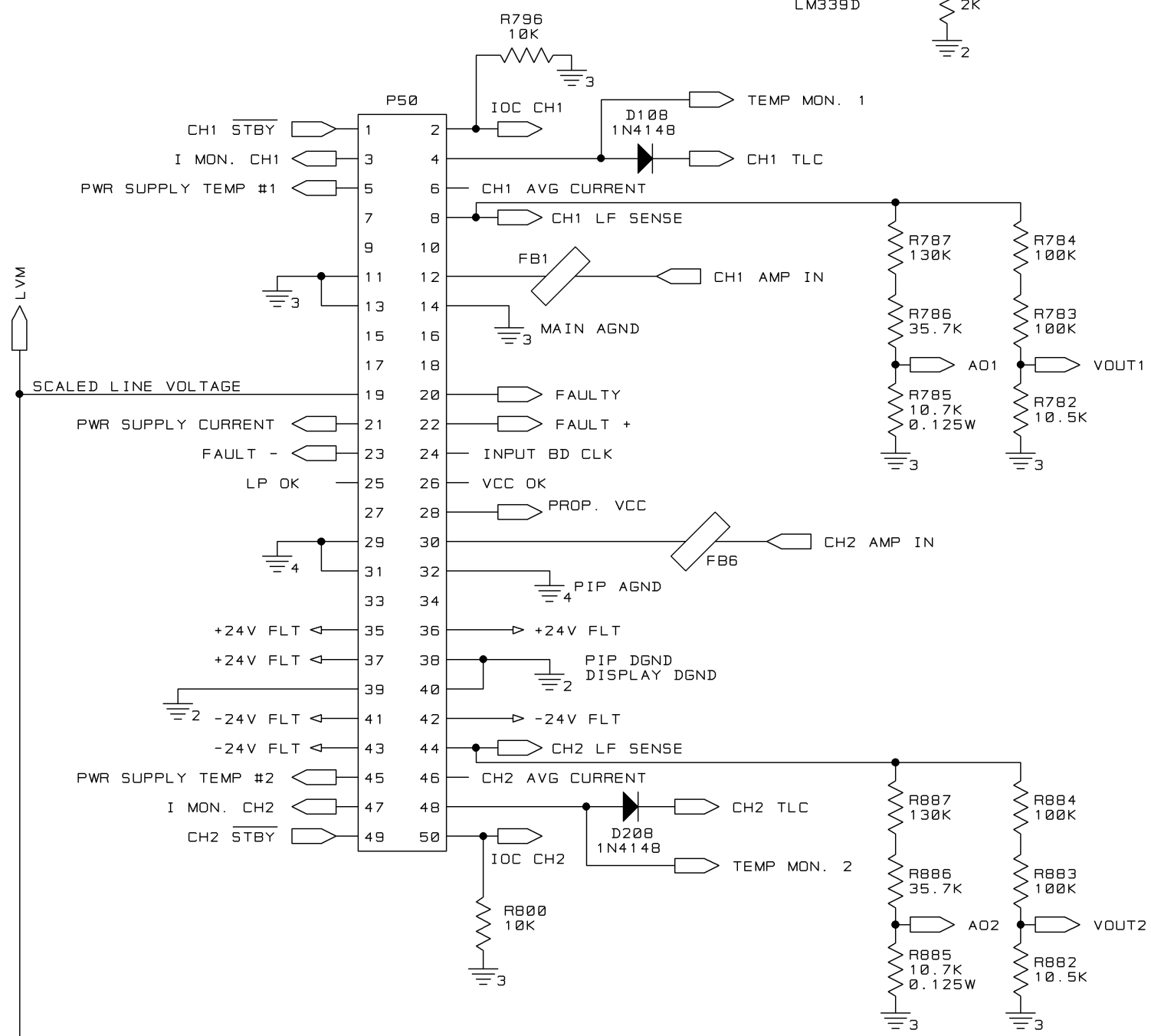
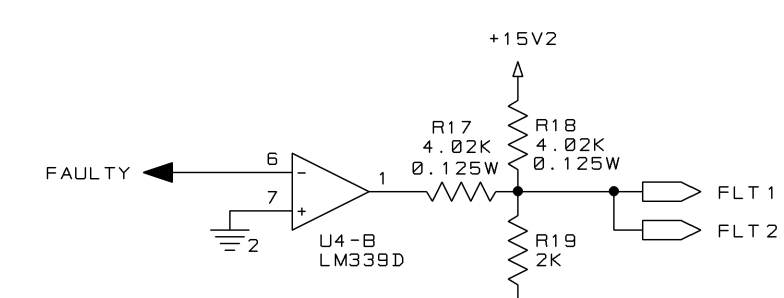
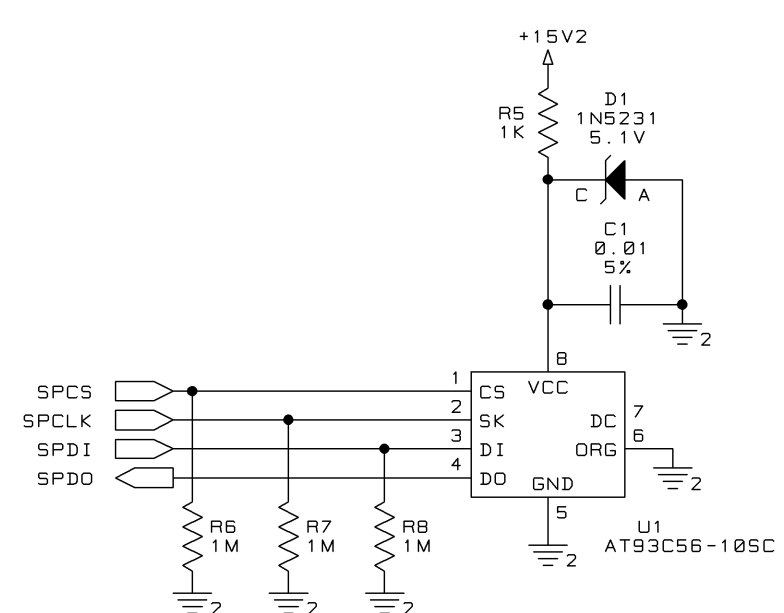
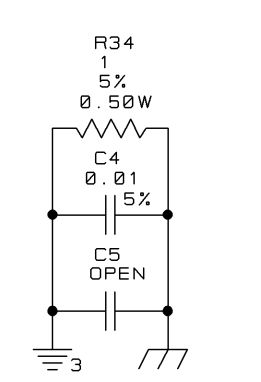
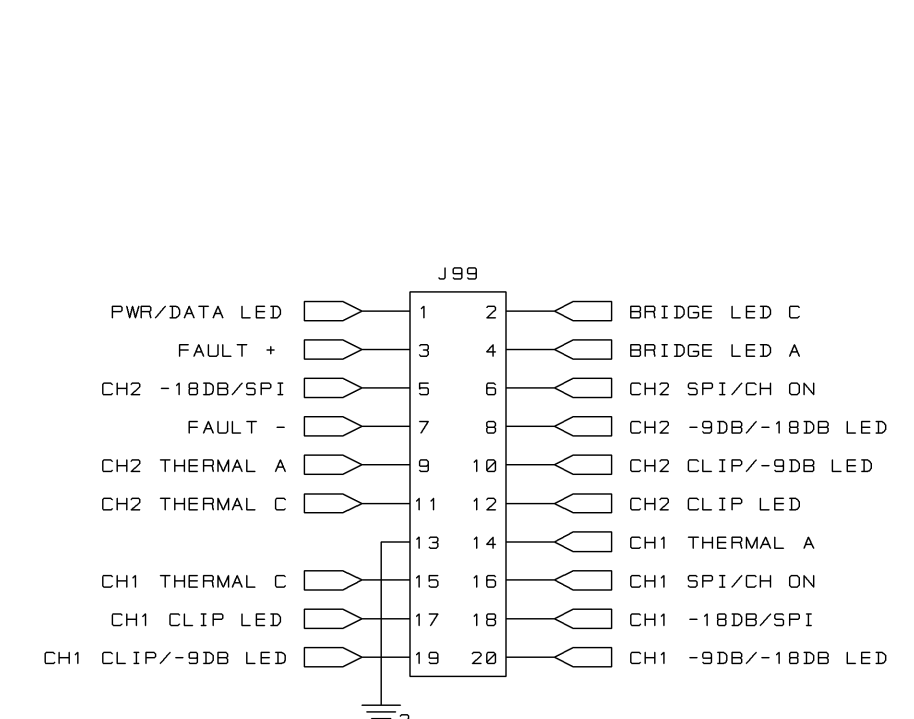
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B

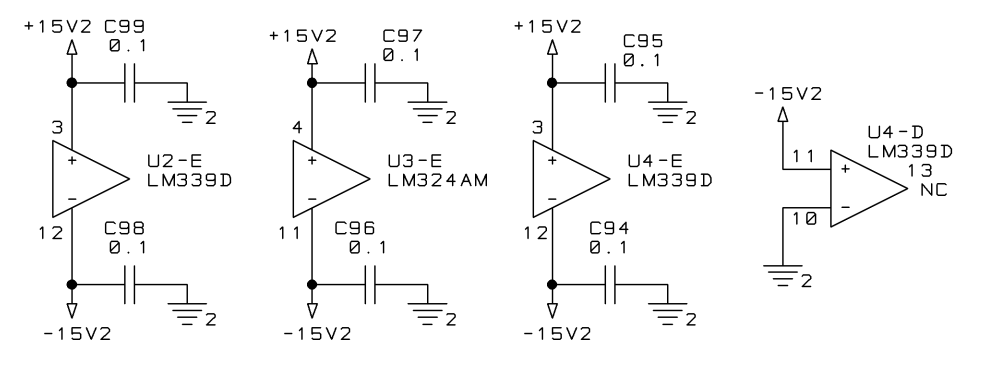
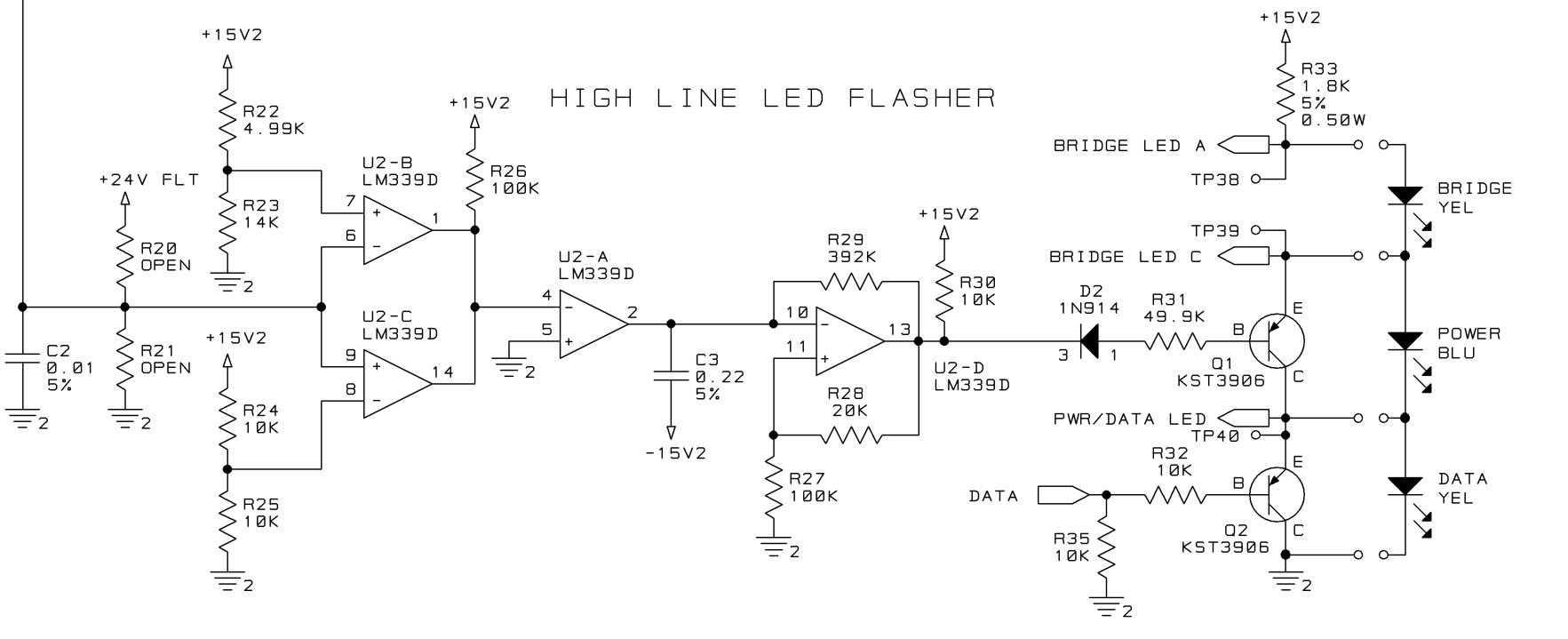
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A

