

PRIMARE



SPA20 Surround Processing Amplifier Service Manual

1. Circuit Diagrams

2. Adjustment

3. Technical Specifications

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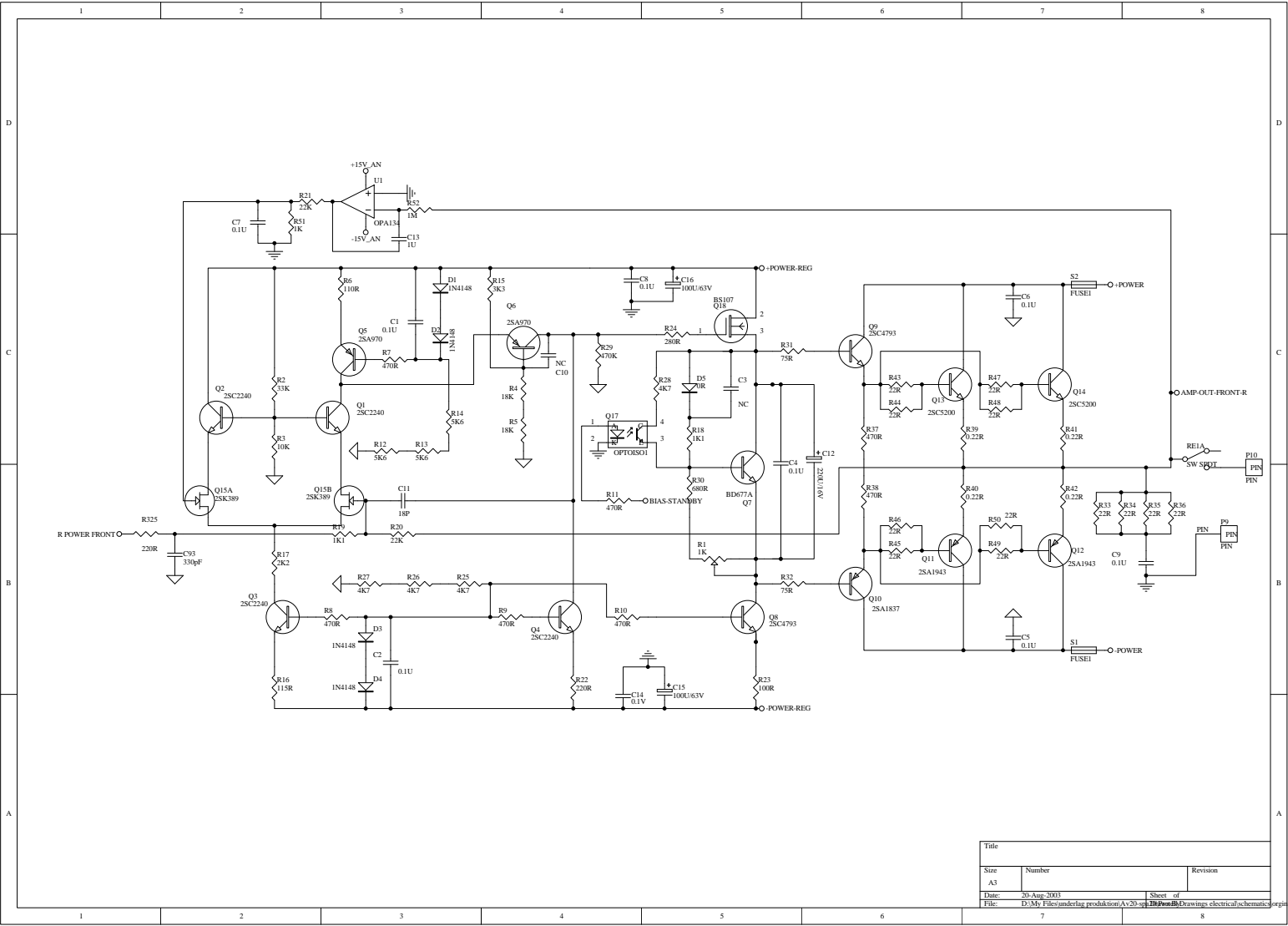
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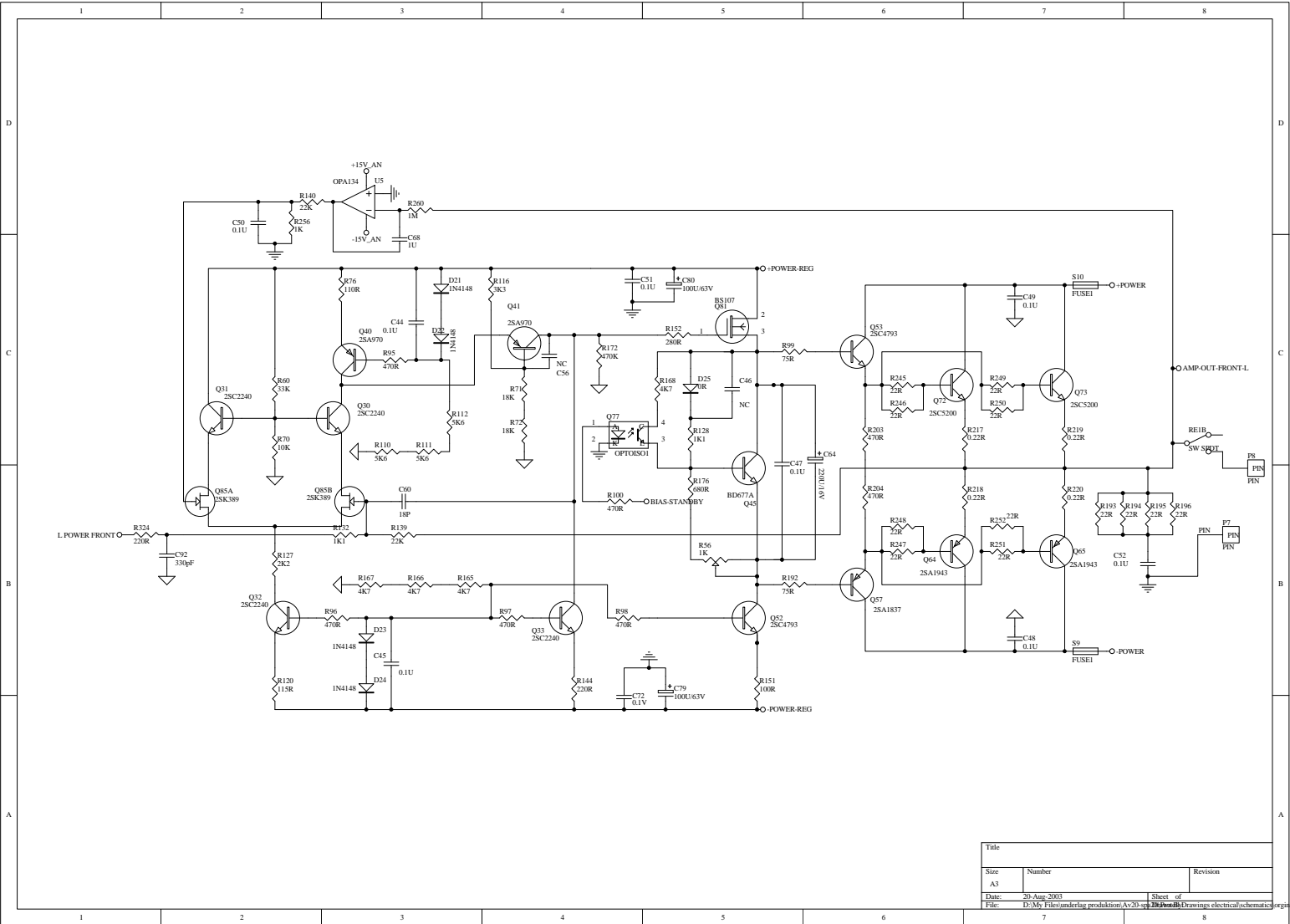
Bjorn Holmqvist

