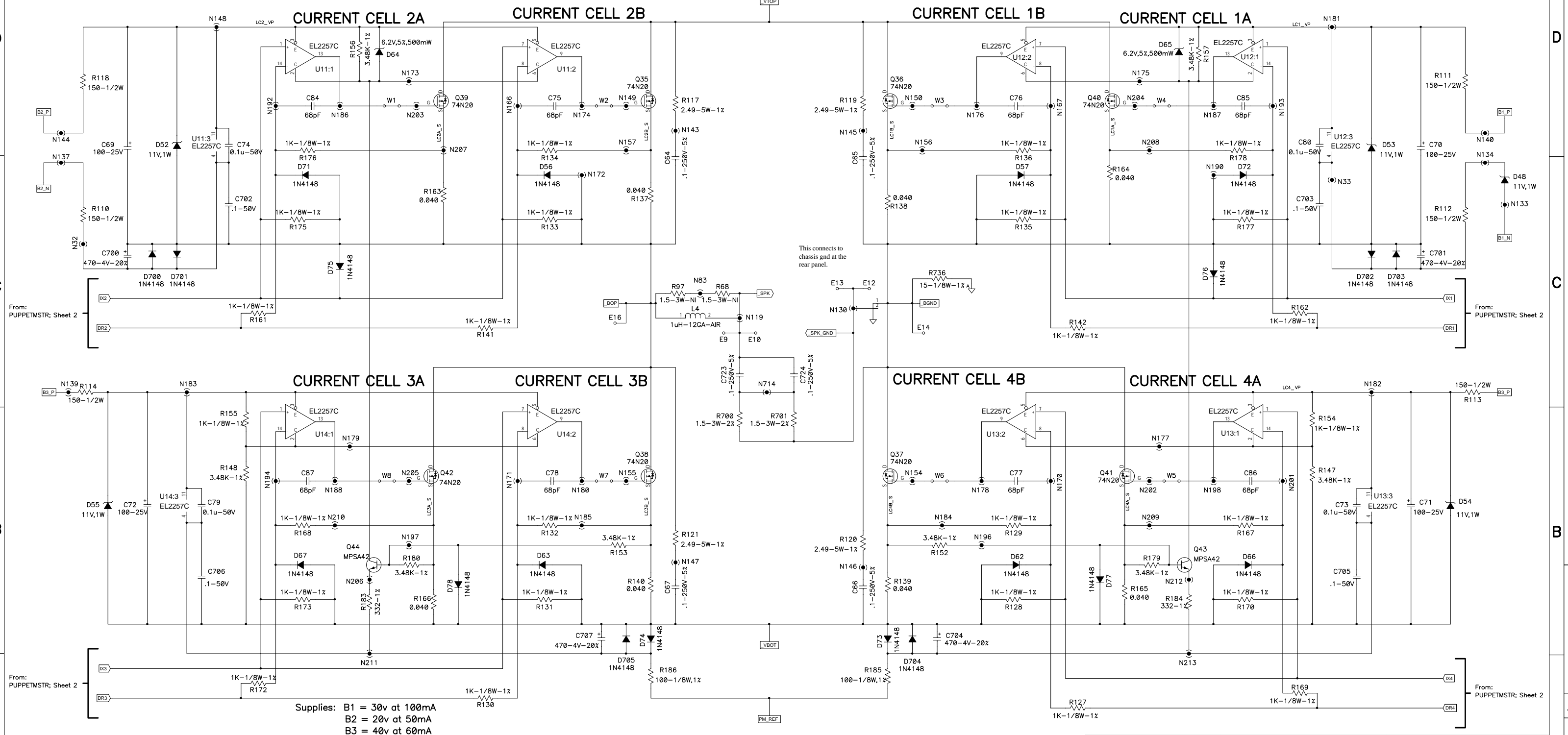


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LC_OUTPUTS



Supplies: B1 = 30v at 100mA
 B2 = 20v at 50mA
 B3 = 40v at 60mA
 B4 = 27v at 50mA

4. R1 IS A POSITIVE TEMPERATURE COEFFICIENT RESISTOR MOUNTED TO HEAT SINK. RESISTANCE IS 100 MAX OHM COLD.
3. ALL CAPACITORS 100V, TOLERANCE 20% FOR ELECTROLYTIC TYPES, 10% ON ALL OTHERS.
2. COMPONENTS WITH VALUE PREFIXED WITH A "*" REPRESENT SMT COMPONENTS.
1. THIS DRAWING USED IN CONJUNCTION WITH ASSEMBLY WP-000171-00.

NOTES: UNLESS OTHERWISE SPECIFIED

QTY	ITEM NO.	PART NO.	DESCRIPTION	VENDOR
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSIONS PER ANSI Y14.5-1982 TOLERANCES ARE:			CONTRACT NO.	
DECIMALS .XX ±	DECIMALS .XXX ±	ANGLES 0	APPROVALS DATE	
MATERIAL DEBURR EDGES .XXX R MAX			DRAWN P. IERYMENKO 11-30-95	
FINISH			CHECKED W. RULAND 5-13-98	
NEXT ASSY USED ON			ISSUED TIM SHOOK 5-15-98	
APPLICATION DO NOT SCALE DRAWING			CAD SEED FILE NO. PLOT DATE: Thu May 04 2000	
			SCALE NONE CAD FILE NO. sh0171-b1.sch SHEET 1 OF 7	

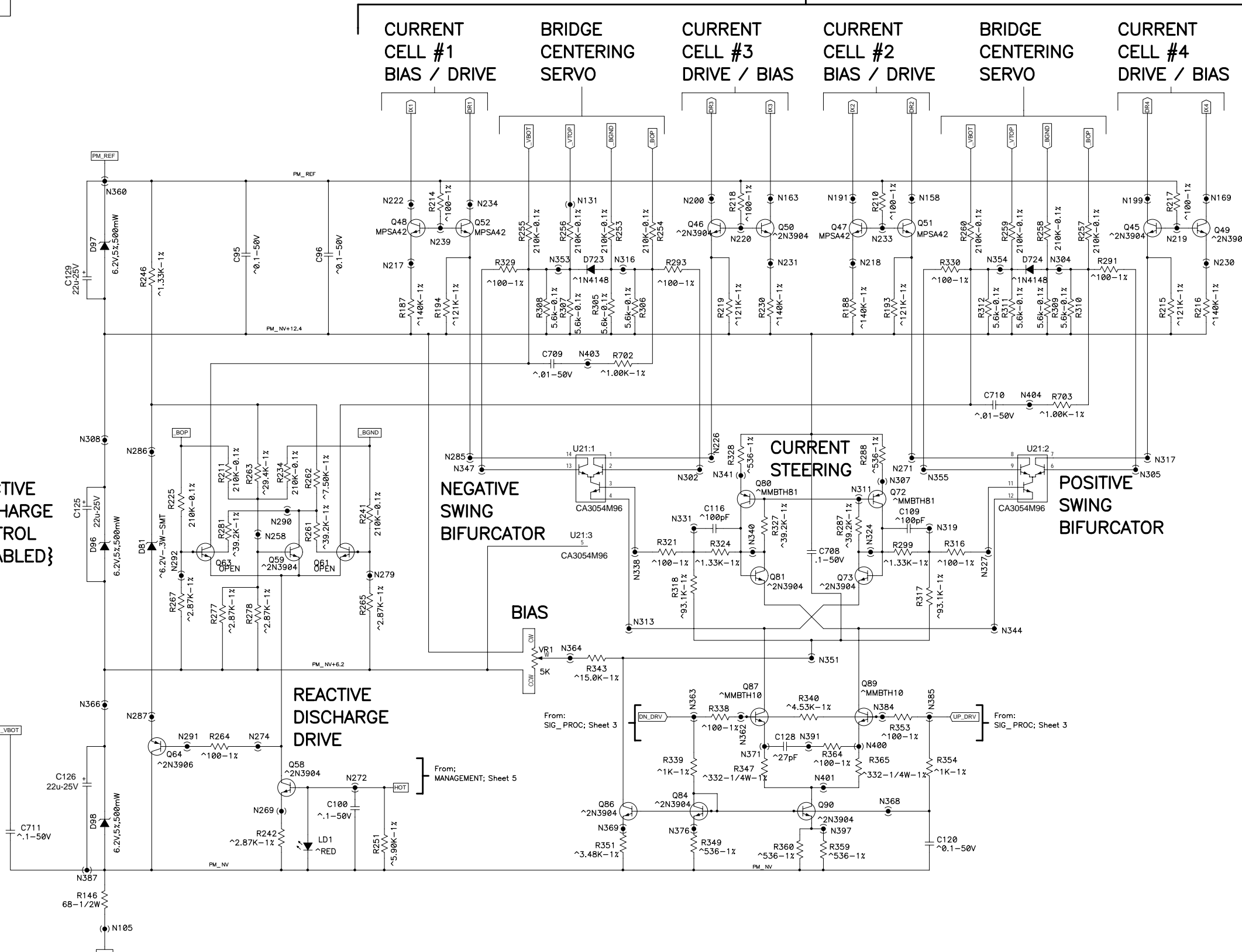
SCHEMATIC DIAGRAM
MAIN PCB, PL 9.0
 SH-000171-00

SH-000171-00
 REV 1

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION WHICH IS THE PROPERTY OF QSC AUDIO PRODUCTS, THAT MAY NOT BE DISCLOSED, REPRODUCED OR USED WITHOUT EXPRESS WRITTEN CONSENT FROM QSC AUDIO PRODUCTS.