A



NOM. = 10V

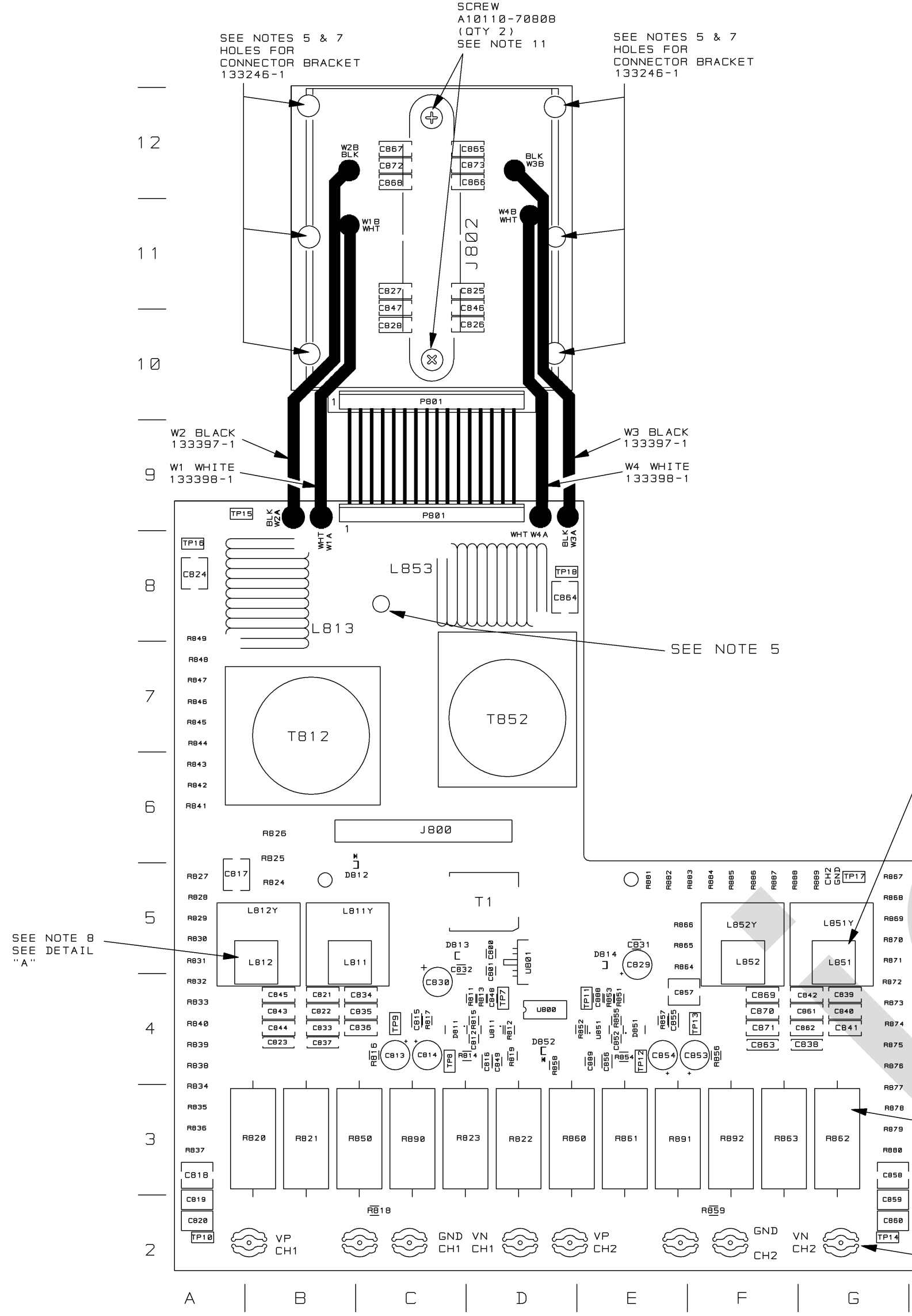
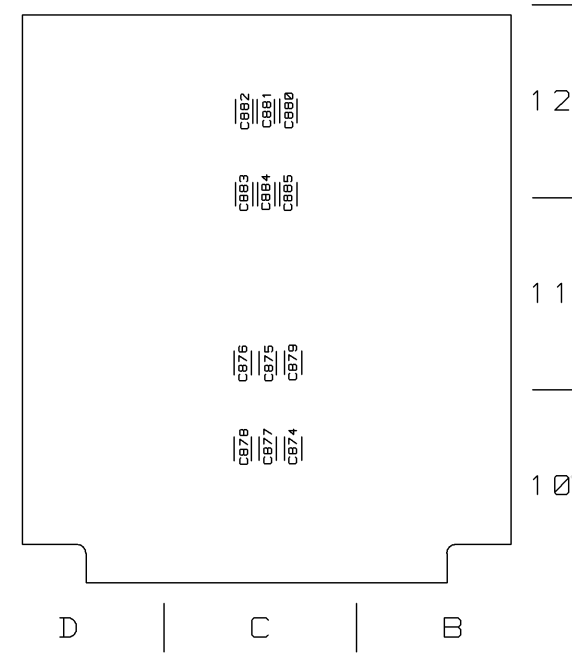


BCA INPUT

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SCALE NONE	PROJ NO. MD43300	SHEET 5 OF 5				

REVISION HISTORY					
E. C. N.	ZONE	REV	DESCRIPTION	DATE	APPROVED
		A	SEE 131408-2.A.XLS FOR PWA DATA AND REVISION HISTORY.	04/08/02	DWN CM PE KBZ MMG JRW

COMPONENT MAP
BOTTOM SIDE



COMPONENT MAP
TOP SIDE

SEE NOTE 8
SEE DETAIL "A"

DETAIL "A"
FOR LOCATING
L811, L812,
L851, L852

SEE NOTE 8
SEE DETAIL
"A"

PWB1

SEE NOTE 10
12 PLACES

SEE NOTE 5
8 PLACES

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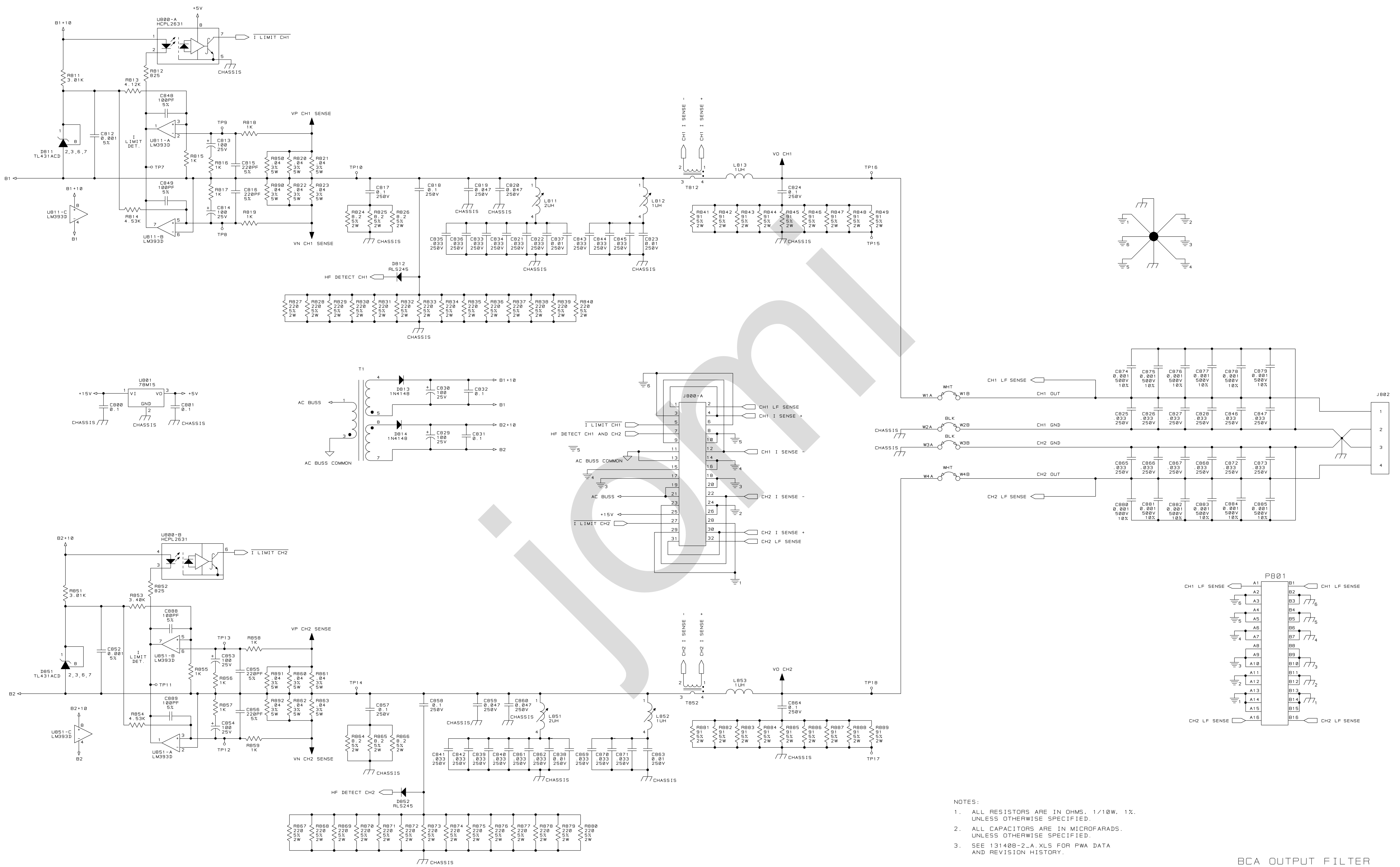
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K	CM	MMG	5/15/02
FILENAME	PE	JRW	4/19/02
131408-2.A.TIF			
TOLERANCE UNLESS OTHERWISE SPECIFIED			
.00 = ±.02"			
.000 = ±.010"			
DRILLS = ±.003"			
DO NOT SCALE DRAWING			