Primare Systems AB

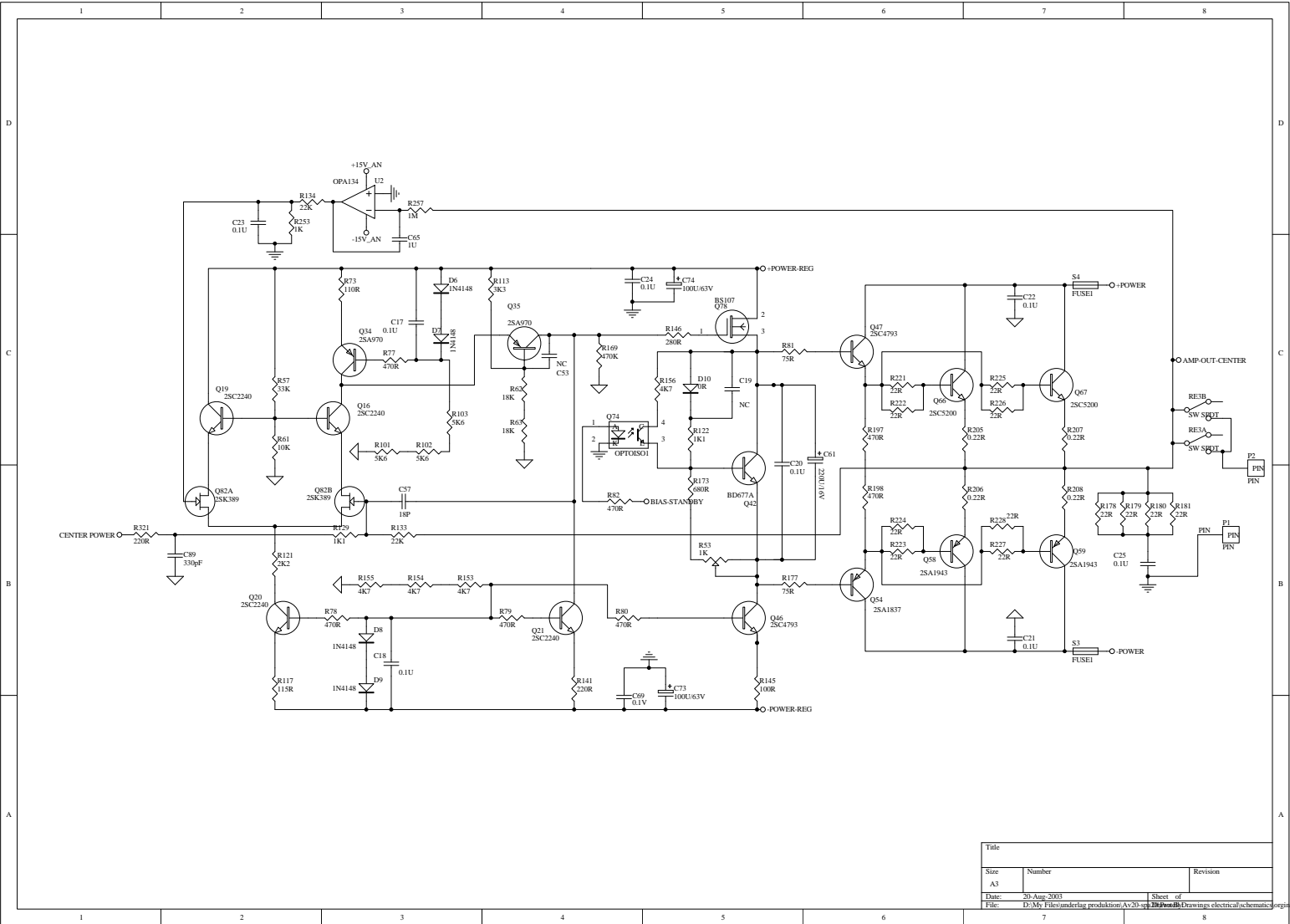
bjorn@primare.net



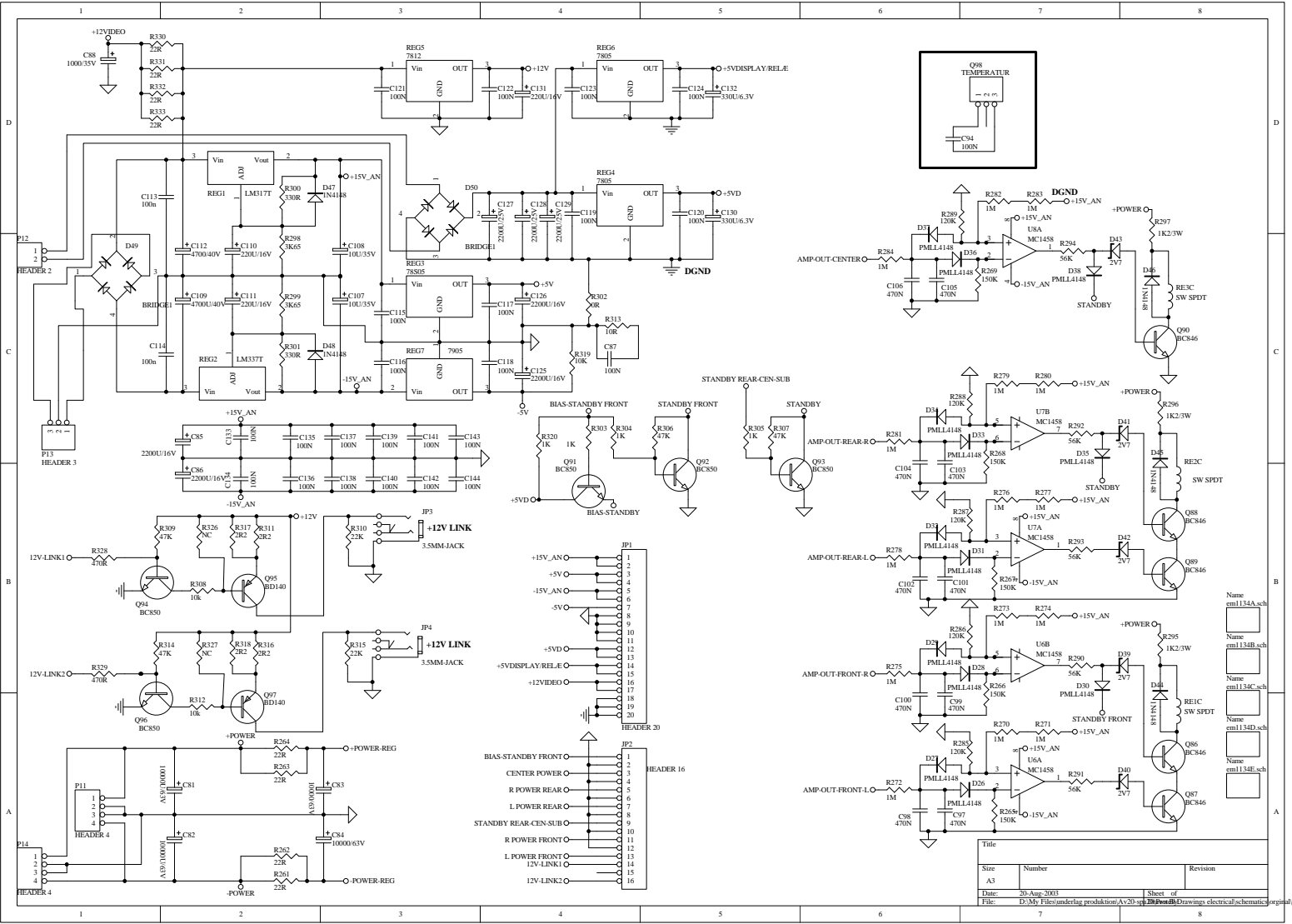