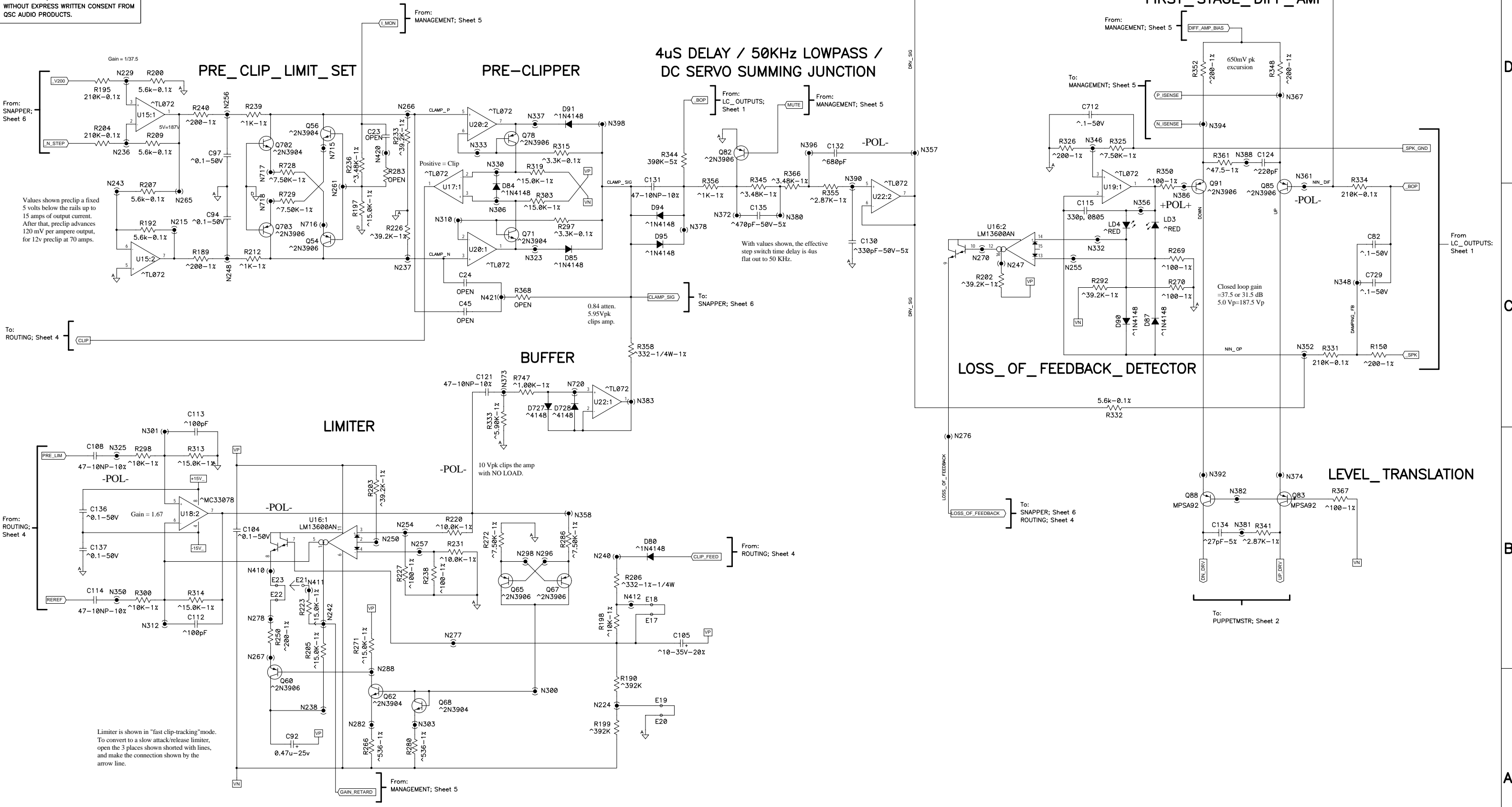
PUPPETMSTR

To:
LC_OUTPUTS; Sheet 1



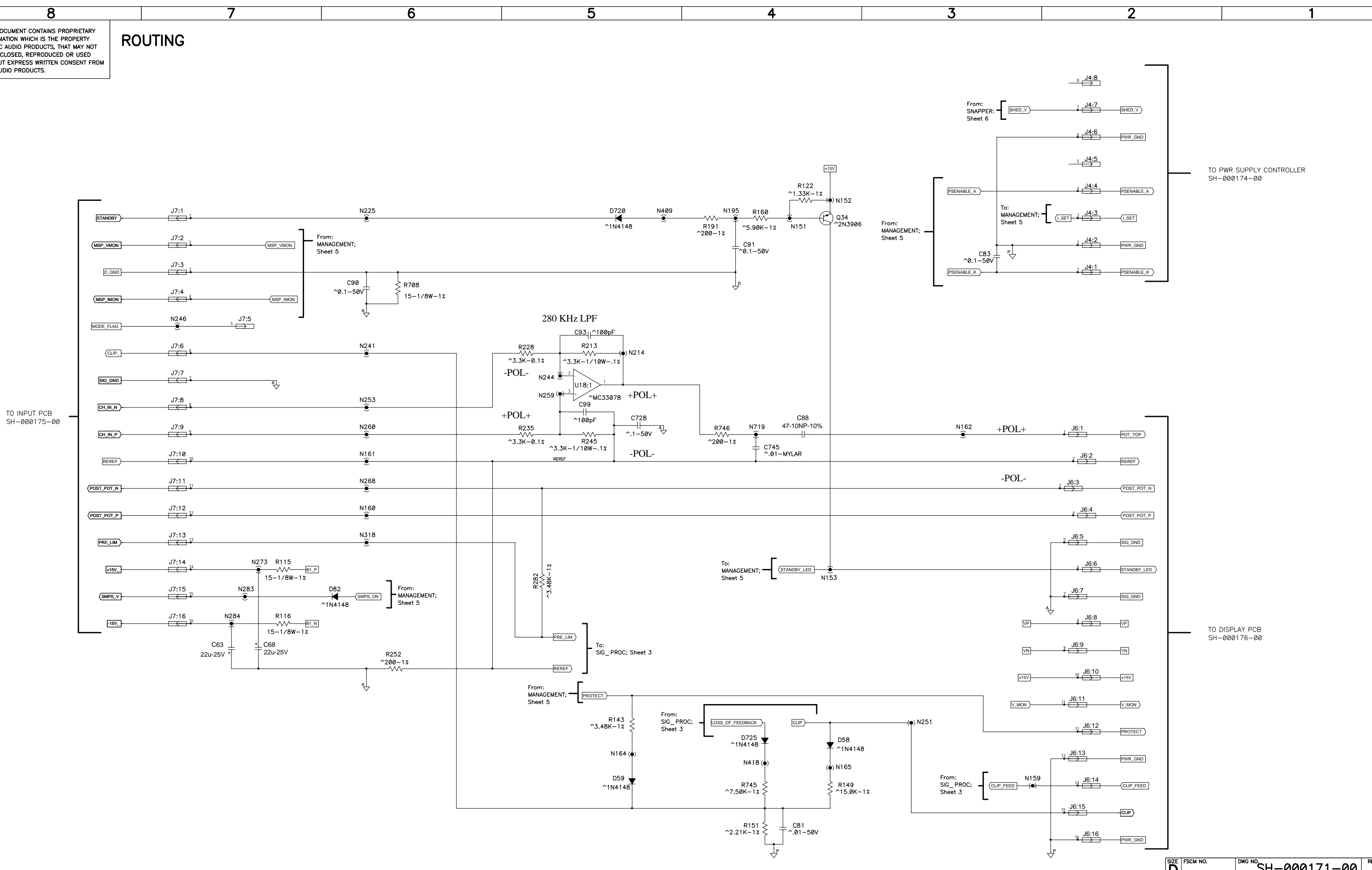
THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION WHICH IS THE PROPERTY OF QSC AUDIO PRODUCTS, THAT MAY NOT BE DISCLOSED, REPRODUCED OR USED WITHOUT EXPRESS WRITTEN CONSENT FROM QSC AUDIO PRODUCTS.

SIG_PROC



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ROUTING

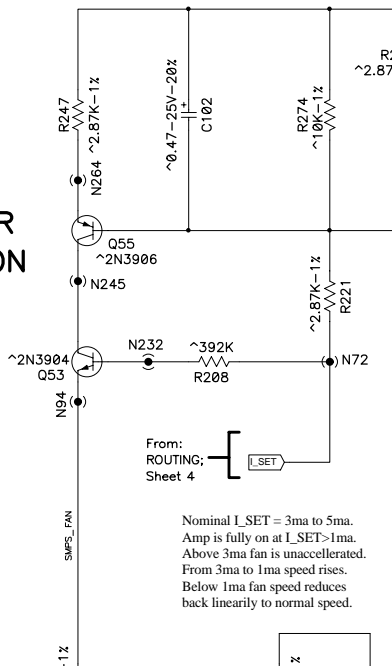


DWG NO. SH-000171-00
 REV. 4

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION WHICH IS THE PROPERTY OF QSC AUDIO PRODUCTS, THAT MAY NOT BE DISCLOSED, REPRODUCED OR USED WITHOUT EXPRESS WRITTEN CONSENT FROM QSC AUDIO PRODUCTS.

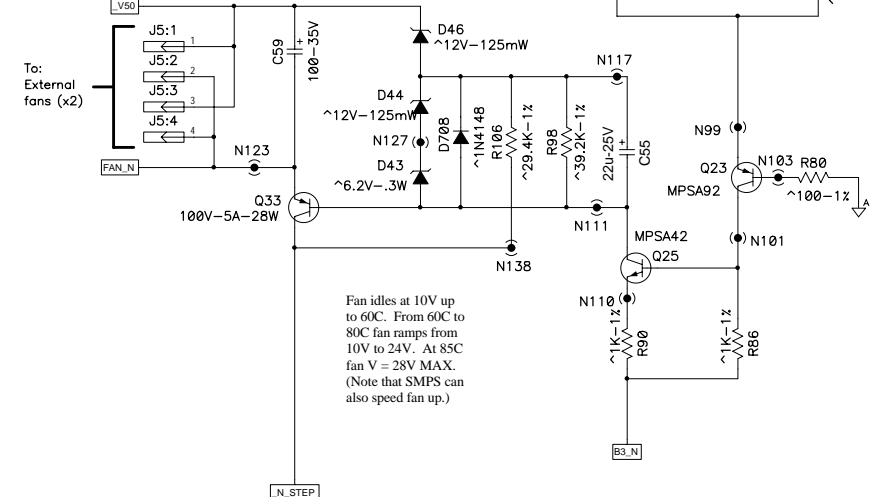
MANAGEMENT

AMPLIFIER ACTIVATION CIRCUIT



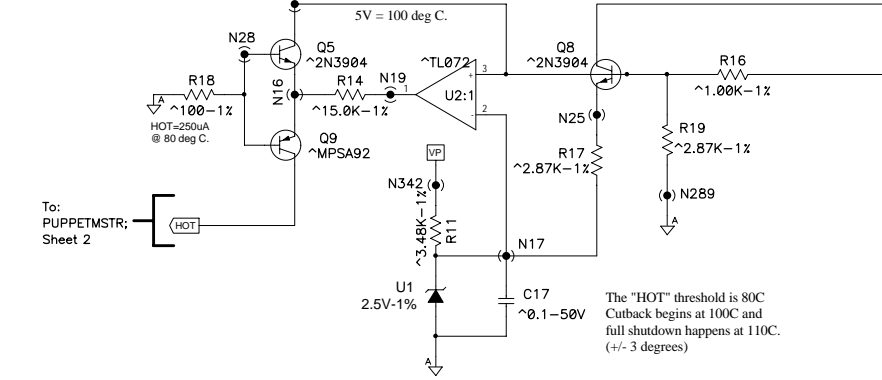
Nominal L_SET = 3ma to 5ma. Amp is fully on at L_SET > 1ma. Above 3ma fan is unaccelerated. From 3ma to 1ma speed rises. Below 1ma fan speed reduces back linearly to normal speed.

FAN CONTROL



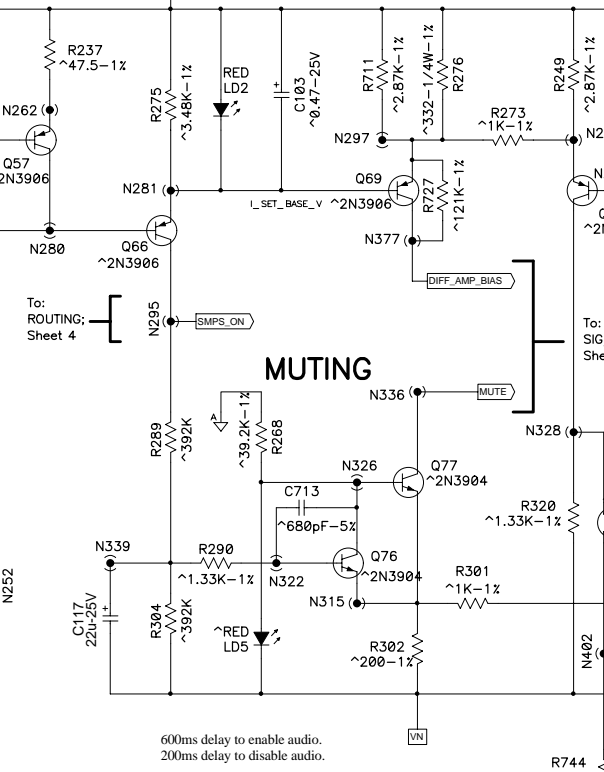
Fan idles at 10V up to 60C. From 60C to 80C fan ramps from 10V to 24V. At 85C fan V = 28V MAX. (Note that SMPS can also speed fan up.)

OVERTEMP KILL / REACTIVE DISCHARGE CONTROL



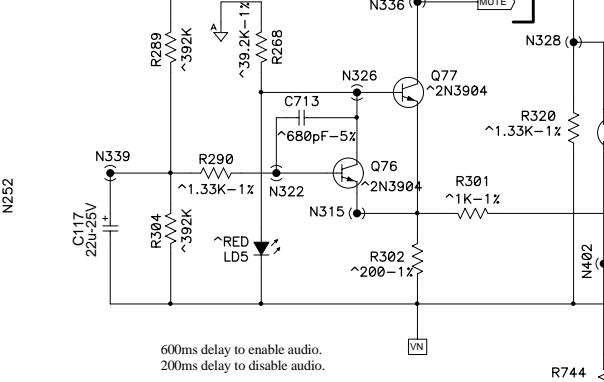
The "HOT" threshold is 80C. Cutback begins at 100C and full shutdown happens at 110C. (+/- 3 degrees)

DIFF-AMP BIAS



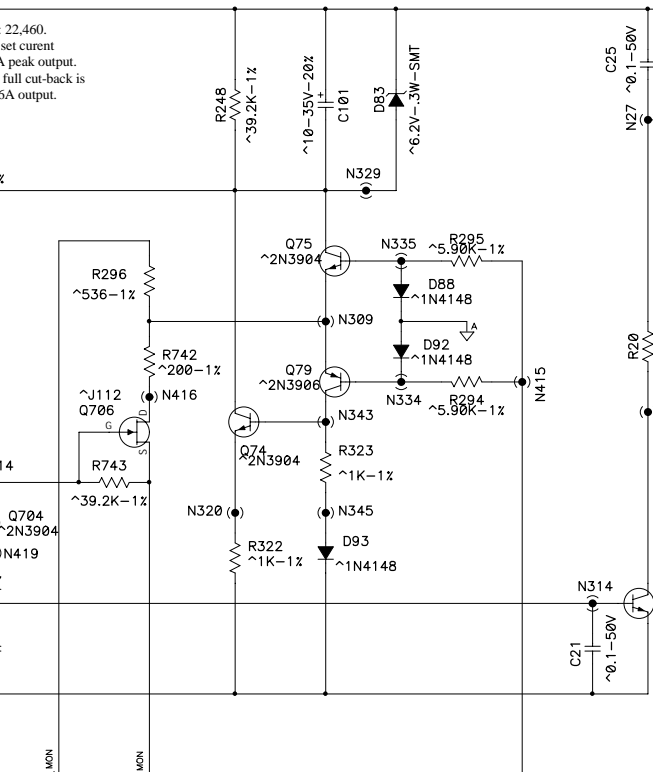
Current gain: 22,460. 3.6 mA total set current results in 81A peak output. Minimum at full cut-back is 250 uA or 5.6A output.