CROWN INTERNATIONAL, INC. 1718 W. MISHAWAKA RD. ELKHART IN. 46517 PHONE (219) 294-8000 WWW.CROWNINTL.COM

TITLE
PWA, BCA OUTPUT FILTER

SIZE DWG NO. 131408-2 REV A

SCALE NONE PROJ. NO. MD433D0 SHEET 1 OF 2

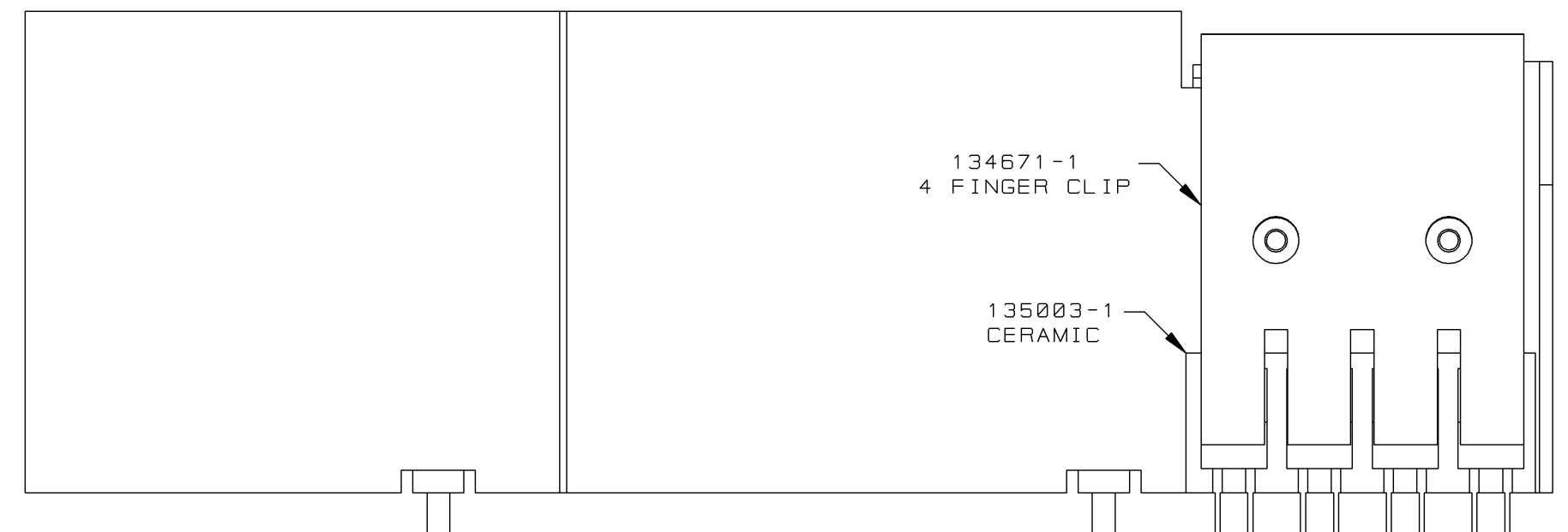
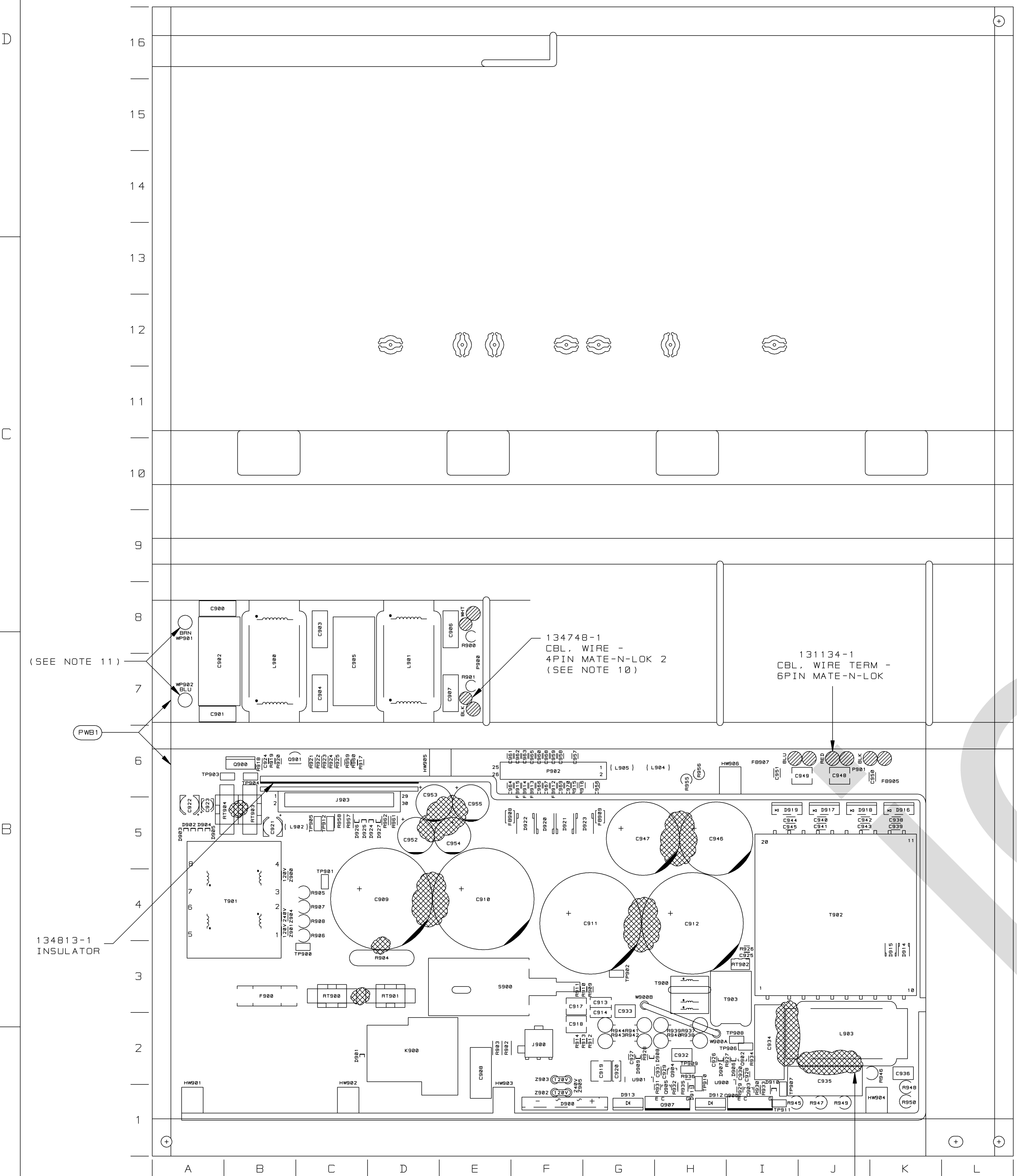


- NOTES:
1. ALL RESISTORS ARE IN OHMS, 1/10W, 1%. UNLESS OTHERWISE SPECIFIED.
 2. ALL CAPACITORS ARE IN MICROFARADS, UNLESS OTHERWISE SPECIFIED.
 3. SEE 131408-2.A.XLS FOR PWA DATA AND REVISION HISTORY.

BCA OUTPUT FILTER

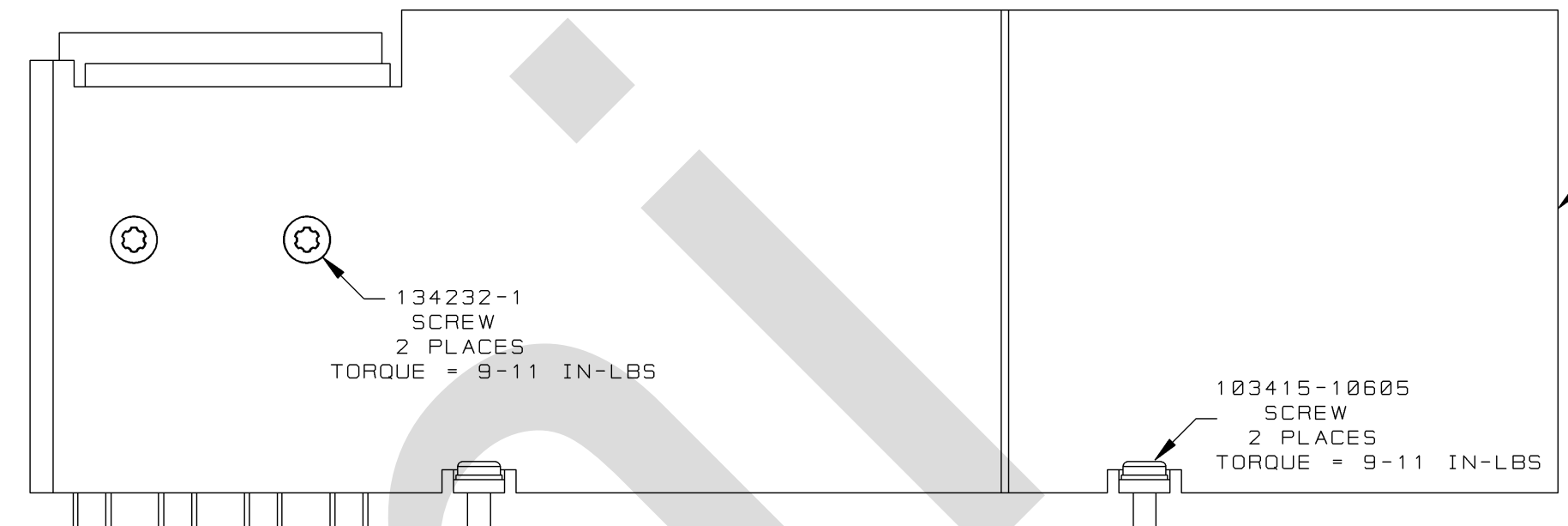
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	D	131408-2	A
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	NONE	MD433D8	

COMPONENT MAP
TOP SIDE

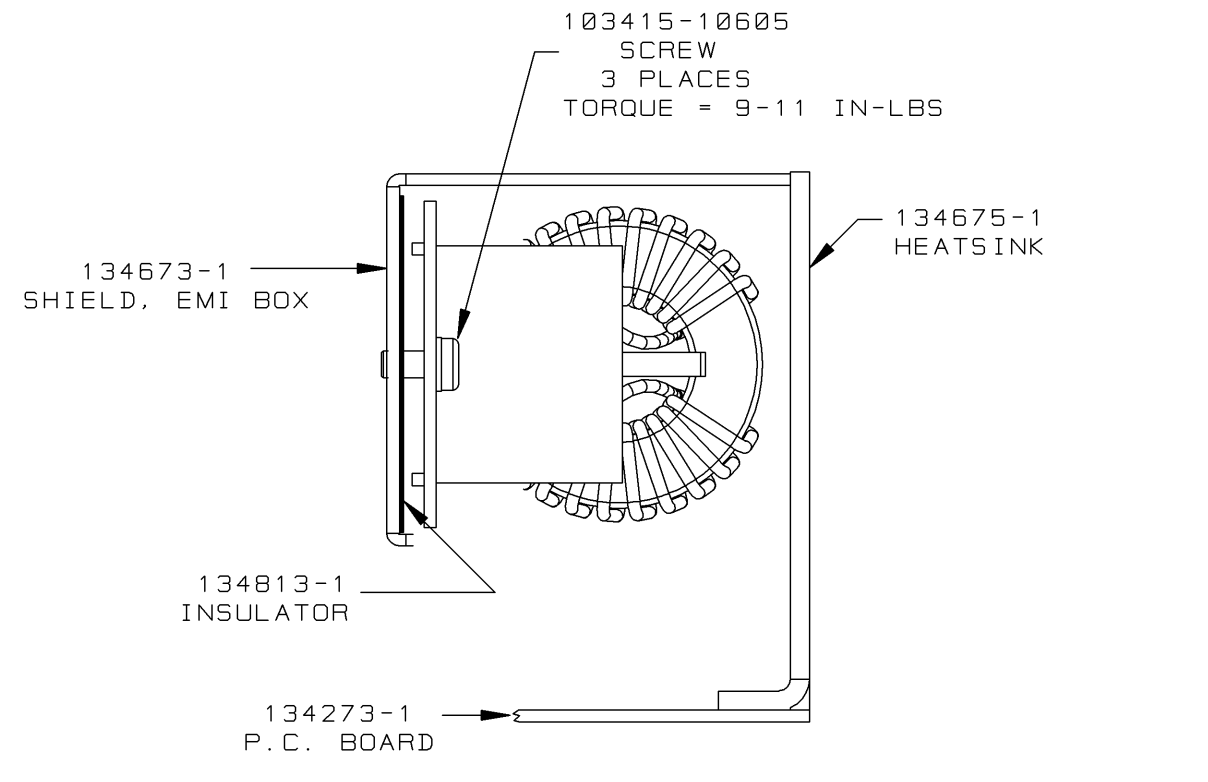


FRONT VIEW OF HEATSINK ASSEMBLY 134674-1

HEATSINK COMPOUND (S 2162-6) MUST BE BETWEEN COMPONENTS AND CERAMIC WAFER (135003-1).
HEATSINK COMPOUND (S 2162-6) MUST BE BETWEEN CERAMIC WAFER AND HEATSINK (134674-1).
HEATSINK COMPOUND (S 2162-6) THICKNESS TO BE 0.008" REFERENCE.