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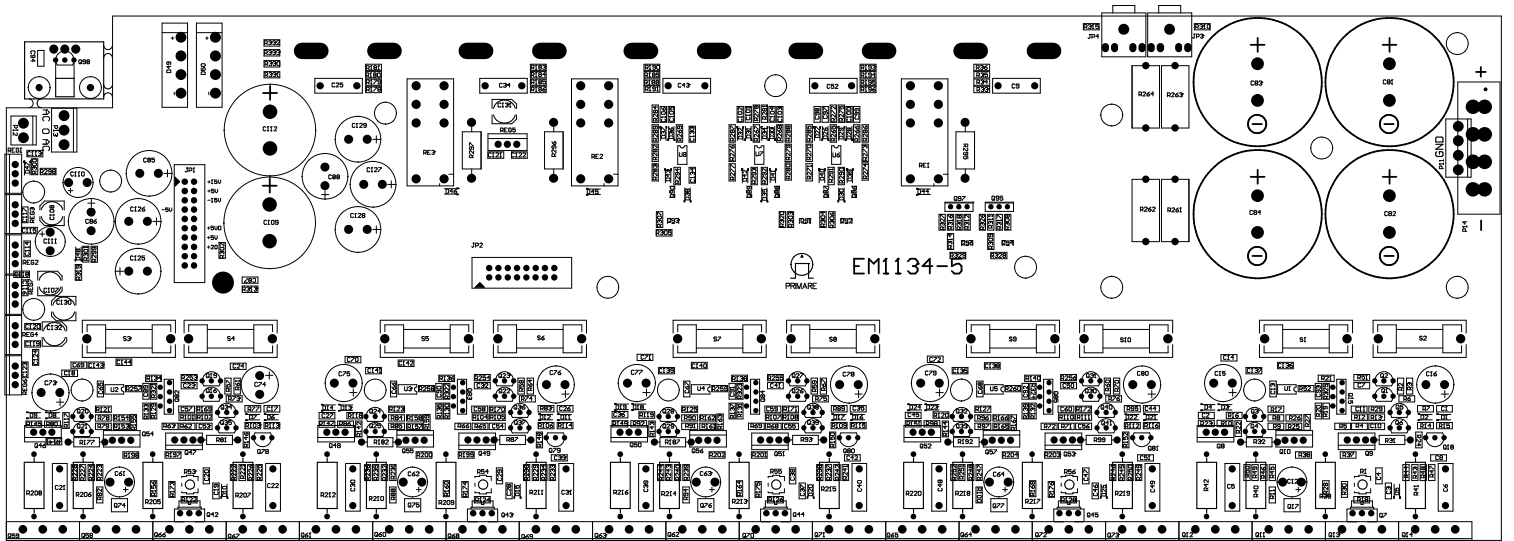