MUTING



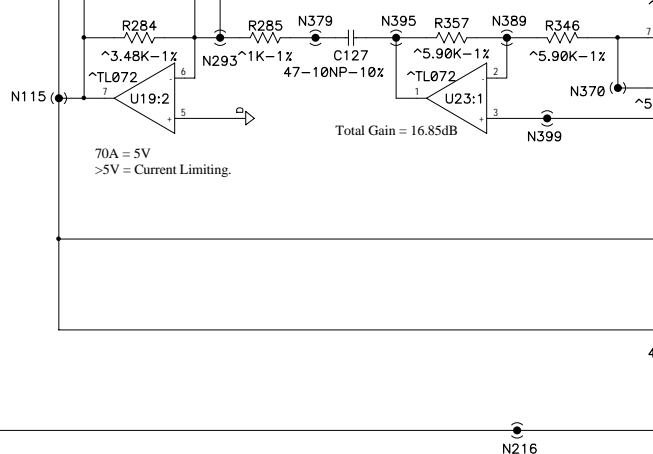
600ms delay to enable audio. 200ms delay to disable audio.

CURRENT CUTBACK



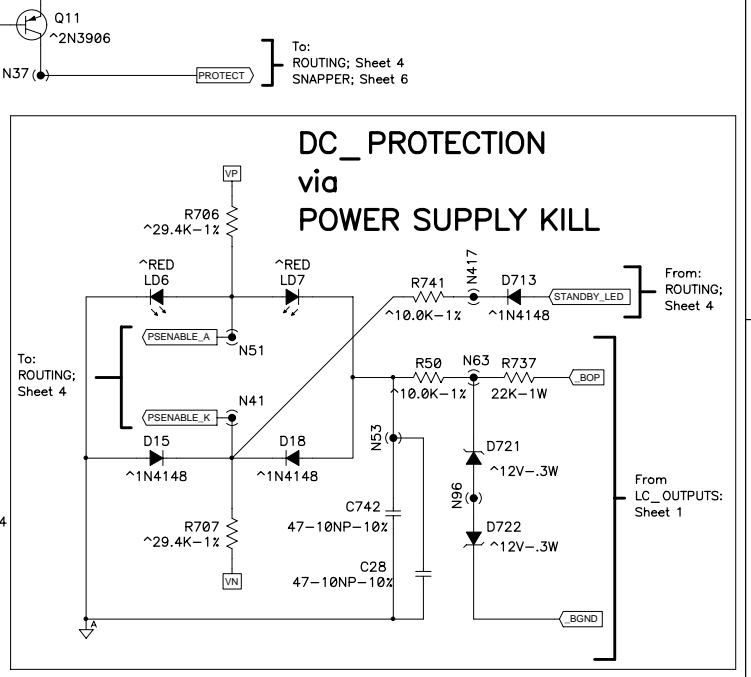
70A = 5V >5V = Current Limiting.

CURRENT_MONITORING

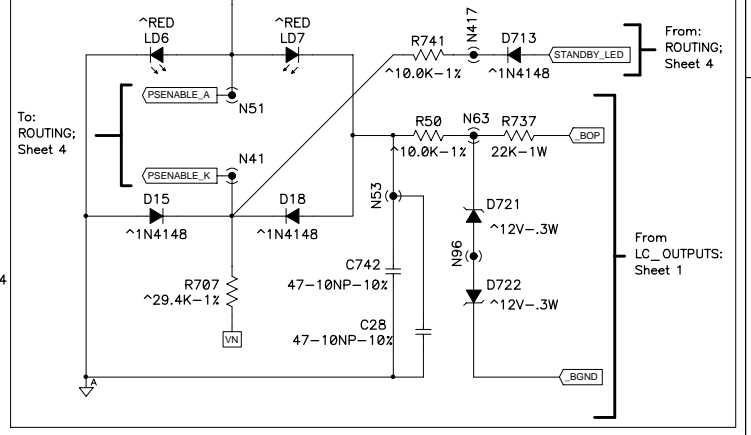


Total Gain = 16.85dB

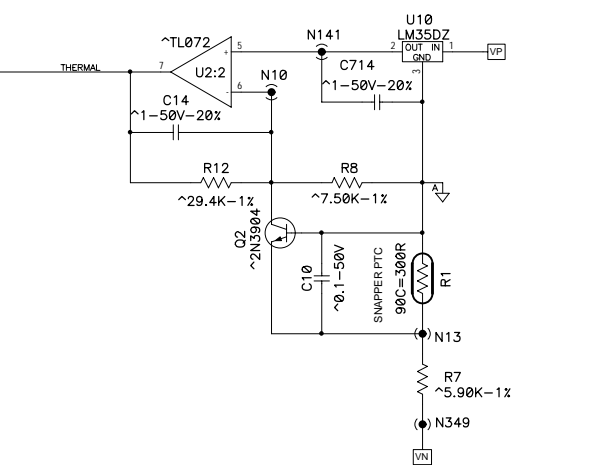
PROTECT DRIVE



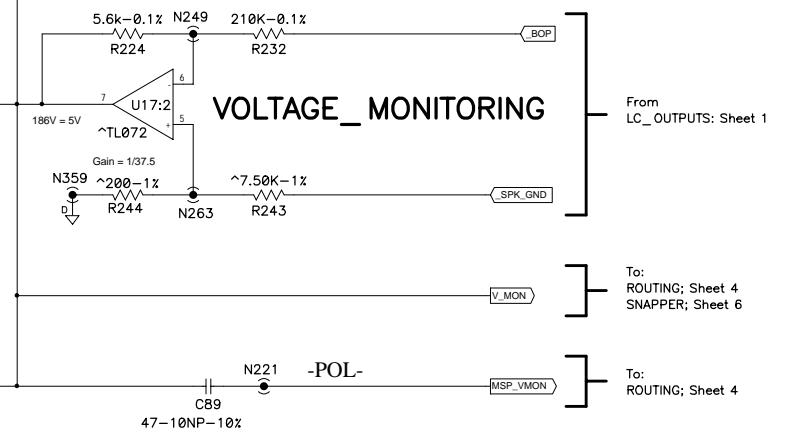
DC_PROTECTION via POWER SUPPLY KILL



THERMAL



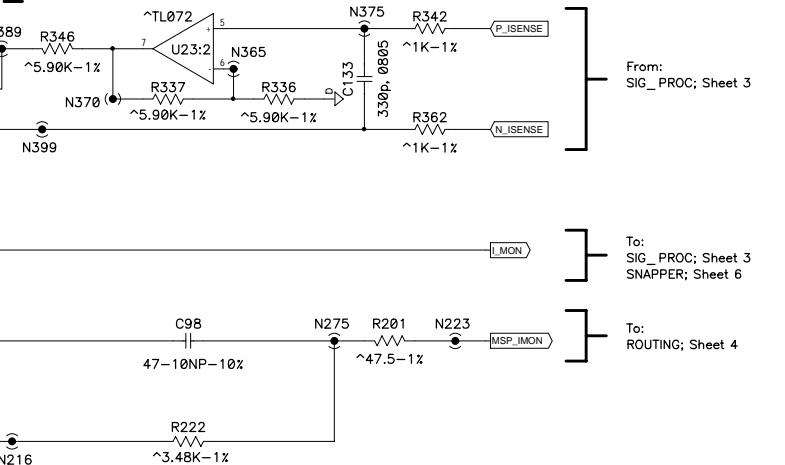
VOLTAGE_MONITORING



Gain = 107.5

70A = 5V >5V = Current Limiting.

VOLTAGE_MONITORING

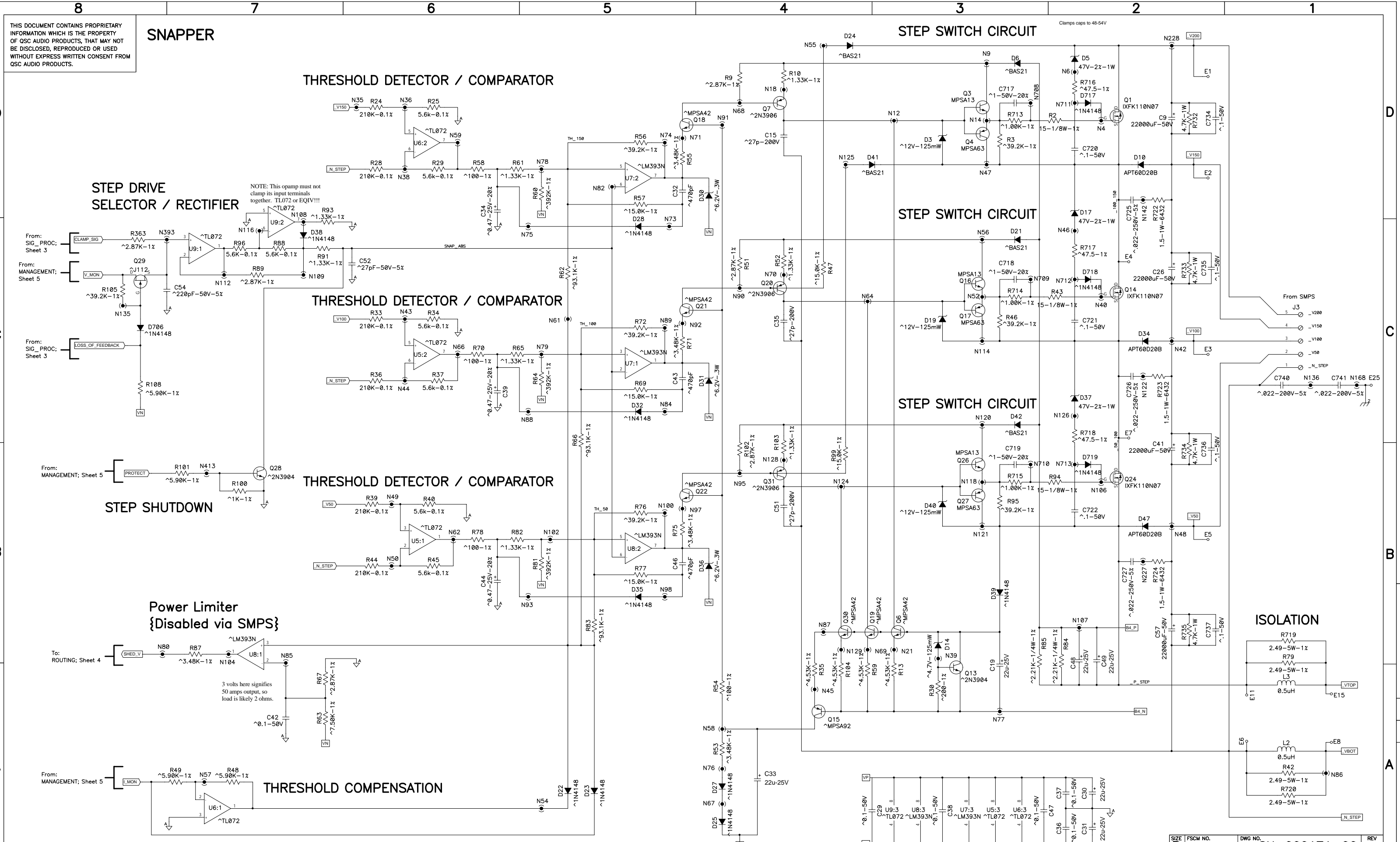


Total Gain = 16.85dB

70A = 5V >5V = Current Limiting.