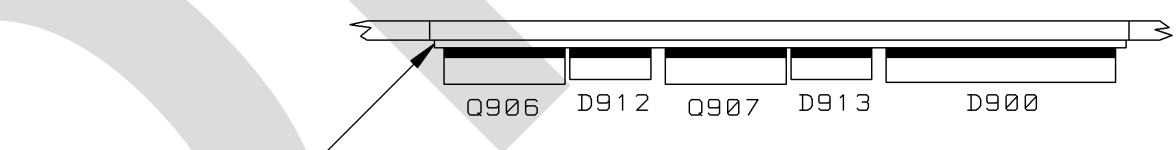


BACK VIEW OF HEATSINK ASSEMBLY 134674-1

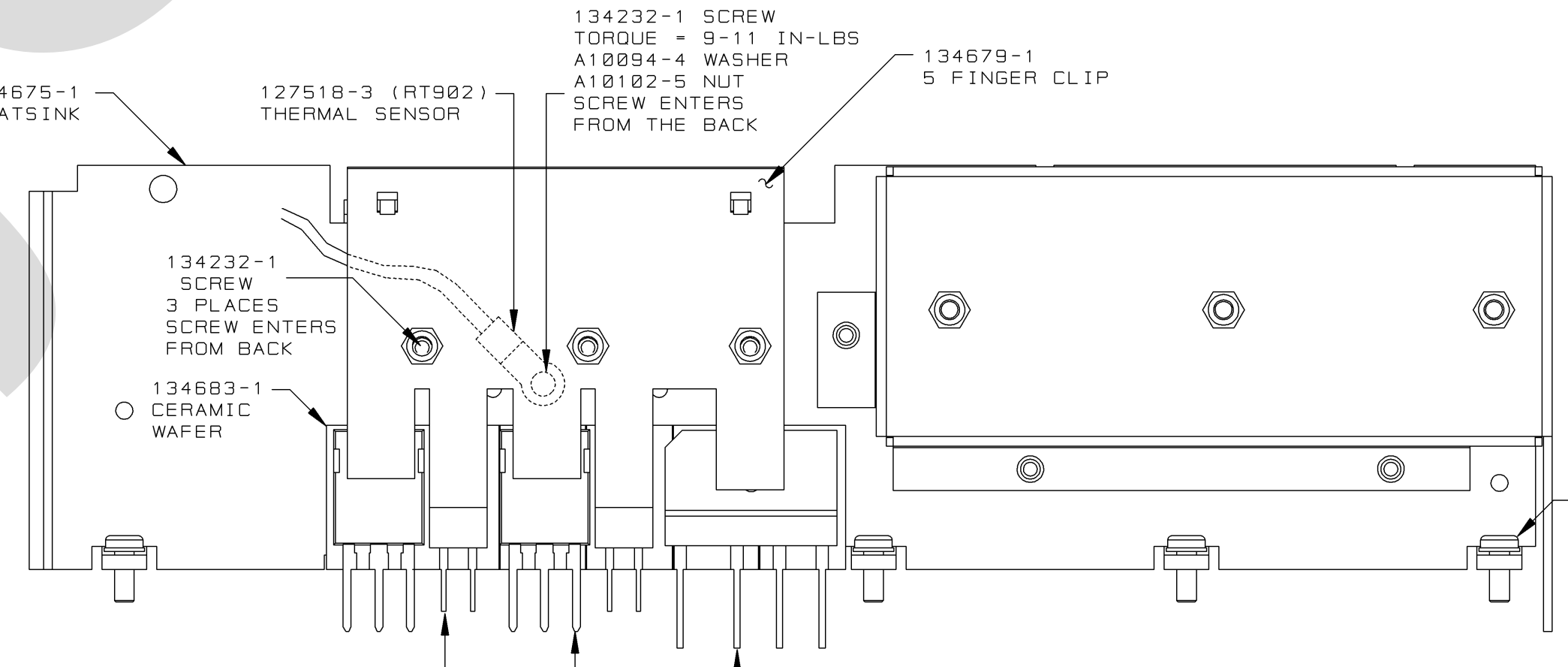


END VIEW OF HEATSINK ASSEMBLY 134675-1

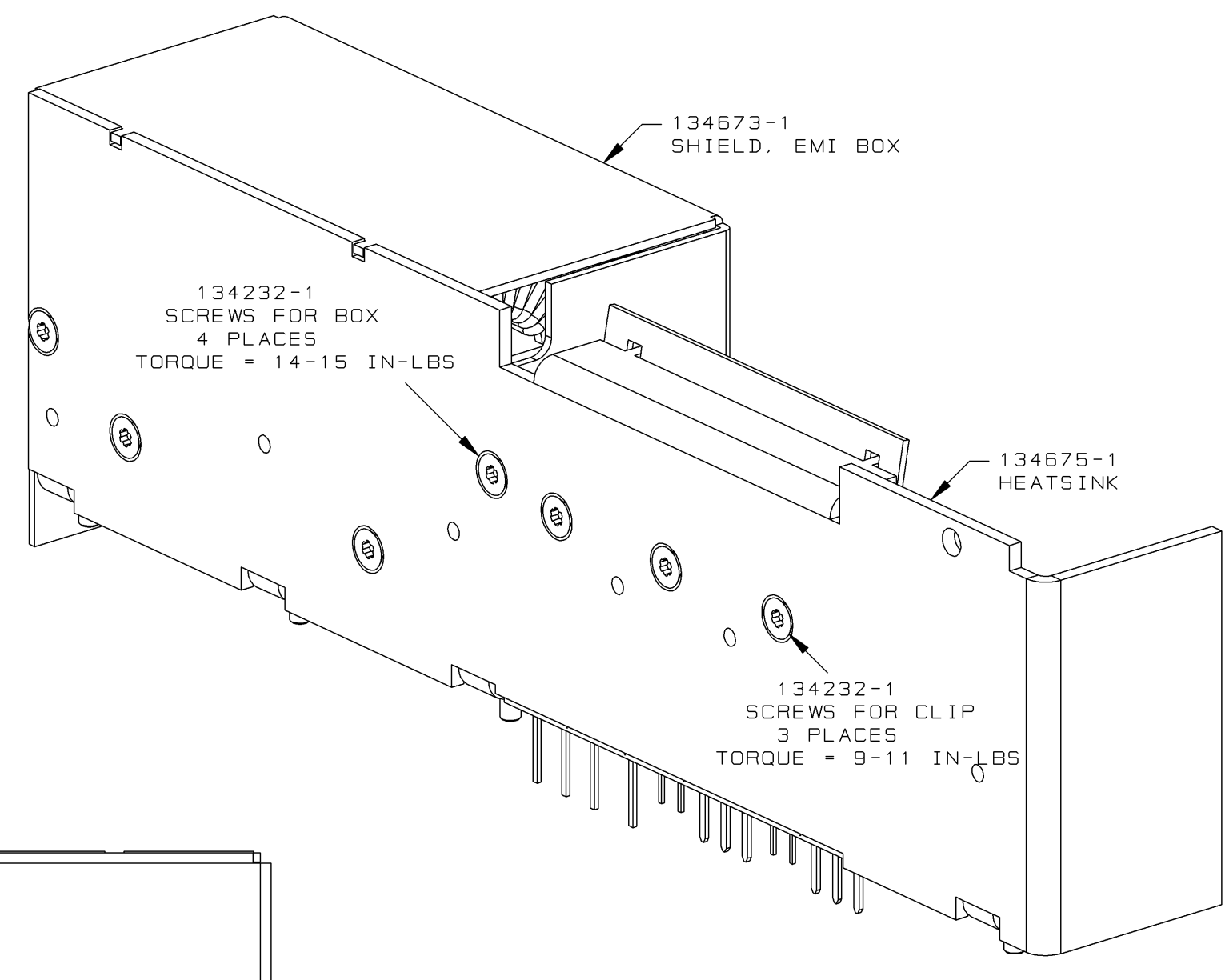
PARTIAL TOP VIEW OF HEATSINK ASSEMBLY 134675-1



HEATSINK COMPOUND (S 2162-6) MUST BE BETWEEN COMPONENTS AND CERAMIC WAFER (134683-1).
HEATSINK COMPOUND (S 2162-6) MUST BE BETWEEN CERAMIC WAFER (134683-1) AND HEATSINK (134675-1).
HEATSINK COMPOUND (S 2162-6) THICKNESS TO BE 0.008" REFERENCE.



FRONT VIEW OF HEATSINK ASSEMBLY 134675-1

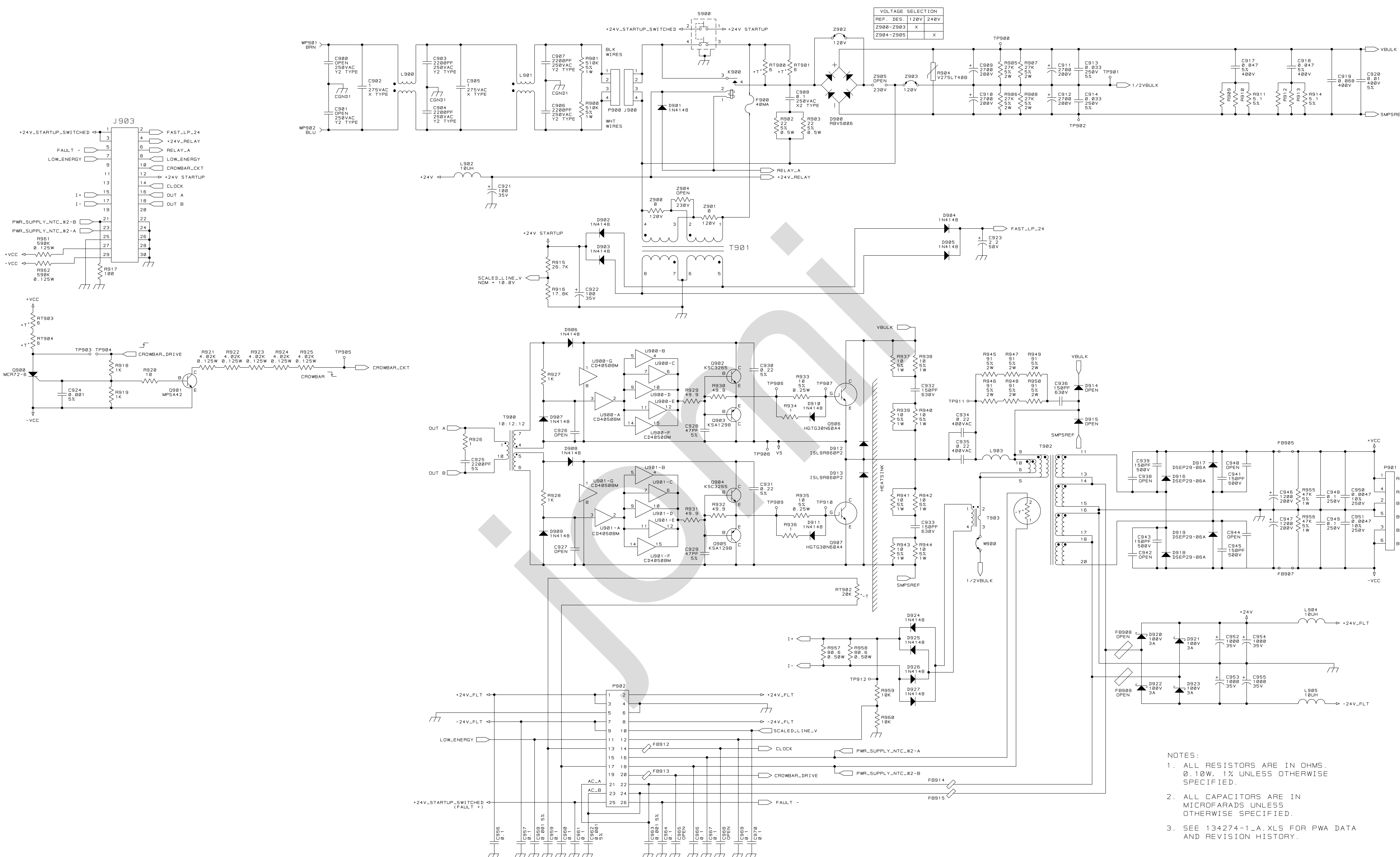


ISOMETRIC VIEW OF THE BACK OF HEATSINK ASSEMBLY 134675-1

SEE 134274-1_A.XLS FOR PWA DATA

REVISION HISTORY					
E. C. N.	ZONE	REV	DESCRIPTION	DATE	APPROVED
		A	SEE 134274-1_A.XLS FOR REVISION HISTORY.	04-17-02	KLW MMG JW

DWN	KLW	04-17-02		1718 W. MISHAWAKA RD. ELKHART IN. 46517 PHONE (219) 294-8888 WWW.CROWNINTL.COM
CM	MMG	4-25-02		
PE	JW	04-17-02	TITLE	
DISTRIBUTION			PWA, SMPS MAIN	
FILENAME			134274-1_A-01_PCB	
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TOLERANCE UNLESS OTHERWISE SPECIFIED			DWG NO.	134274-1
DO NOT SCALE DRAWING			SCALE	NONE
			PROJ. NO.	MD433DD
			SHEET	1 OF 2
			REV	A