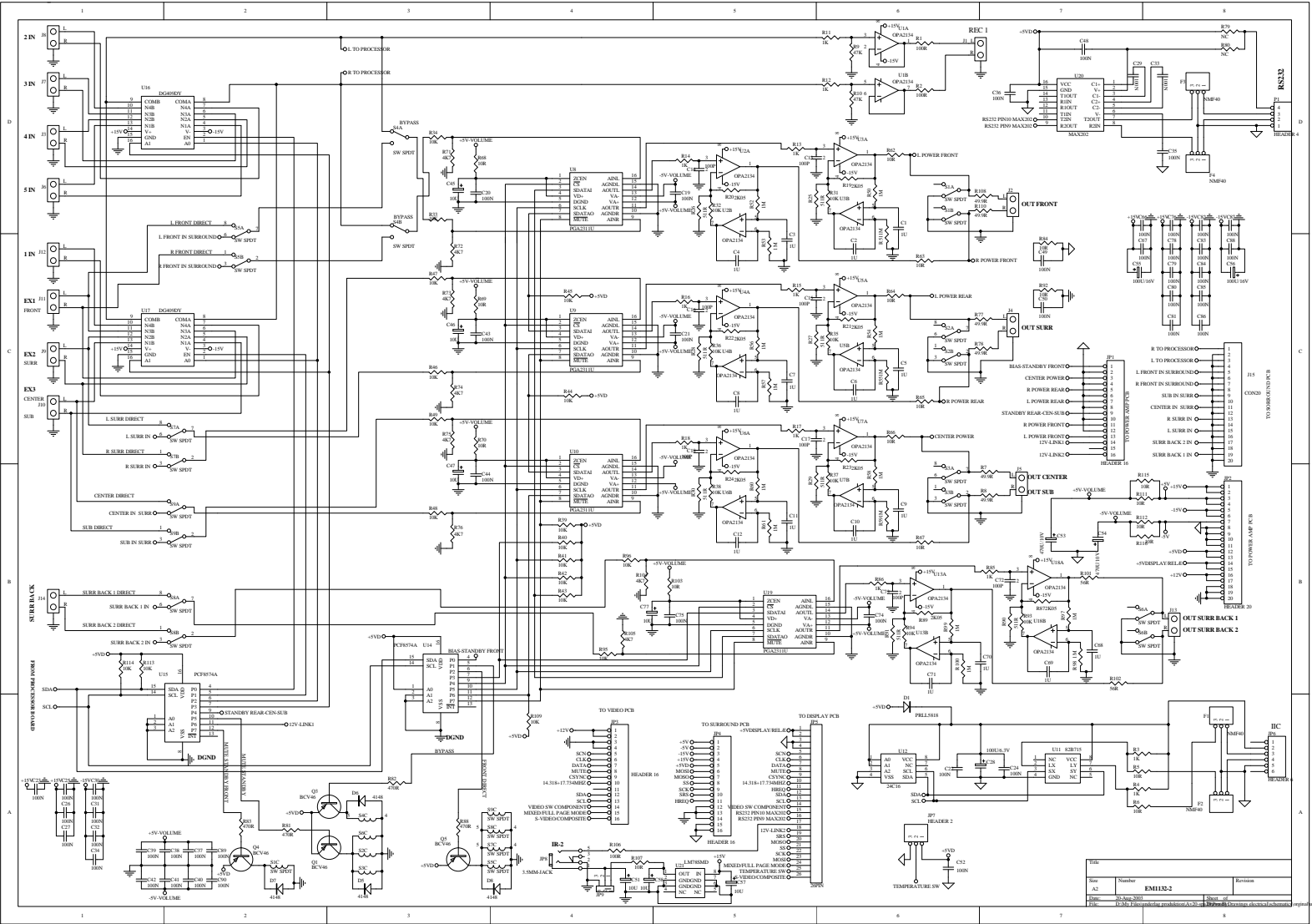
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