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SNAPPER

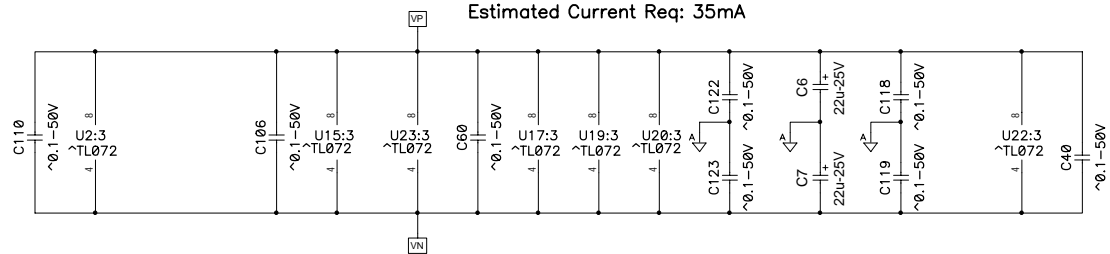
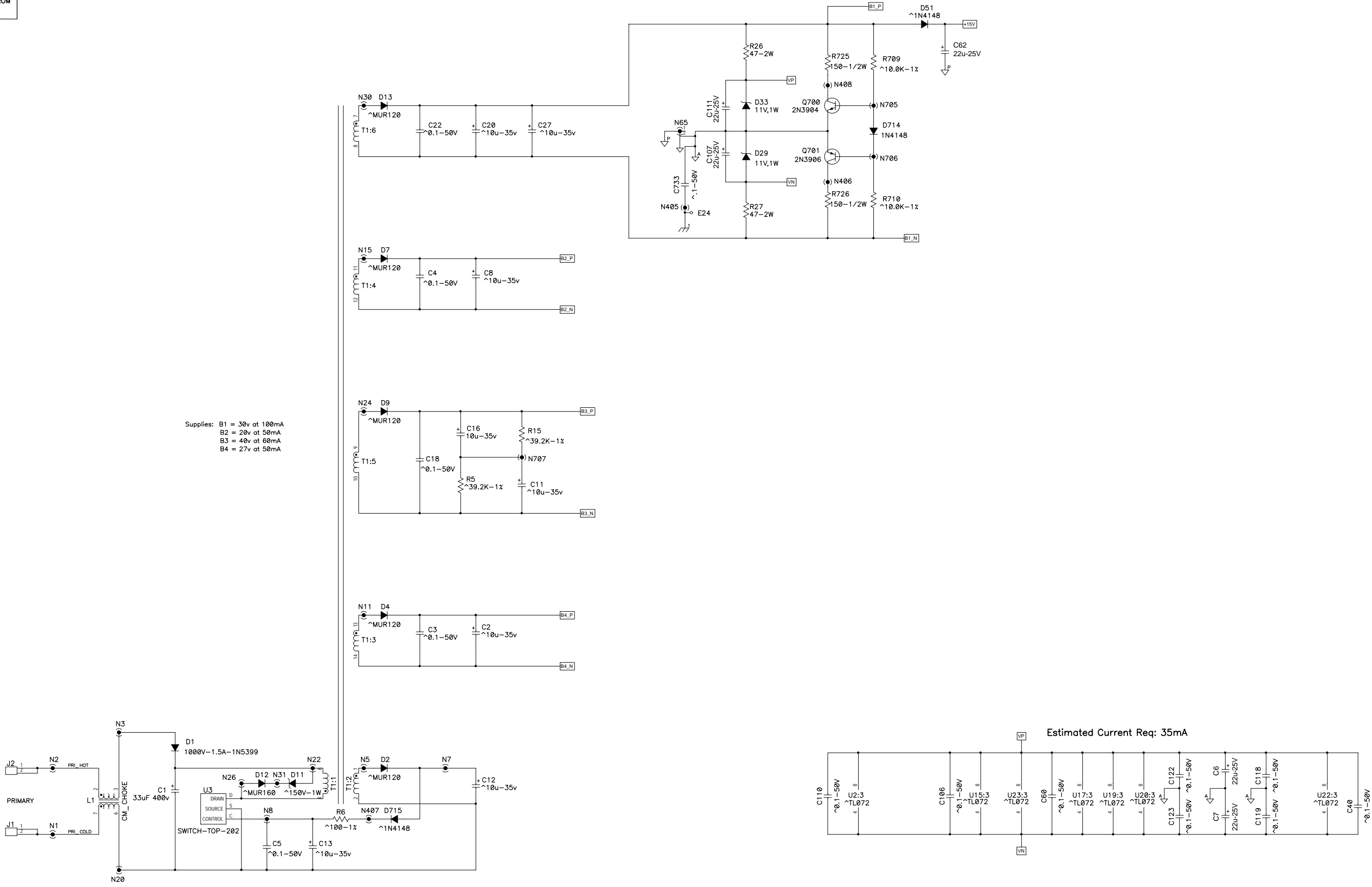


DWG NO. SH-000171-00

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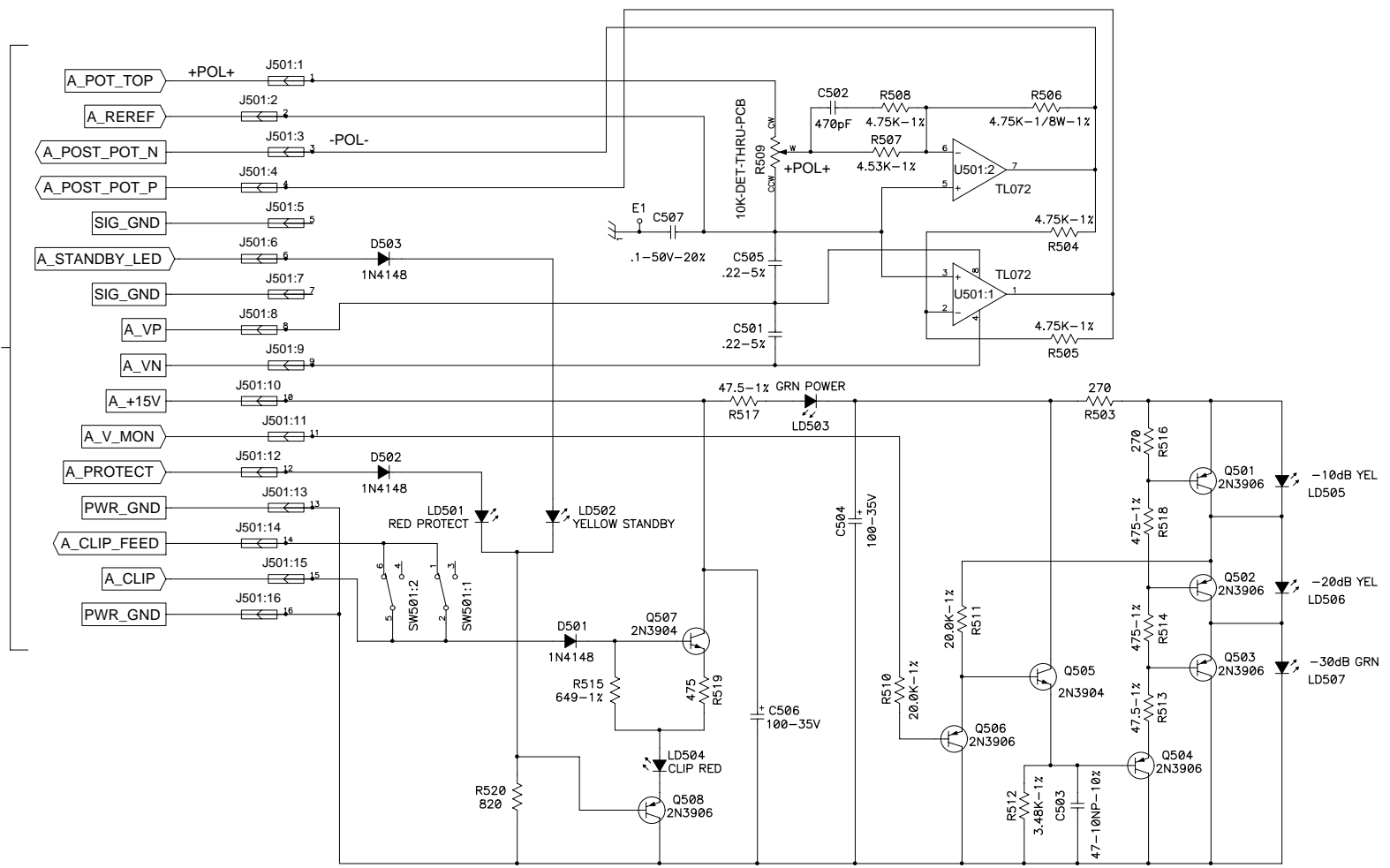
HK_SUPPLY

Supplies: B1 = 30v at 100mA
 B2 = 20v at 50mA
 B3 = 40v at 60mA
 B4 = 27v at 50mA



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TO MAIN PCB
SH-000171-00
SHEET 4



- 4. CH 1 COMPONENTS NUMBERED 501-599.
CH2 COMPONENTS NUMBERED 601-699.
 - 3. ALL CAPACITORS ARE IN MICROFARADS.
 - 2. ALL RESISTORS ARE IN OHMS, 1/4W, 5%.
 - 1. THIS DRAWING USED IN CONJUNCTION WITH ASSEMBLY WP-000176-00
AND FABRICATION DRAWING PC-000176-00.
- NOTES: UNLESS OTHERWISE SPECIFIED

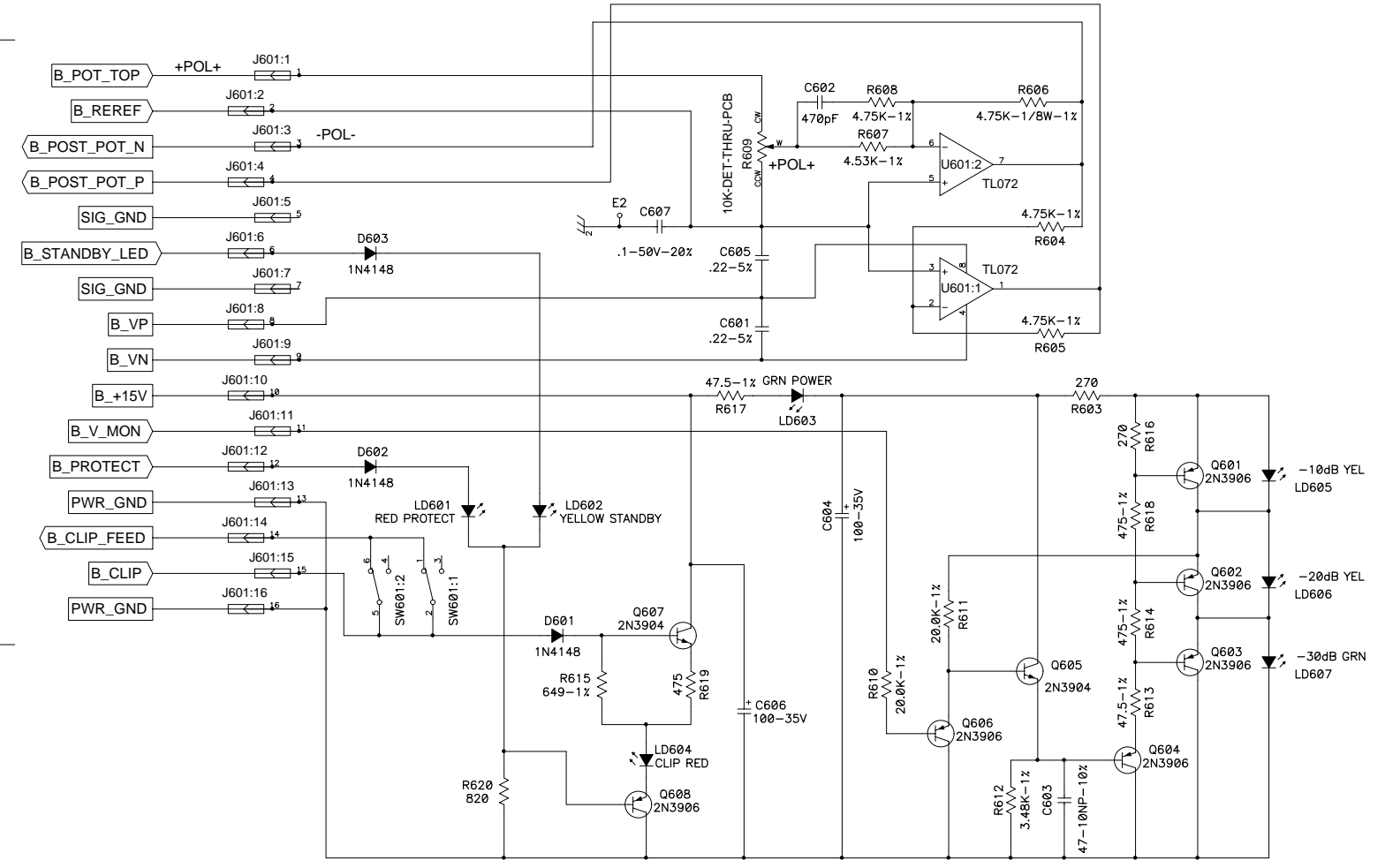
QTY	ITEM NO.	PART NO.	DESCRIPTION	VENDOR
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSIONS PER ANSI Y14.5-1982 TOLERANCES ARE: DECIMALS DECIMALS ANGLES .XX ± .XXX ± 0			CONTRACT NO.	
DRAWN P. Ierymenko			DATE 11-30-95	
CHECKED RCM			5-13-98	
ISSUED TIM SHOOK			5-15-98	
CAD SEED FILE NO.			PLOT DATE: Thu May 04, 2000	
APPLICATION			DO NOT SCALE DRAWING	

QSC AUDIO PRODUCTS, INC. COSTA MESA, CALIFORNIA	
SCHEMATIC DIAGRAM DISPLAY PCB, PL 9.0 & 6.0	
SIZE D	FSCM NO.
DWG NO. SH-000176-00	REV
SCALE NONE	CAD FILE NO. Sh176-b.sch
SHEET 1 OF 2	P:\MEGAMP\TANGO\DISPLAY