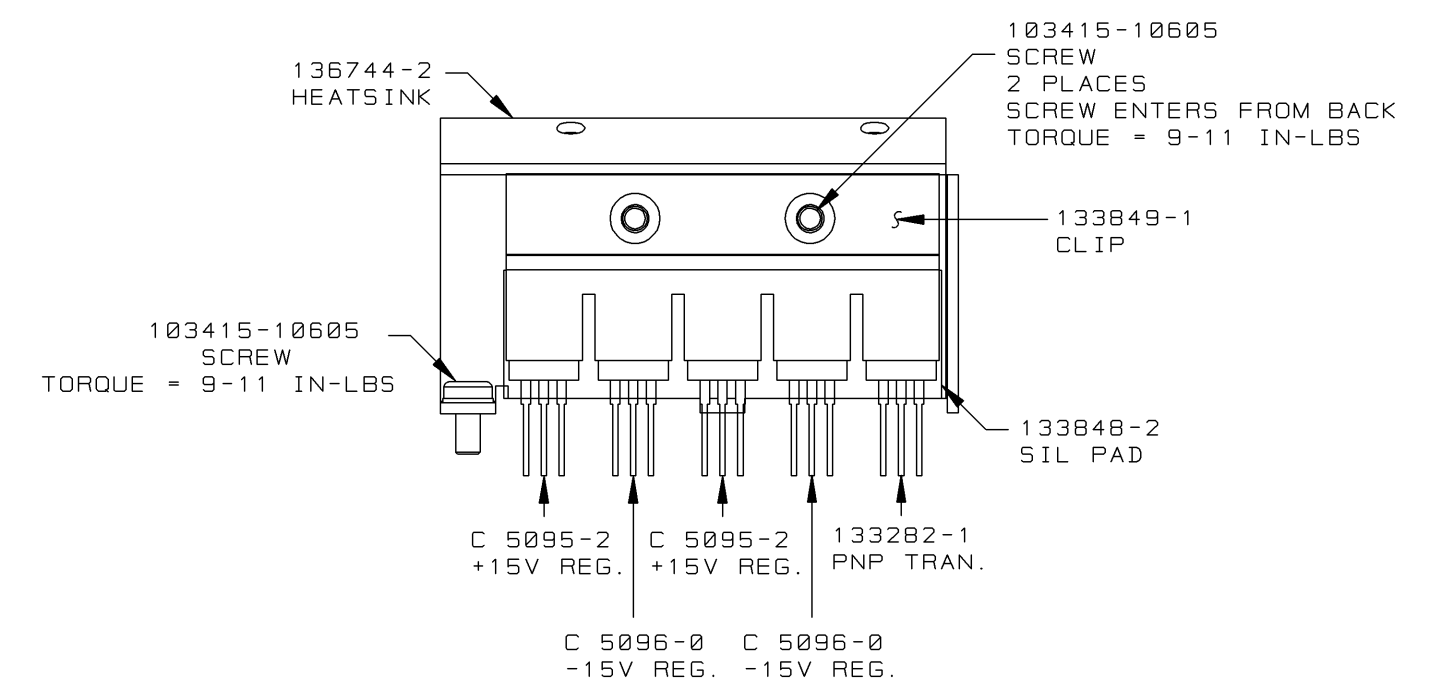
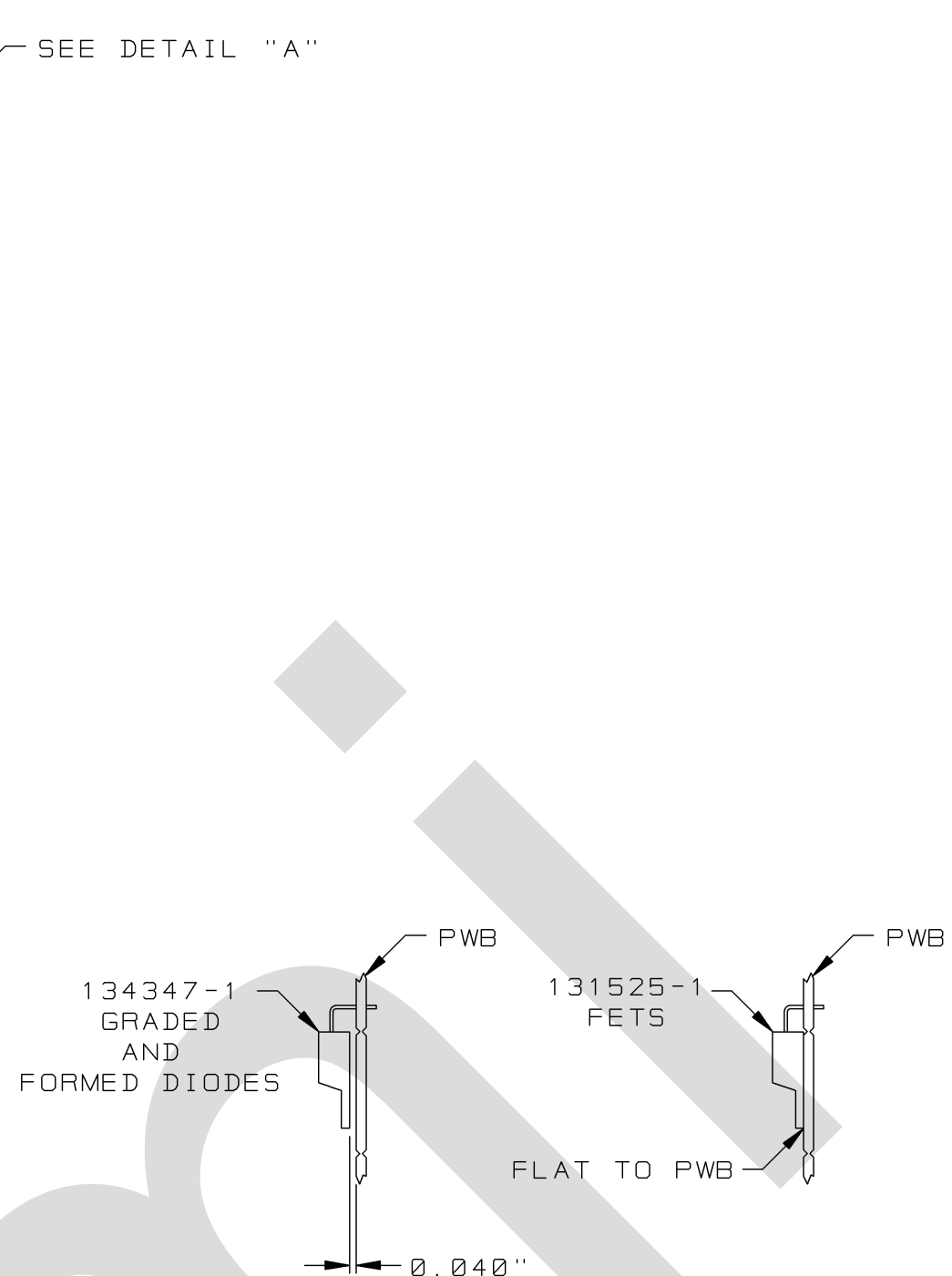
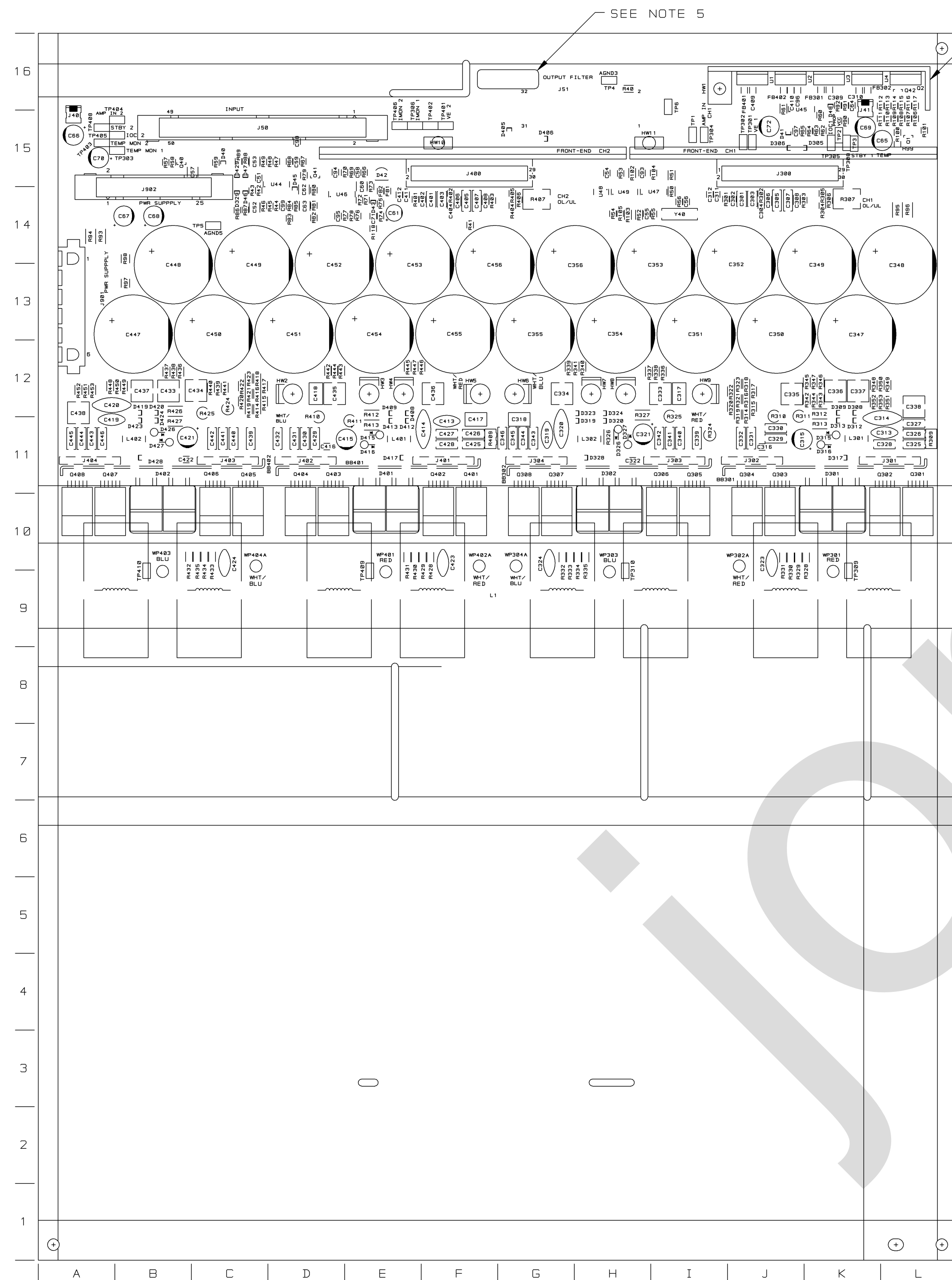
VOLTAGE SELECTION			
REF.	DES.	120V	240V
Z900-Z903		X	
Z904-Z905			X

- NOTES:
1. ALL RESISTORS ARE IN OHMS. 0.10W, 1% UNLESS OTHERWISE SPECIFIED.
 2. ALL CAPACITORS ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.
 3. SEE 134274-1_A.XLS FOR PWA DATA AND REVISION HISTORY.

SMPS MAIN

REVISION HISTORY				APPROVED	
E.C.N.	ZONE	REV	DESCRIPTION	DATE	
		A	SEE 134476-4.A.XLS FOR COMPONENT DATA AND REVISION HISTORY.	10-30-03	KLW DSV JW
04N0200		B	SEE 134476-4.B.XLS FOR COMPONENT DATA AND REVISION HISTORY.	4-1-04	MES KZ JW