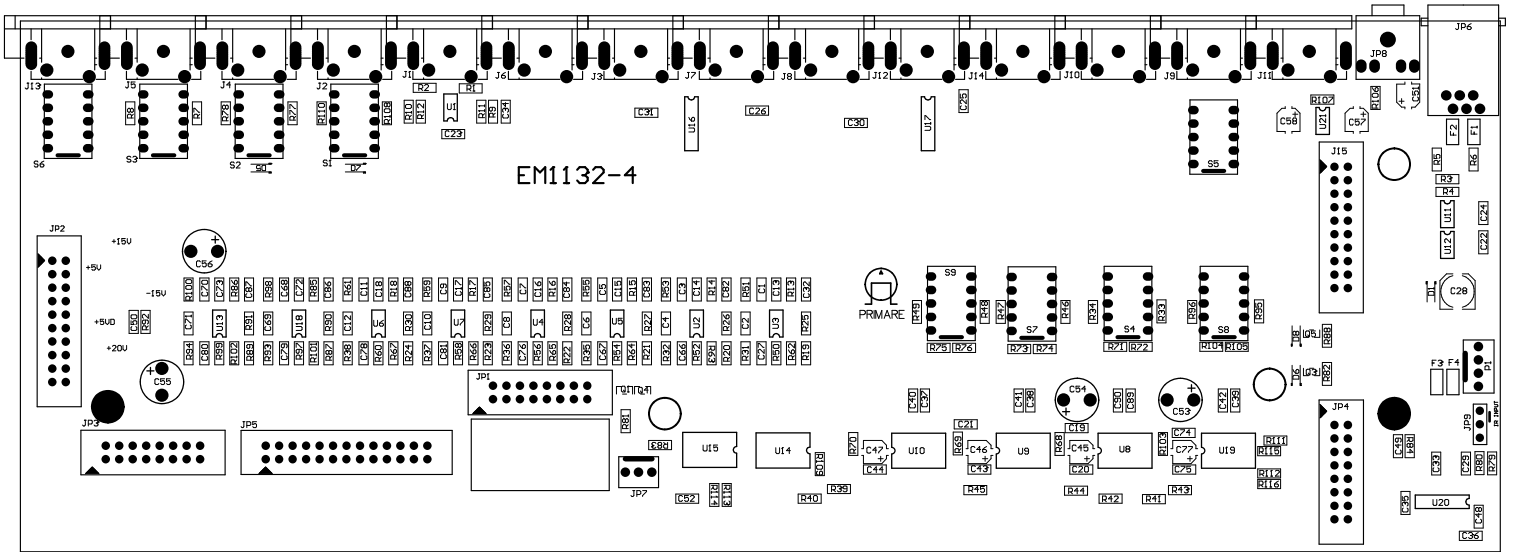