1 SH-000176-00 DWG NO.

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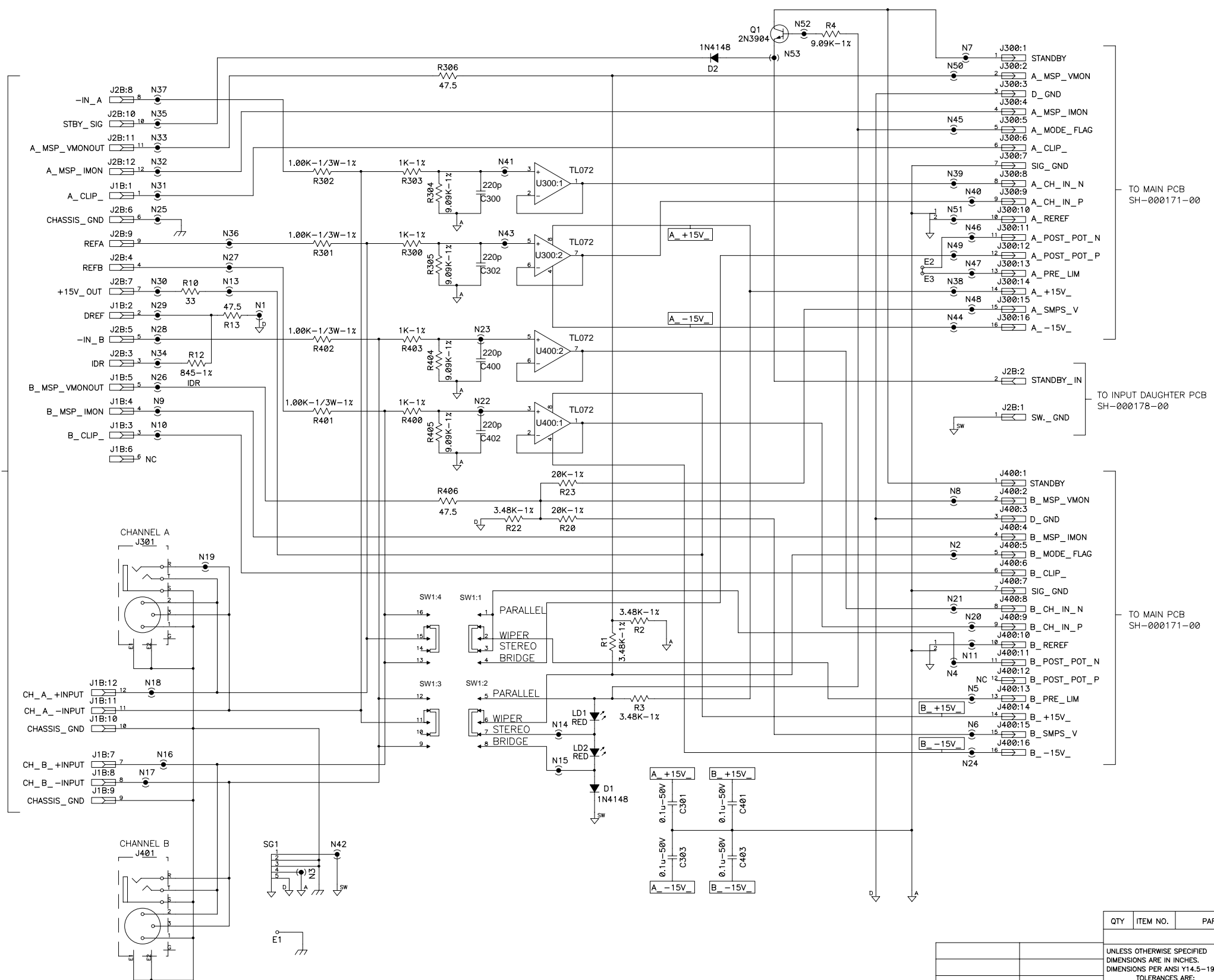
TO MAIN PCB
SH-000171-00
SHEET 4



SIZE	FSCM NO.	DWG NO.	REV
D		SH-000176-00	
SCALE	CAD FILE NO.	SHEET	2 OF 2
	Sh176-b.sch		

REV 2 SH-000176-00 DWG NO.

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QTY	ITEM NO.	PART NO.	DESCRIPTION	VENDOR
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSIONS PER ANSI Y14.5-1982 TOLERANCES ARE:			CONTRACT NO.	
DECIMALS	DECIMALS	ANGLES	APPROVALS	DATE
.XX ±	.XXX ±	0	DRAWN P. Ierymenko	11-30-95
DEBURR EDGES .XXX R MAX MATERIAL			CHECKED	
WP-000175-00	PL 9.0	FINISH	ISSUED	SIZE D FSCM NO.
NEXT ASSY	USED ON		CAD SEED FILE NO.	DWG NO. SH-000175-00
APPLICATION			DO NOT SCALE DRAWING	SHEET 1 OF 1

1. THIS DRAWING USED IN CONJUNCTION WITH ASSEMBLY WP-000175-00 AND FABRICATION DRAWING PC-000175-00.

NOTES: UNLESS OTHERWISE SPECIFIED

1 SH-000175-00 (DWG NO.)

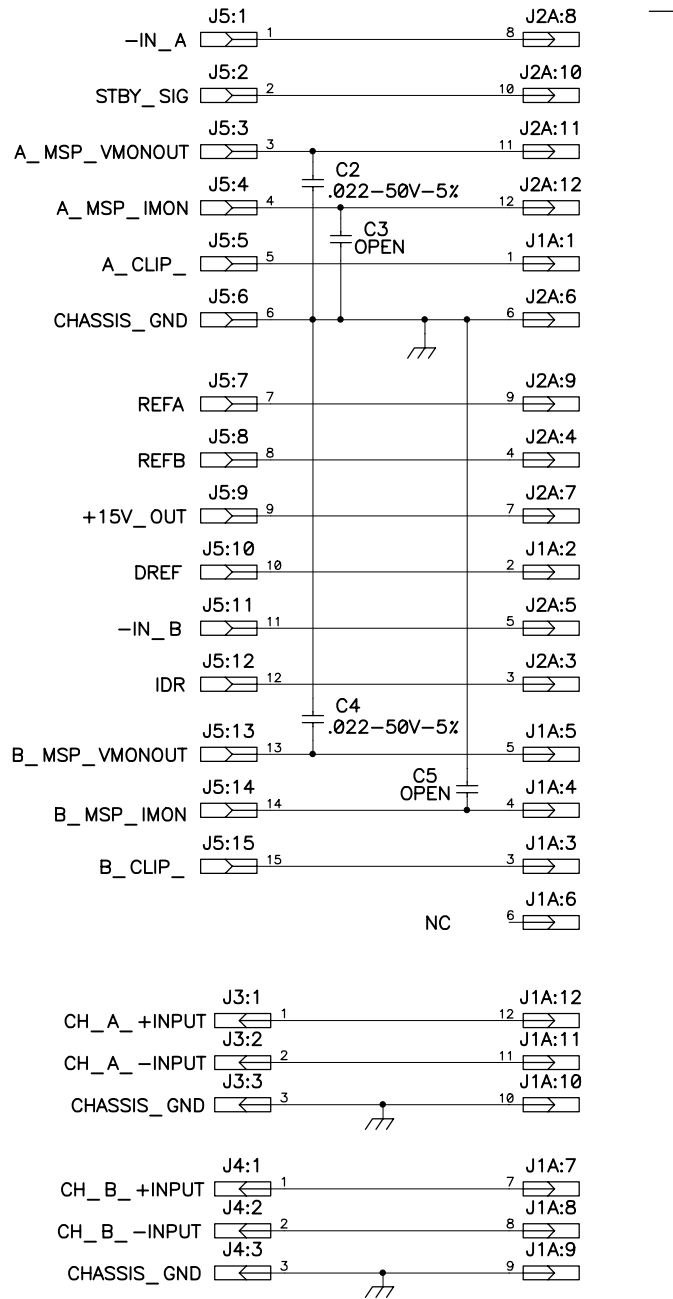
QSC AUDIO PRODUCTS, INC.
COSTA MESA, CALIFORNIA

SCHEMATIC DIAGRAM
INPUT PCB, PL 9.0

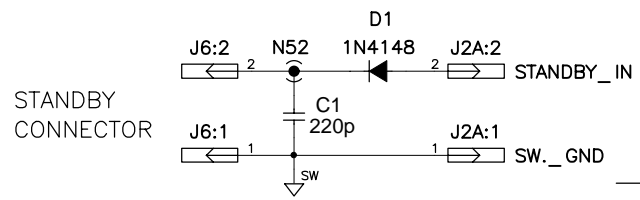
SCALE NONE CAD FILE NO. sh175-a5.sch SHEET 1 OF 1

P:\MEGAMP\TANGO\INPUT

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TO INPUT PCB
SH-000175-00

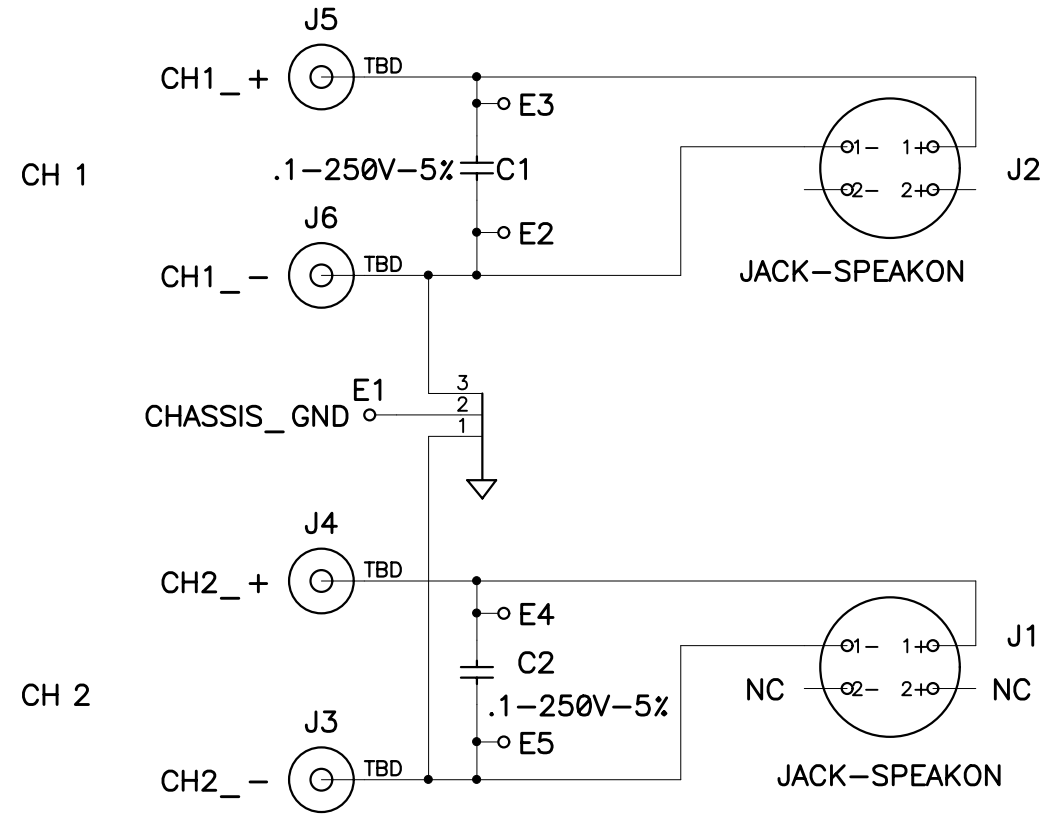


QTY	ITEM NO.	PART NO.	DESCRIPTION	VENDOR
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSIONS PER ANSI Y14.5-1982 TOLERANCES ARE: DECIMALS DECIMALS ANGLES .XX ± .XXX ± 0 DEBURR EDGES .XXX R MAX MATERIAL			CONTRACT NO.	
FINISH			AUDIO PRODUCTS, INC. COSTA MESA, CALIFORNIA	
NEXT ASSY USED ON			APPROVALS	DATE
APPLICATION			DRAWN A. CERRILLO	3-18-96
DO NOT SCALE DRAWING			CHECKED	
			ISSUED	
			SIZE	FSCM NO.
			C	
			DWG NO. SH-000178-00	
			CAD SEED FILE NO. SH0178-1.SCH	Thu May 04, 2000
			SCALE	CAD FILE NO. sh178-a3.sch
			SHEET	1 OF 1

**SCHEMATIC DIAGRAM
INPUT DAUGHTER PCB, PL9.0**

DWG NO. **SH-000178-00**

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1. THIS DRAWING USED IN CONJUNCTION WITH ASSEMBLY WP-000179-00 AND FABRICATION DRAWING PC-000179-00.