COMPONENT MAP
TOP SIDE

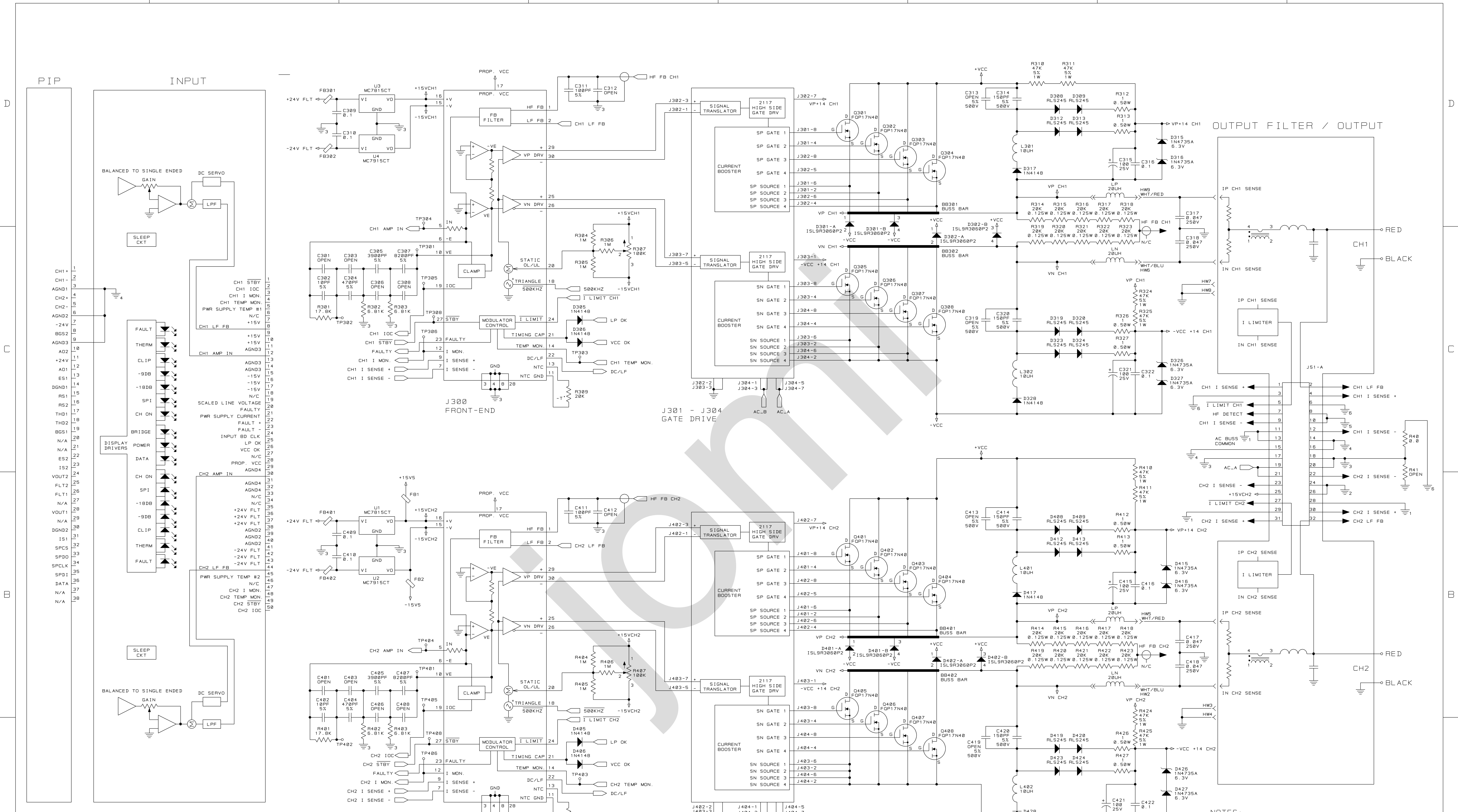


DETAIL "A"
SCALE 1:1

SEE 134476-4_B.XLS FOR PWA DATA

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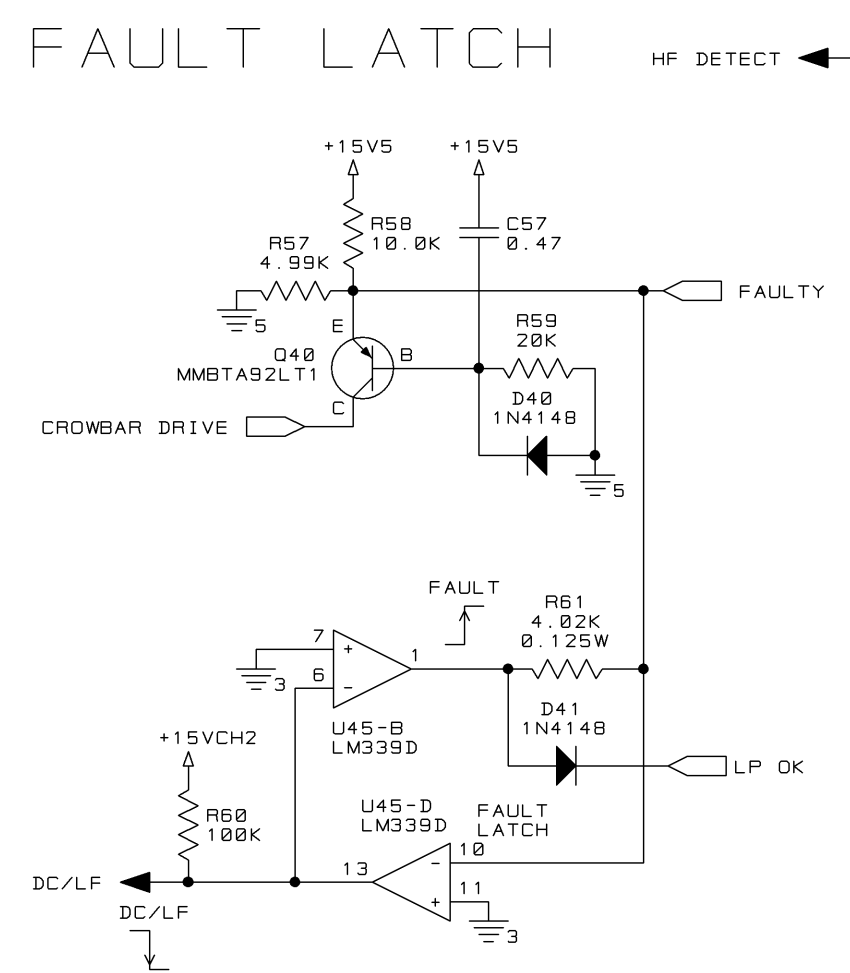
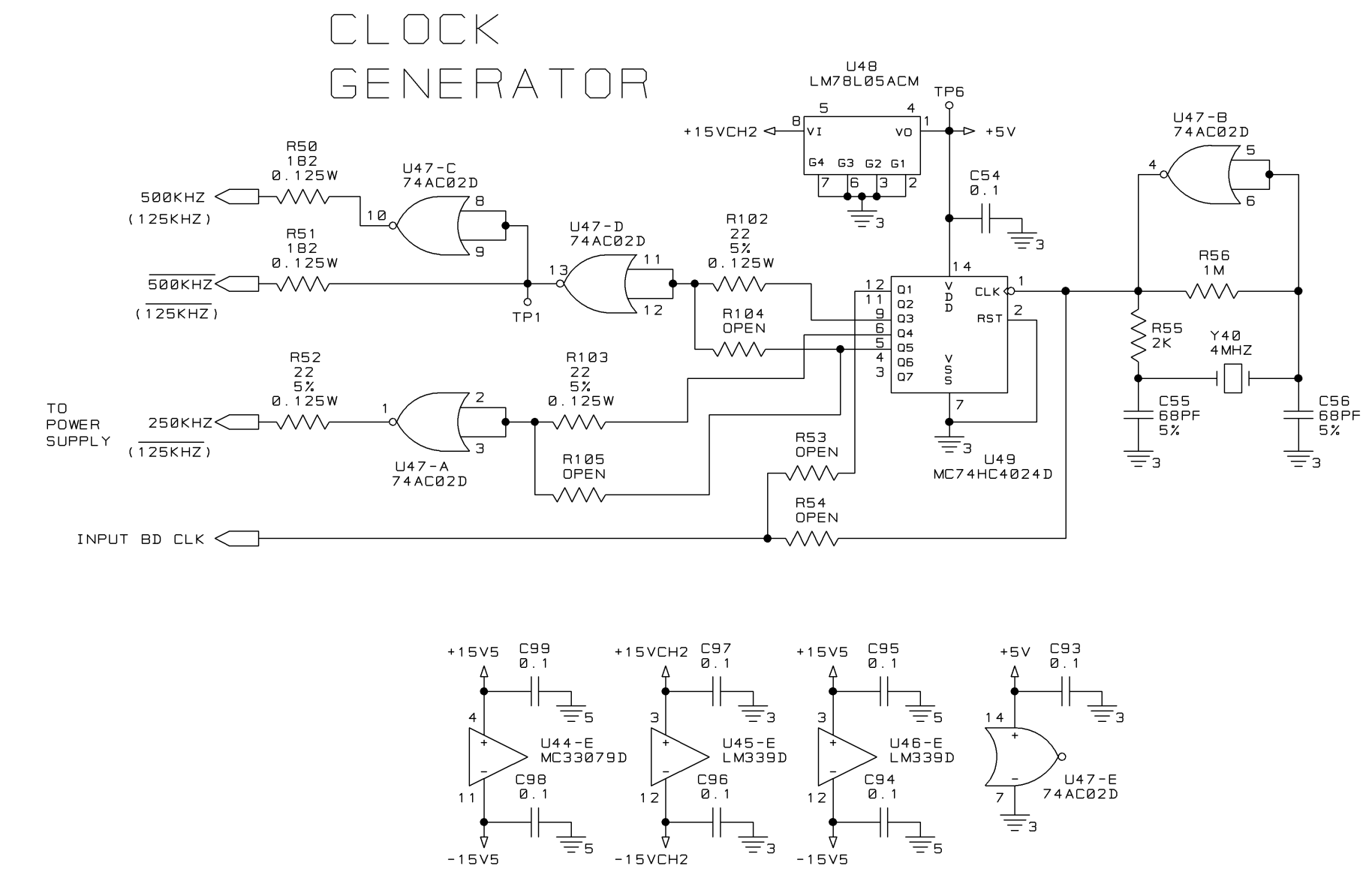
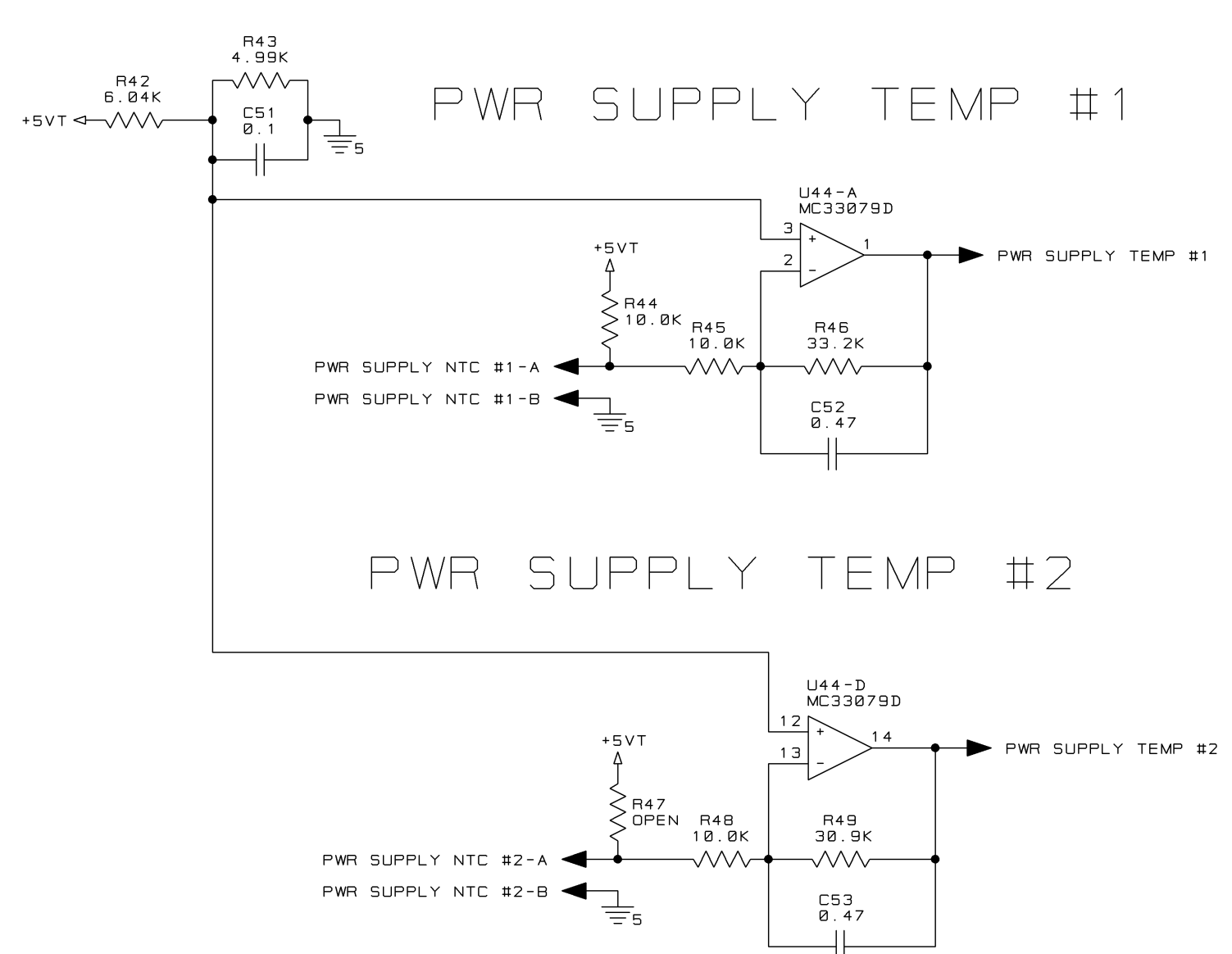
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FILENAME		CM	DSV	11-12-03	
134476-4-B.01.PCB			JW	10-30-03	TITLE
PWA, BCA MAIN CTS2000					
TOLERANCE UNLESS OTHERWISE SPECIFIED					SIZE DWG NO.
.00 ± .02"					D 134476-4
.000 ± .010"					REV
DRILLS ± .003"					B
DO NOT SCALE DRAWING					SCALE NONE PROJ. NO. MD433DB SHEET 1 OF 4



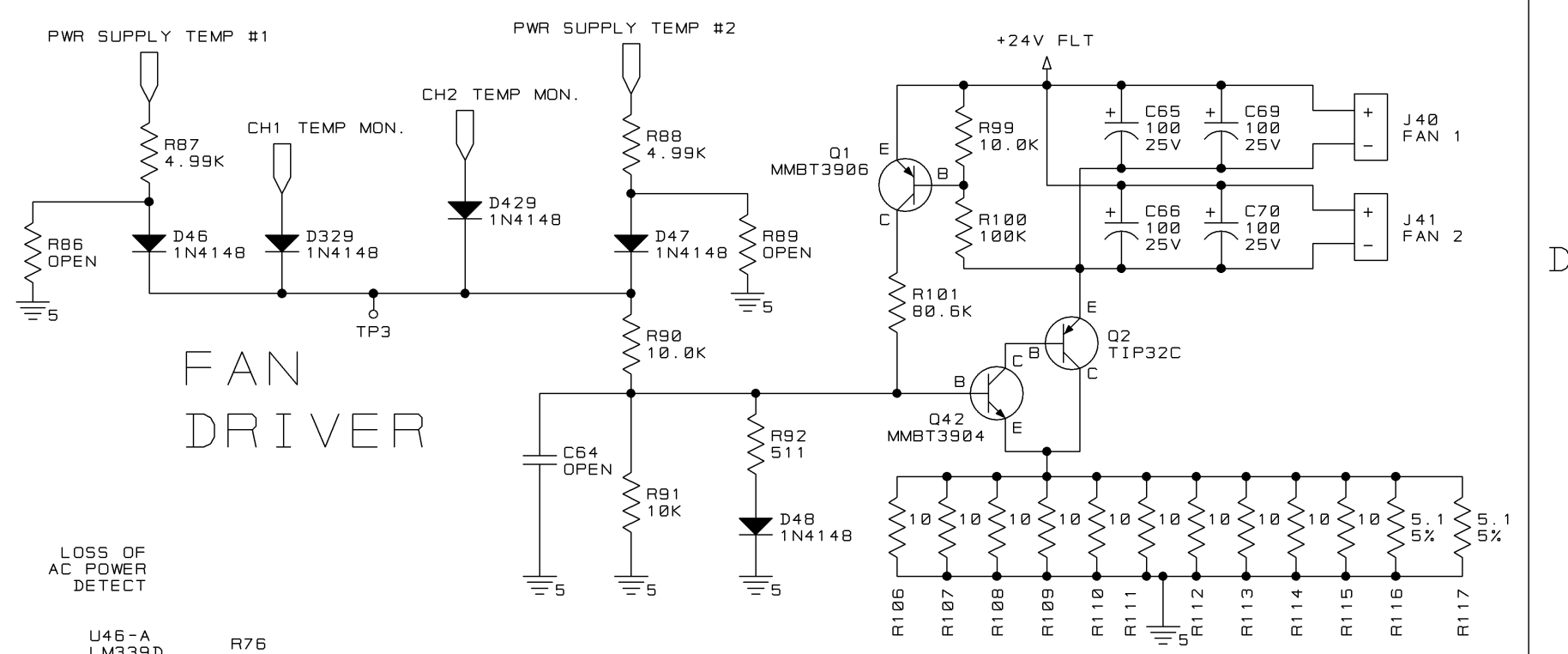
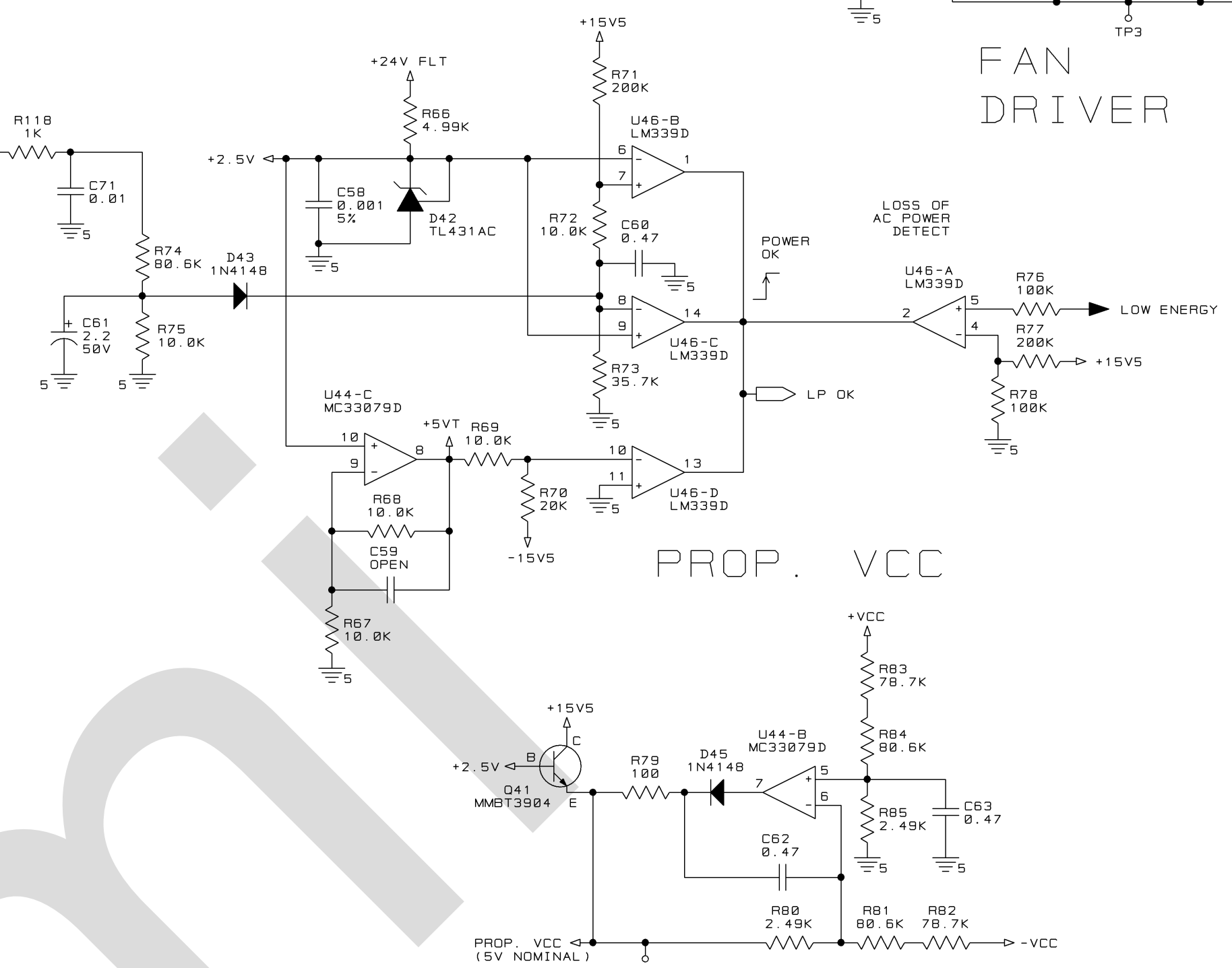
GROUND LABELS

VCC	+24V	PIP	SIGNAL	PIP	MAIN BD	SIGNAL
GND	GND	DGND	GND	AGND	DIGITAL	GND
⏏	⏏	⏏	⏏	⏏	⏏	⏏

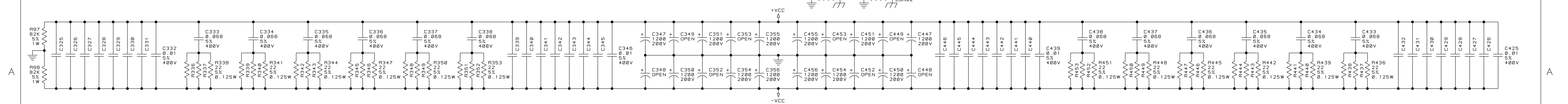
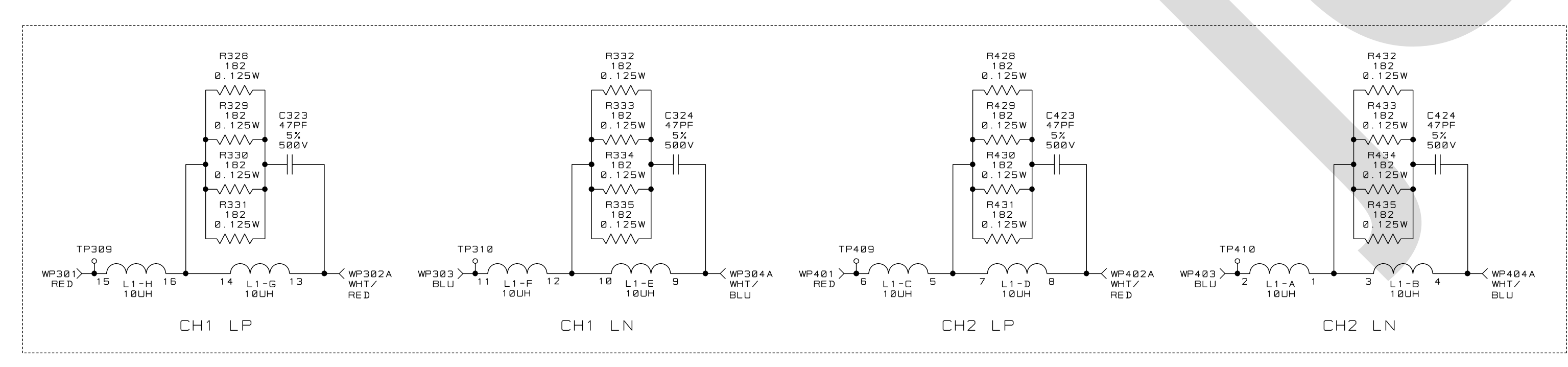
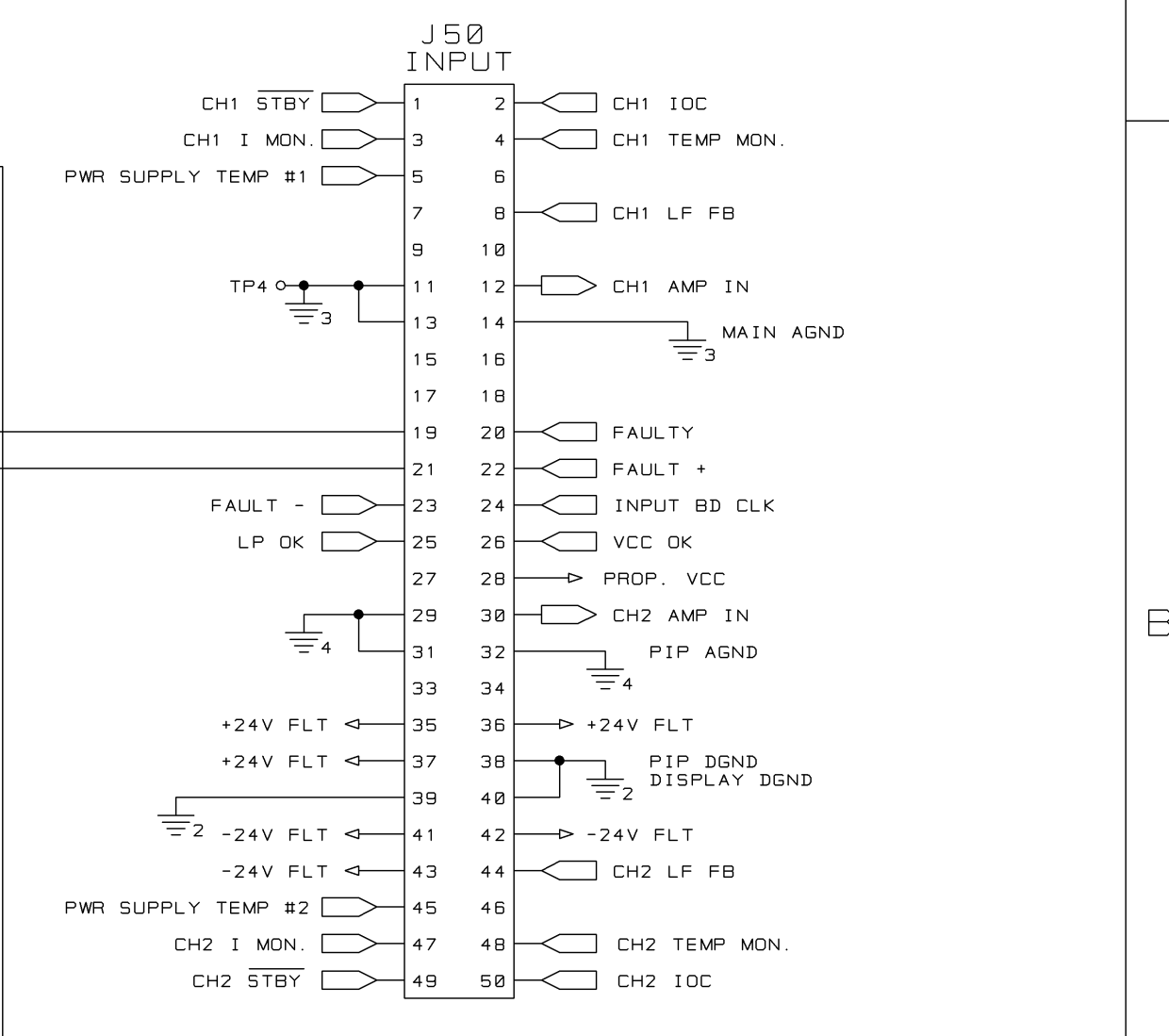
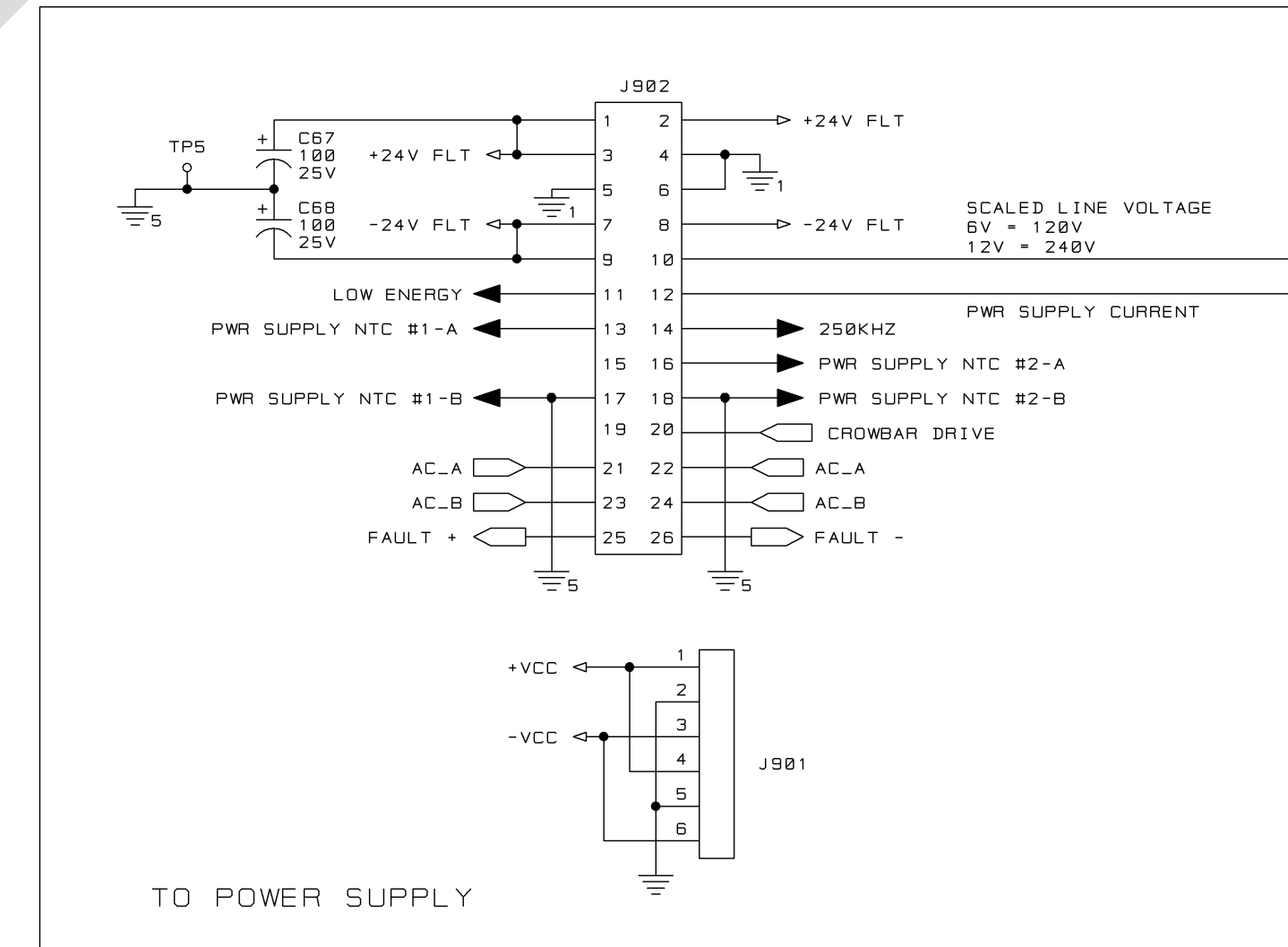
- NOTES:**
1. ALL RESISTORS ARE IN OHMS. 0.1W, 1% UNLESS OTHERWISE SPECIFIED.
 2. ALL CAPACITORS ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.
 3. SEE 134476-4_B.XLS FOR PWA DATA AND REVISION HISTORY.