NOTES: UNLESS OTHERWISE SPECIFIED

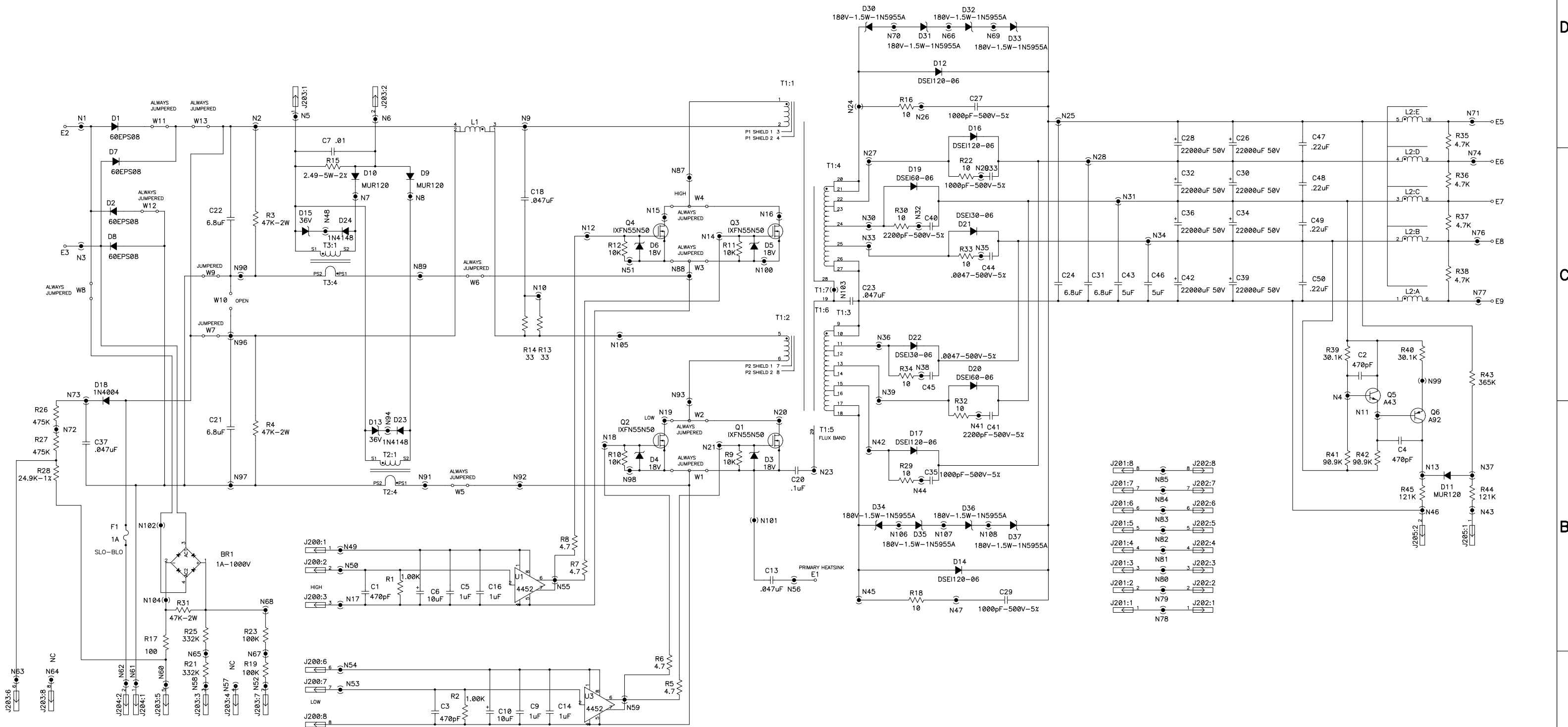
QTY	ITEM NO.	PART NO.	DESCRIPTION	VENDOR
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSIONS PER ANSI Y14.5-1982 TOLERANCES ARE: DECIMALS DECIMALS ANGLES .XX ± .XXX ± 0 DEBURR EDGES .XXX R MAX MATERIAL			CONTRACT NO.	
			APPROVALS	DATE
			DRAWN A. CERRILLO	6-11-97
			CHECKED	
			ISSUED	
			CAD SEED FILE NO.	PLOT DATE: Thu May 04, 2000
APPLICATION		DO NOT SCALE DRAWING		
WP-000179-00	PL 9.0	FINISH		
NEXT ASSY	USED ON			
		SCALE		NONE
		CAD FILE NO.		sh0179-A.sch
		DWG NO.		SH-000179-00
		SHEET		1 OF 1



AUDIO PRODUCTS, INC.
COSTA MESA, CALIFORNIA

**SCHEMATIC DIAGRAM
OUTPUT PCB**

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1. THIS DRAWING USED IN CONJUNCTION WITH ASSEMBLY WP-000173-00 AND FABRICATION DRAWING PC-000173-00.
 NOTES: UNLESS OTHERWISE SPECIFIED

QTY	ITEM NO.	PART NO.	DESCRIPTION	VENDOR
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSIONS PER ANSI Y14.5-1982 TOLERANCES ARE:			CONTRACT NO.	
DECIMALS	DECIMALS	ANGLES	APPROVALS	
.XX ±	.XXX ±	0	DATE	
DRAWN ERIC MENDENHALL			3-5-98	
CHECKED R. MUNIZ			5-14-98	
ISSUED TIM SHOOK			5-15-98	
CAD SEED FILE NO.			PLOT DATE: Thu May 04, 2000	
APPLICATION			DO NOT SCALE DRAWING	

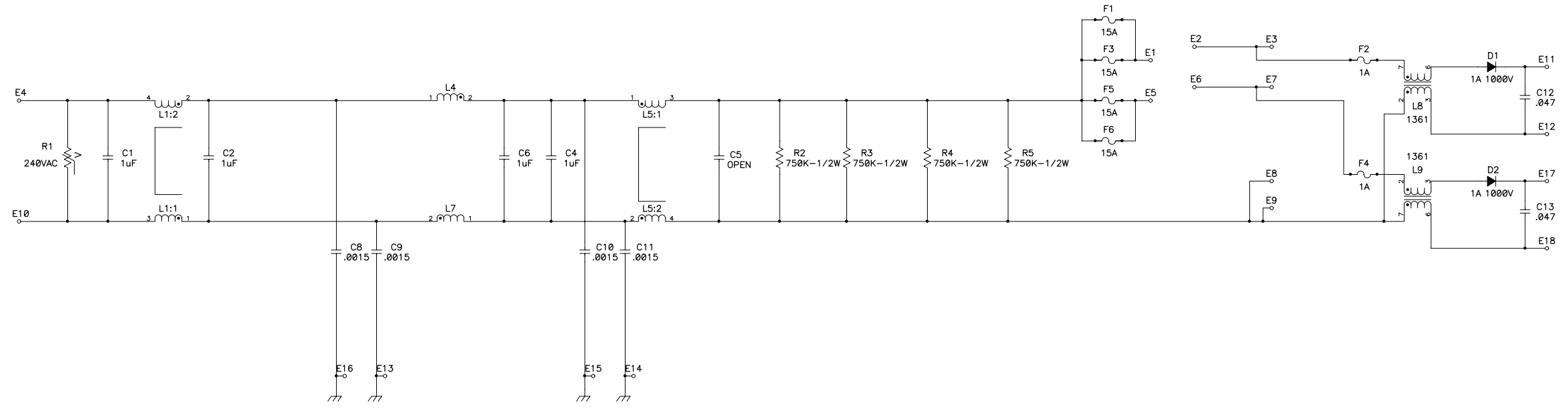
QSC AUDIO PRODUCTS, INC.
 COSTA MESA, CALIFORNIA

SCHEMATIC DIAGRAM
PWR SPLY PCB, PL 9.0 (120V)

SIZE: FSCM NO. DWG NO. SH-000173-00 REV
 SCALE: NONE CAD FILE NO. sh173-E.sch SHEET 1 OF 1

1 SH-000173-00 DWG NO.

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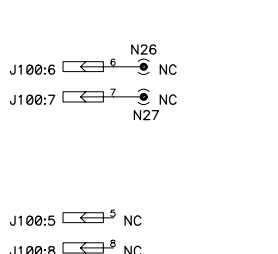
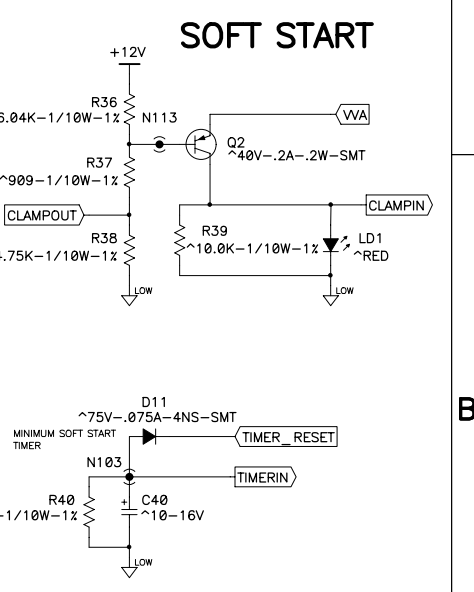
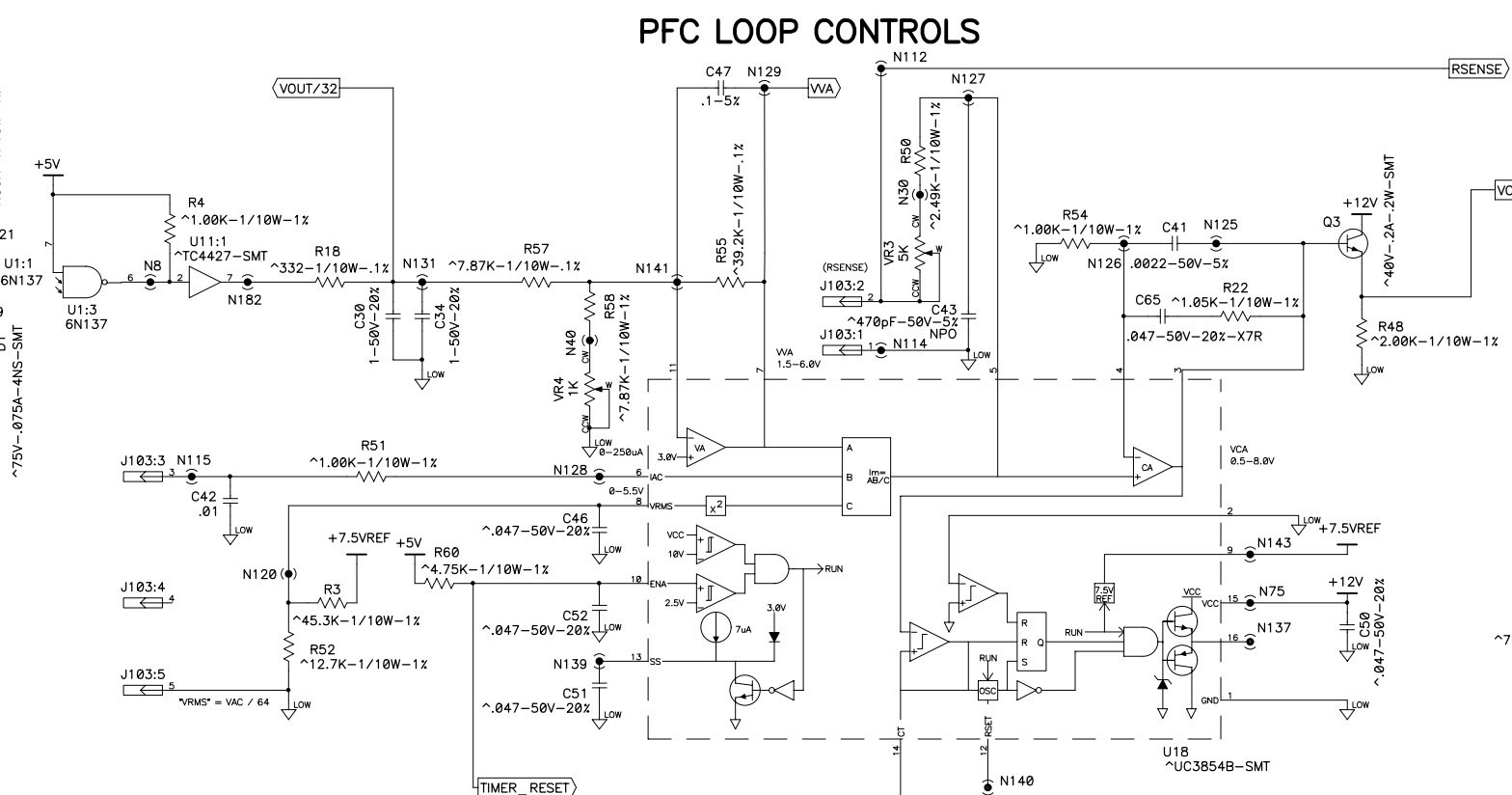
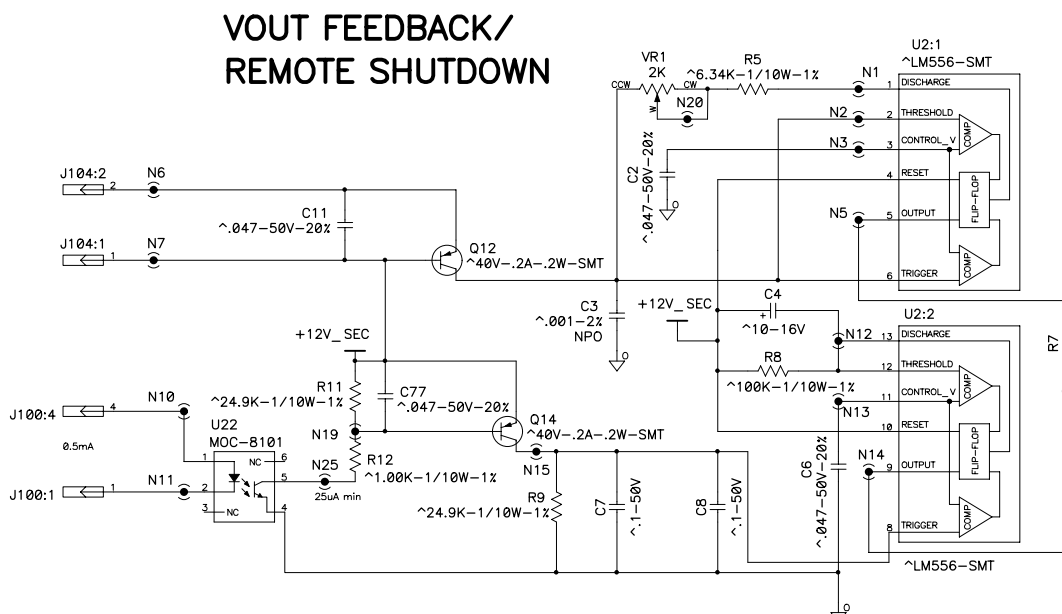
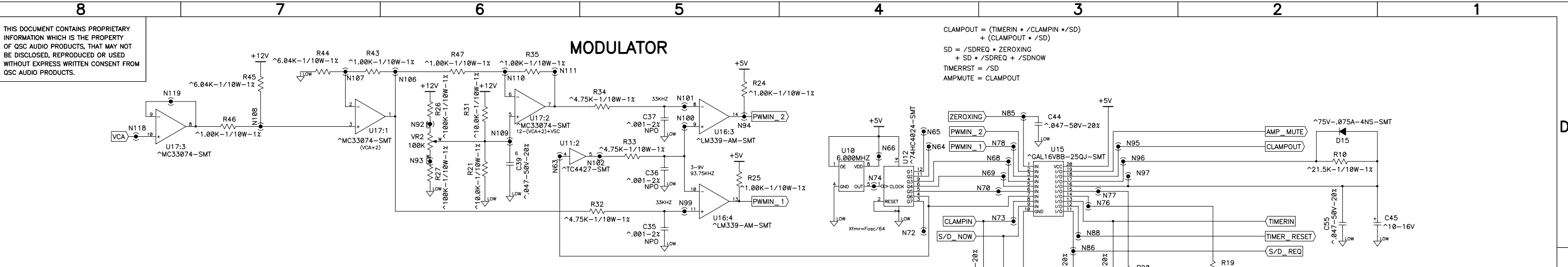
1. THIS DRAWING USED IN CONJUNCTION WITH ASSEMBLY WP-000181-00 AND FABRICATION DRAWING PC-000177-00.
 NOTES: UNLESS OTHERWISE SPECIFIED