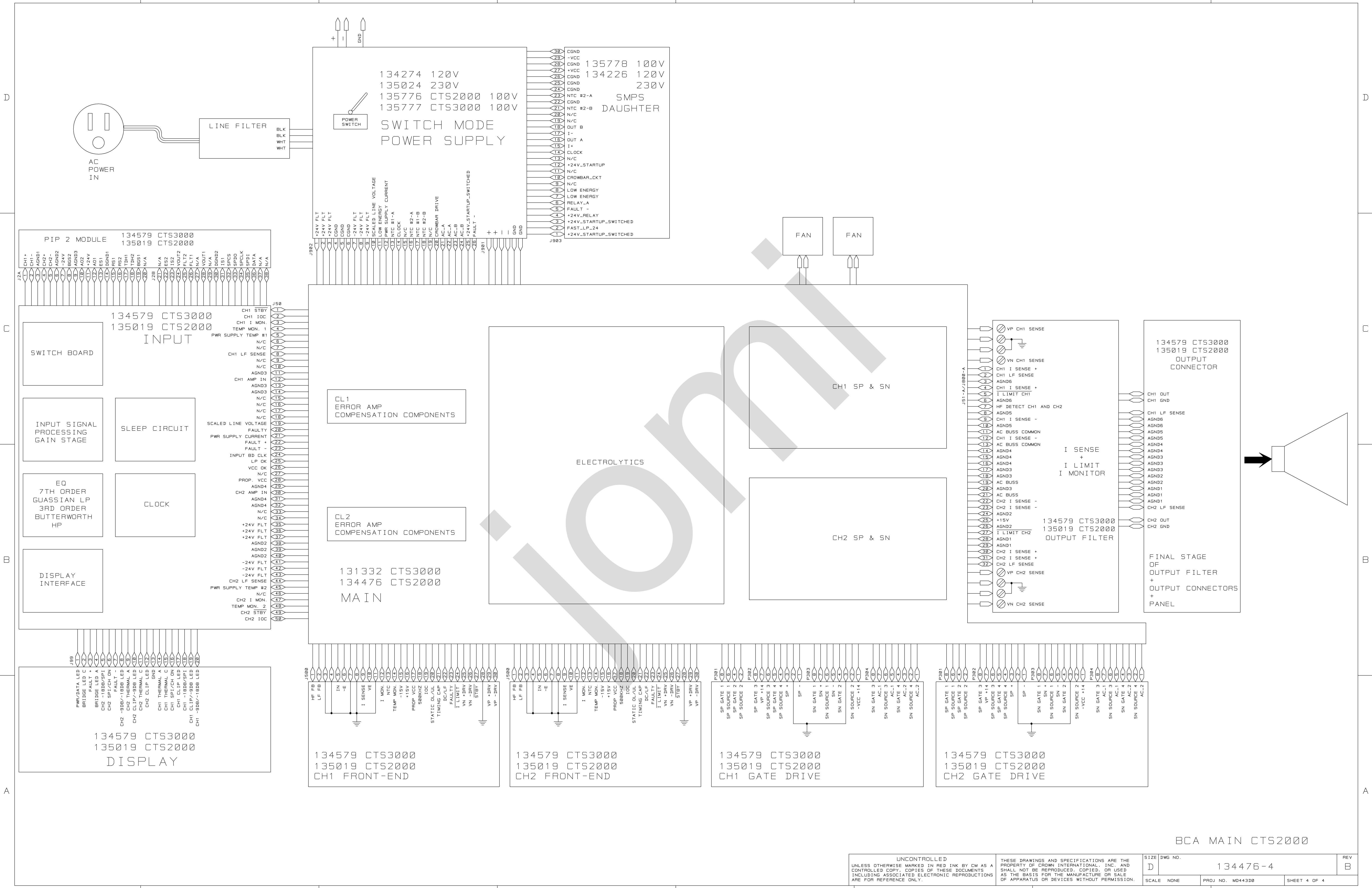
HF DETECT
+15 PWR OK
LOSS OF AC



- ≡ VCC GND
- ≡ ±24V GND
- ≡ PIP DIGITAL GND
- ≡ SIGNAL GND
- ≡ PIP ANALOG GND
- ≡ MAIN BRD DIGITAL GND
- ≡ REDUNDANT SIGNAL GND

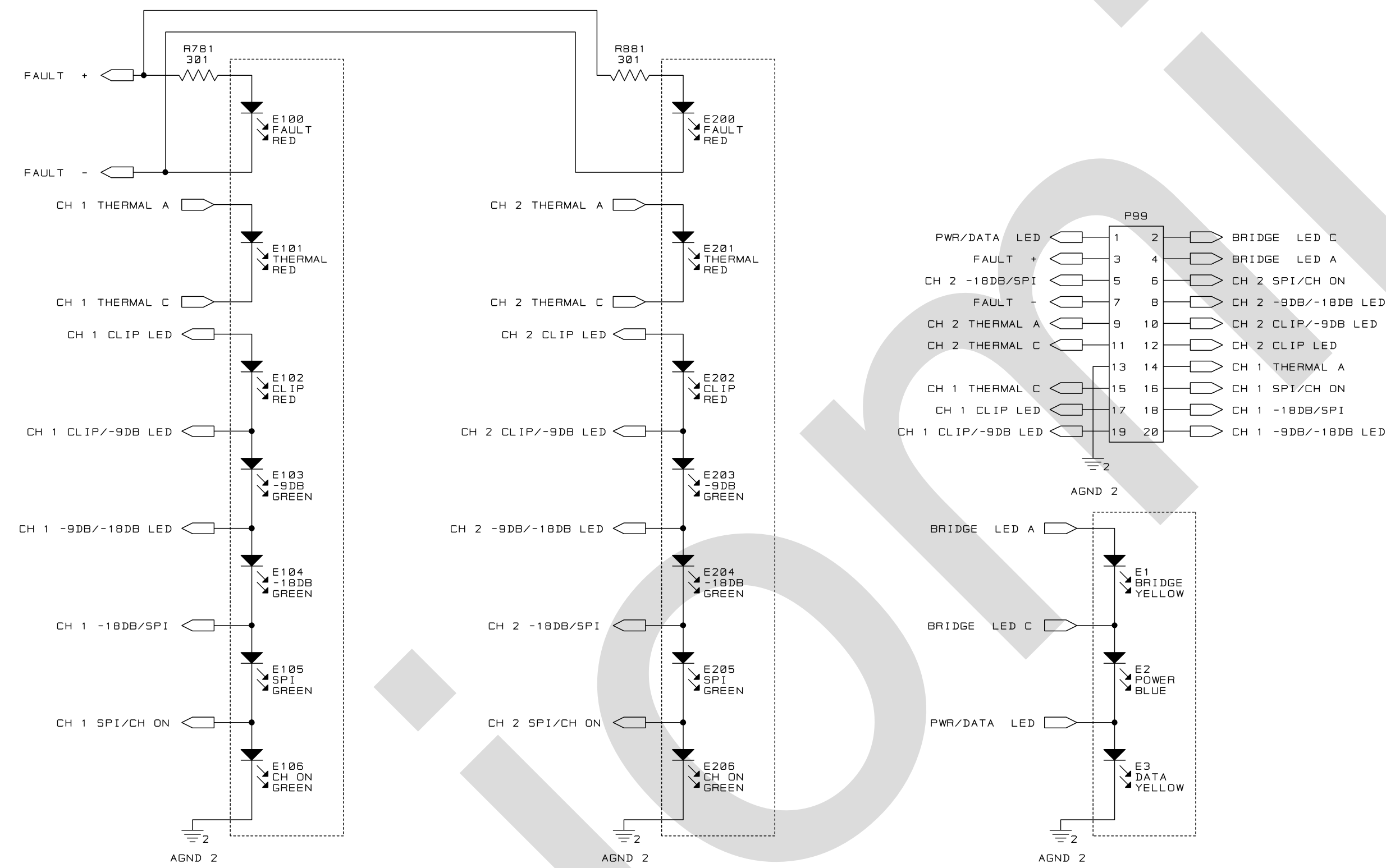


BCA MAIN CTS2000



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SCALE NONE	PROJ NO. MD44300	SHEET 4 OF 4				



NOTES:

1. ALL RESISTORS ARE IN OHMS, 1/10W, 1%. UNLESS OTHERWISE SPECIFIED.
2. ALL CAPACITORS ARE IN MICROFARADS. UNLESS OTHERWISE SPECIFIED.
3. SEE 134605-2_A.XLS FOR PWA DATA AND REVISION HISTORY.