QTY	ITEM NO.	PART NO.	DESCRIPTION	VENDOR
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSIONS PER ANSI Y14.5-1982 TOLERANCES ARE: DECIMALS DECIMALS ANGLES .XX ± .XXX ± 0 DEBURR EDGES .XXX R MAX MATERIAL			CONTRACT NO.	
FINISH			APPROVALS	DATE
WP-000181-00	PL 9.0		DRAWN ERIC MENDENHALL	2-9-98
NEXT ASSY	USED ON		CHECKED RCM	5-14-98
APPLICATION			ISSUED TIM SHOOK	5-15-98
DO NOT SCALE DRAWING			CAD SEED FILE NO.	Thu May 04, 2000
		SIZE	FSCM NO.	DWG NO.
		D		SH-000181-00
		SCALE	CAD FILE NO.	SHEET 1 OF 1
			SH181-B.sch	

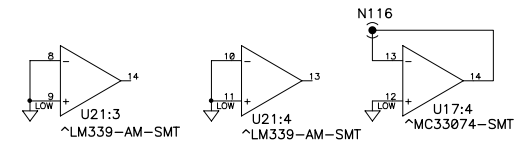
QSC AUDIO PRODUCTS, INC.
 COSTA MESA, CALIFORNIA
SCHEMATIC DIAGRAM
PL9.0 LINE FILTER 230VAC

1 SH-000181-00 DWG NO.

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2. SYMBOL "*" BEFORE A COMPONENT VALUE DENOTES THAT COMPONENT IS SURFACE MOUNT.
 1. THIS DRAWING USED IN CONJUNCTION WITH ASSEMBLY WP-000174-00 AND FABRICATION DRAWING PC-000174-00.
- NOTES: UNLESS OTHERWISE SPECIFIED

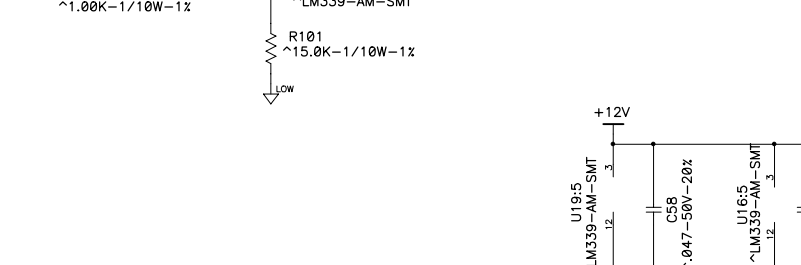
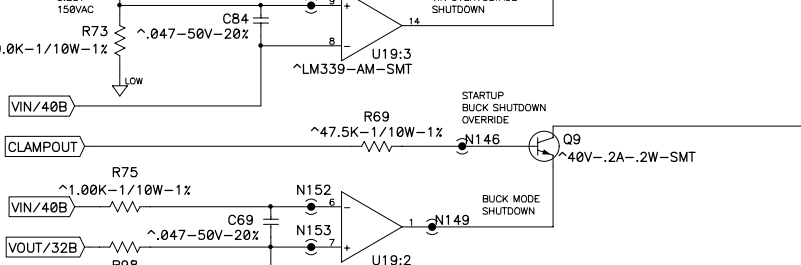
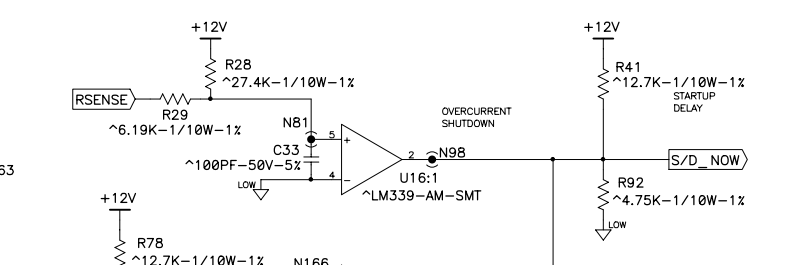
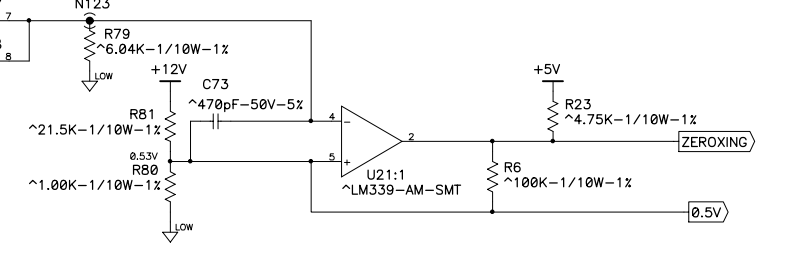
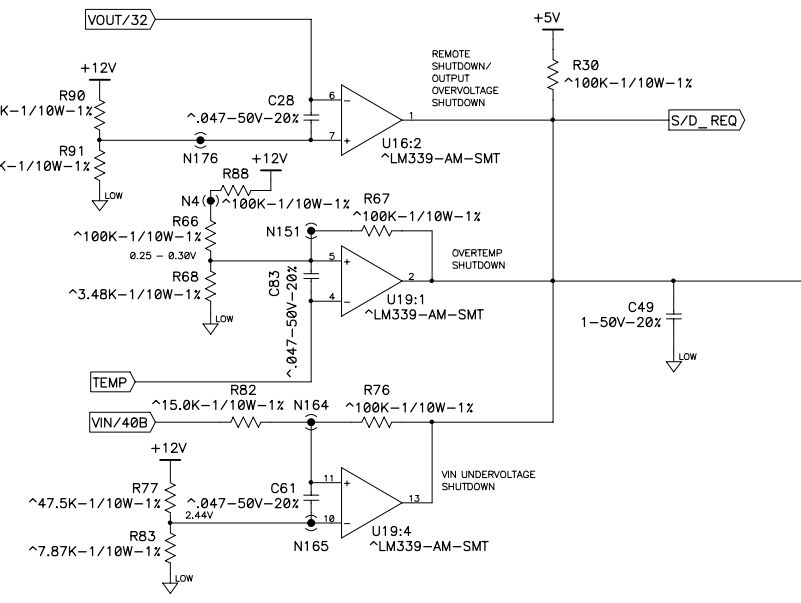
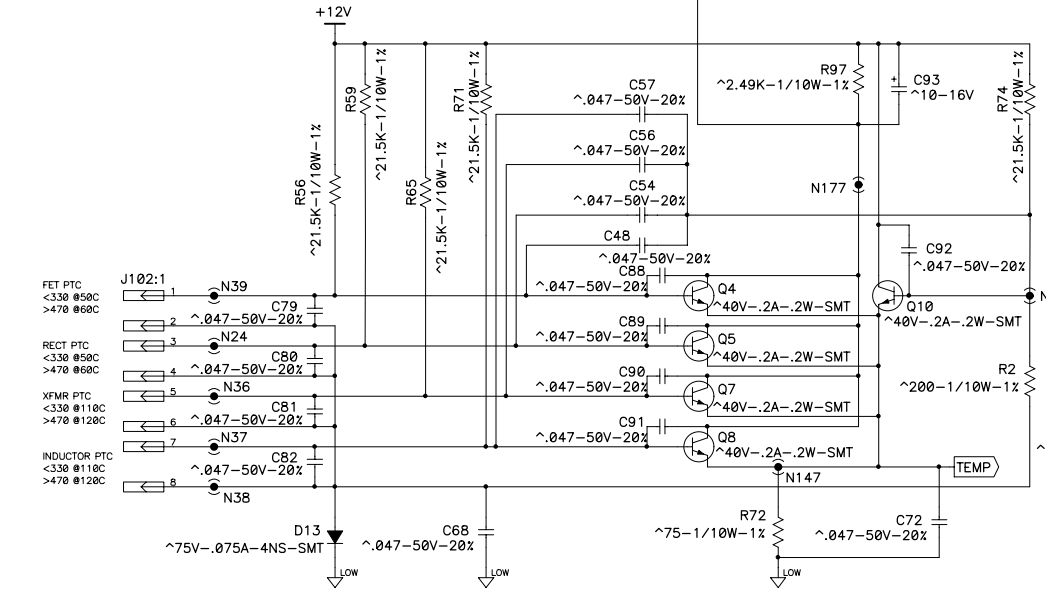
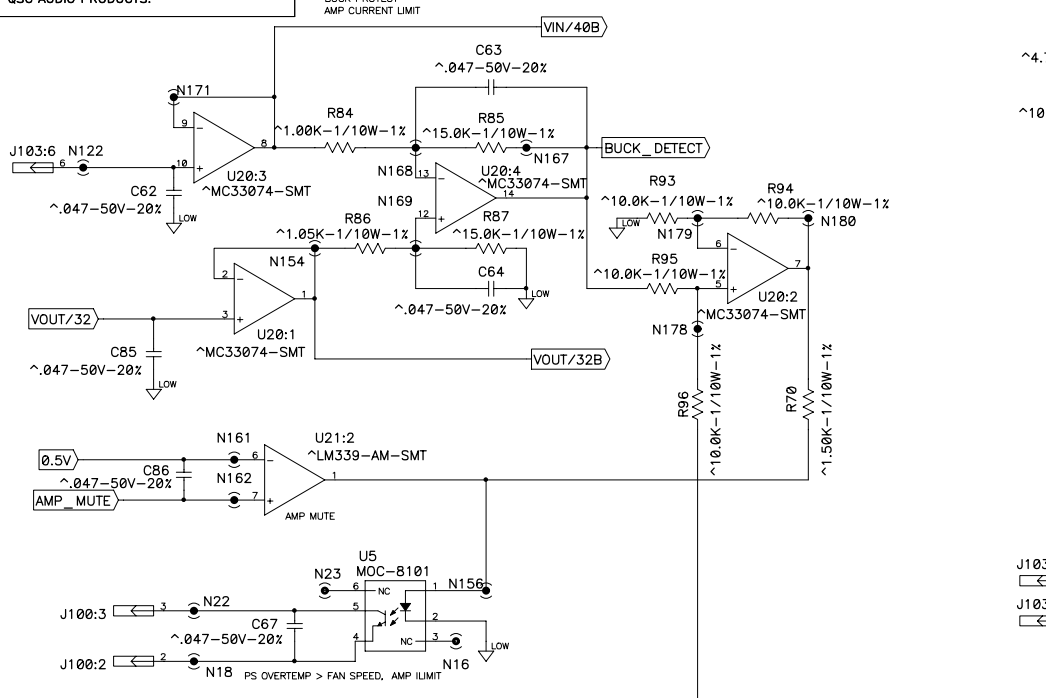


QTY	ITEM NO.	PART NO.	DESCRIPTION	VENDOR
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSIONS PER ANSI Y14.5-1982 TOLERANCES ARE:			QSC AUDIO PRODUCTS, INC. COSTA MESA, CALIFORNIA	
DECIMALS	DECIMALS	ANGLES		
.XX ±	.XXX ±	0	SCHEMATIC DIAGRAM PL9.0 PWR SUPPLY CONTROLLER	
DEBURR EDGES .XXX R MAX				
MATERIAL			APPROVALS	DATE
FINISH			ERIC MENDENHALL	9/8/97
NEXT ASSY			CHECKED	RCM
USED ON			ISSUED	5-15-98
APPLICATION			CAD SEED FILE NO.	PLOT DATE: Thu May 04, 2000
DO NOT SCALE DRAWING			SCALE	NONE
			CAD FILE NO.	SH174-D.sch
			SHEET	1 OF 2

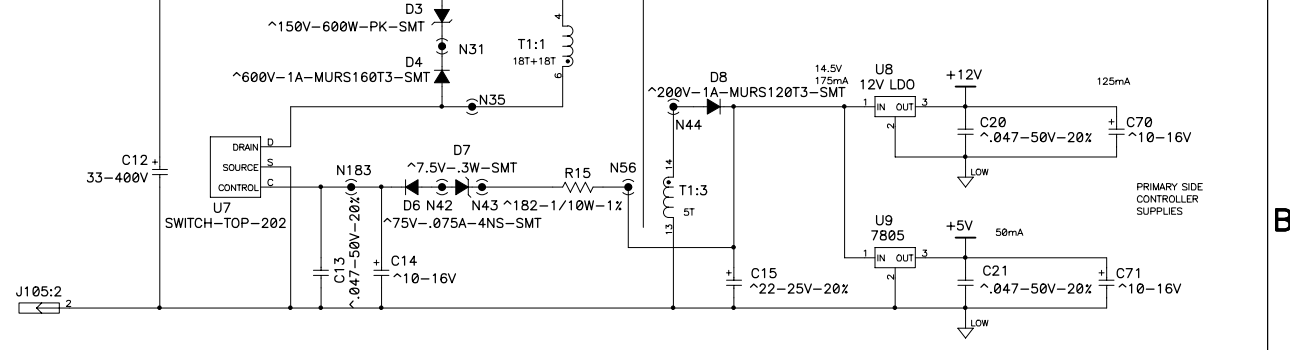
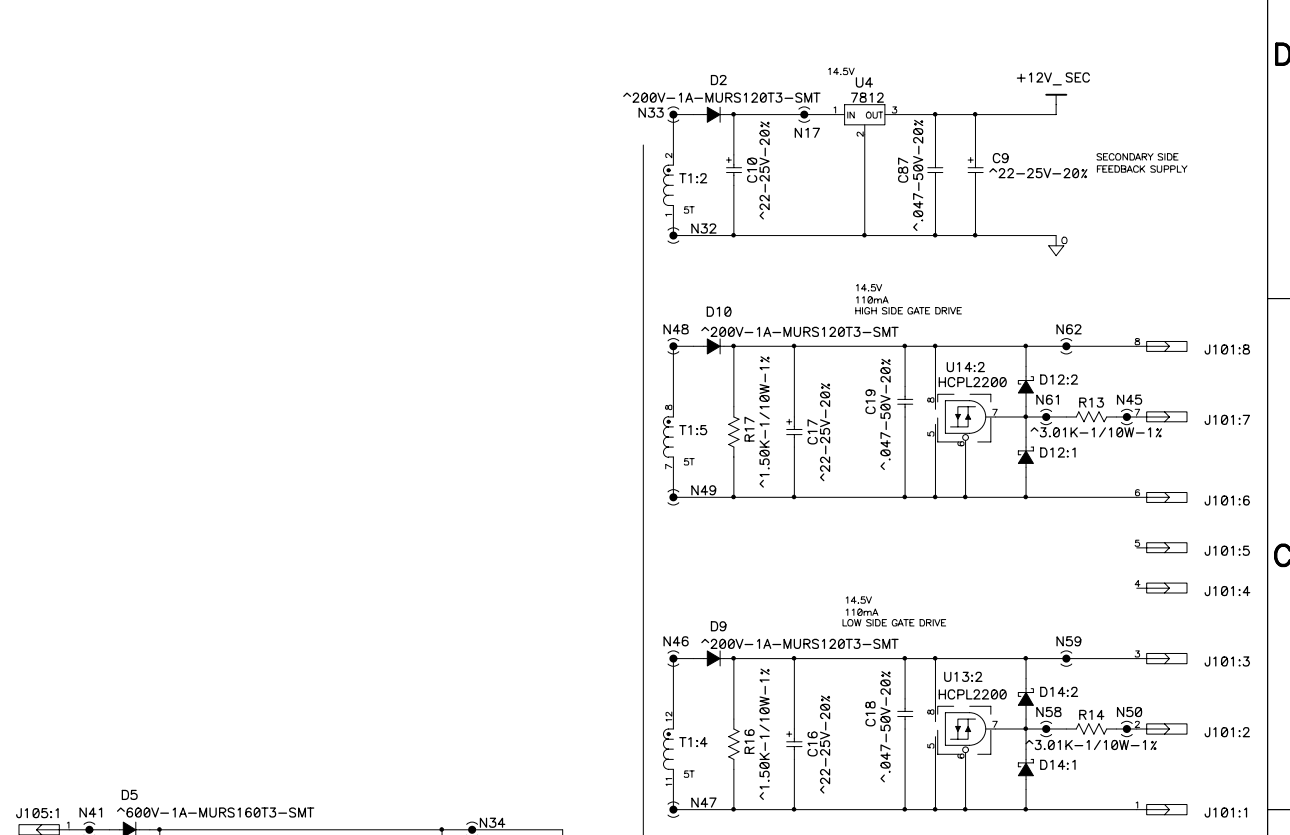
1 SH-000174-00 DWG NO.

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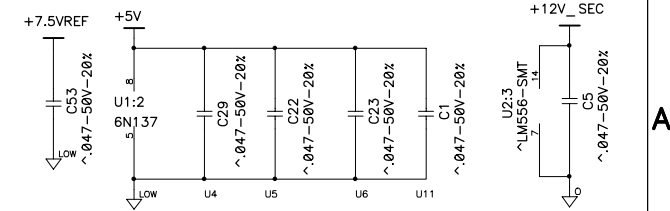
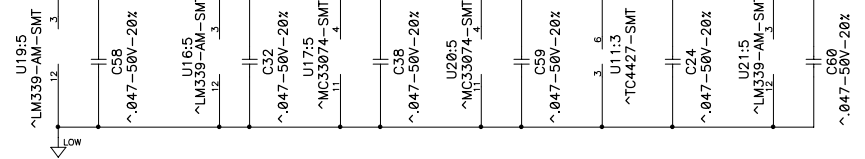
PROTECTION



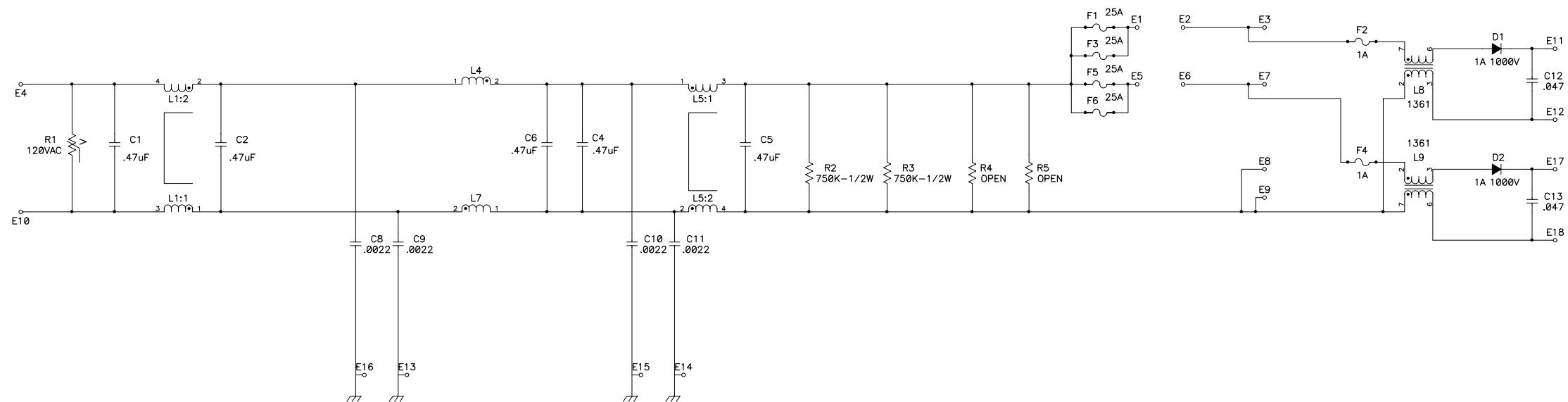
HOUSEKEEPING SUPPLY



POWER/BYPASS



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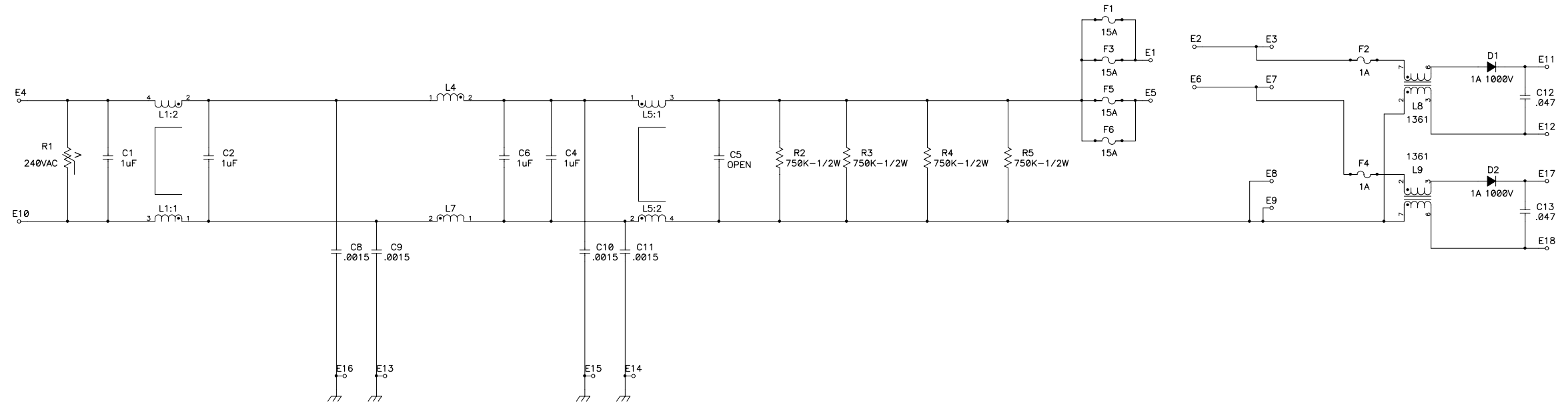
1. THIS DRAWING USED IN CONJUNCTION WITH ASSEMBLY WP-000177-00 AND FABRICATION DRAWING PC-000177-00.
 NOTES: UNLESS OTHERWISE SPECIFIED

QTY	ITEM NO.	PART NO.	DESCRIPTION	VENDOR
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSIONS PER ANSI Y14.5-1982 TOLERANCES ARE: DECIMALS DECIMALS ANGLES .XX ± .XXX ± °			CONTRACT NO.	
DEBURR EDGES .XXX R MAX			APPROVALS DATE	
MATERIAL			DRAWN ERIC MENDENHALL 2-9-98	
FINISH			CHECKED RCM 5-13-98	
WP-000177-00	PL 9.0		ISSUED TIM SHOOK 5-15-98	
NEXT ASSY	USED ON		PLOT DATE: Thu May 04, 2000	
APPLICATION			DO NOT SCALE DRAWING	

QSC AUDIO PRODUCTS, INC. COSTA MESA, CALIFORNIA	
SCHEMATIC DIAGRAM PL9.0 LINE FILTER 120VAC	
SIZE D	FSCM NO.
DWG NO. SH-000177-00	REV
SCALE NONE	CAD FILE NO. SH177-B.sch
SHEET 1 OF 1	

1 SH-000177-00 DWG NO.

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1. THIS DRAWING USED IN CONJUNCTION WITH ASSEMBLY WP-000181-00 AND FABRICATION DRAWING PC-000177-00.
 NOTES: UNLESS OTHERWISE SPECIFIED

QTY	ITEM NO.	PART NO.	DESCRIPTION	VENDOR
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSIONS PER ANSI Y14.5-1982 TOLERANCES ARE: DECIMALS DECIMALS ANGLES .XX ± .XXX ± ° DEBURR EDGES .XXX R MAX MATERIAL			CONTRACT NO.	
FINISH			APPROVALS	DATE
WP-000181-00	PL 9.0		DRAWN ERIC MENDENHALL	2-9-98
NEXT ASSY	USED ON		CHECKED RCM	5-14-98
APPLICATION			ISSUED TIM SHOOK	5-15-98
DO NOT SCALE DRAWING			CAD SEED FILE NO.	Thu May 04, 2000
		SIZE	FSCM NO.	DWG NO.
		D		SH-000181-00
		SCALE	CAD FILE NO.	SHEET 1 OF 1
			SH181-B.sch	

QSC AUDIO PRODUCTS, INC.
 COSTA MESA, CALIFORNIA
SCHEMATIC DIAGRAM
PL9.0 LINE FILTER 230VAC

1 SH-000181-00 DWG NO.