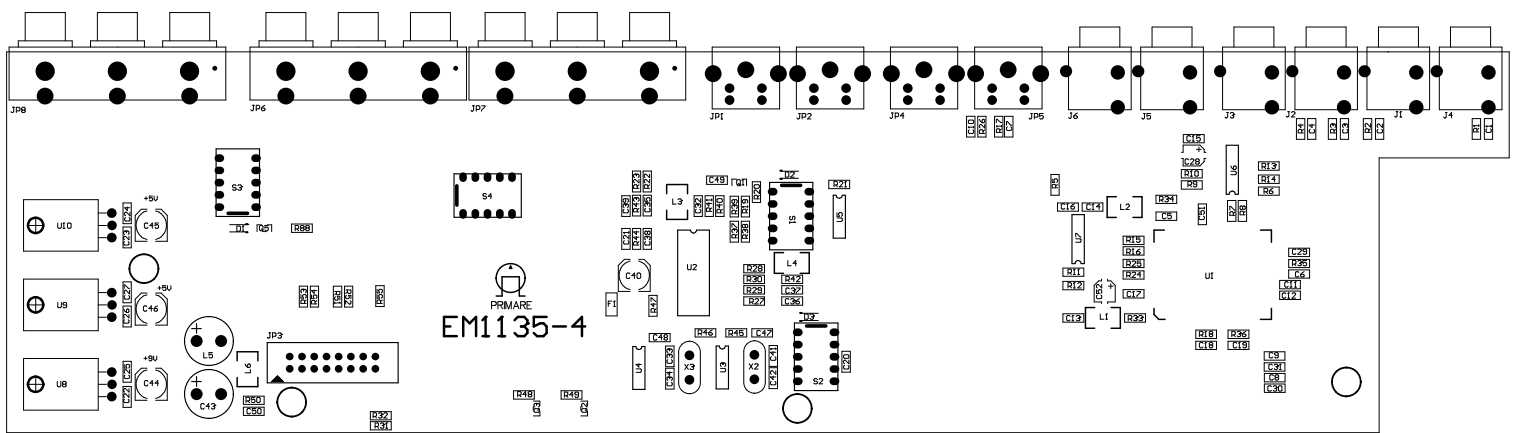




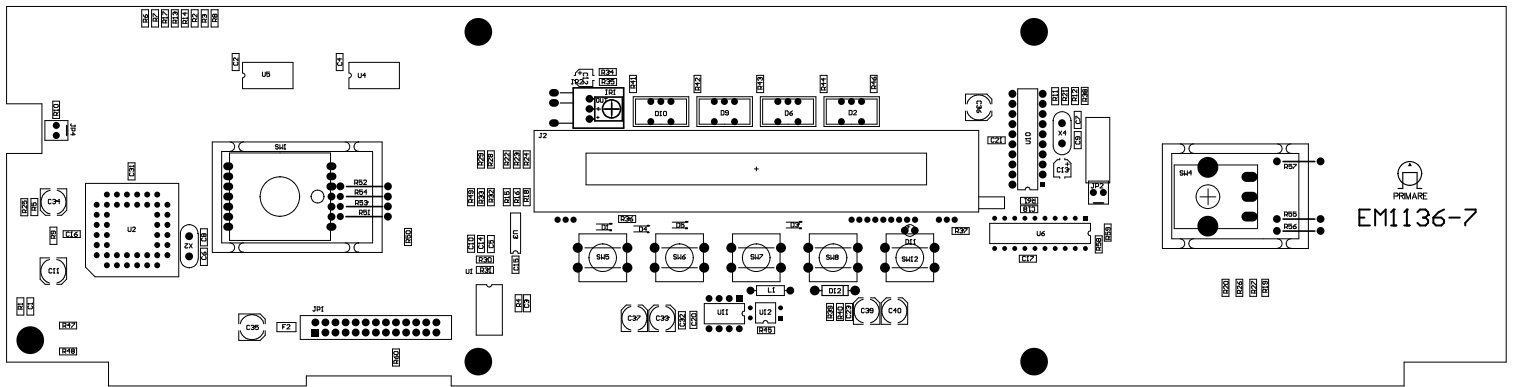
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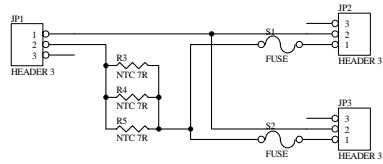




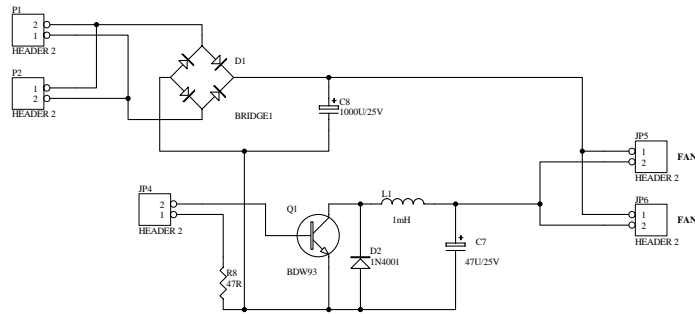
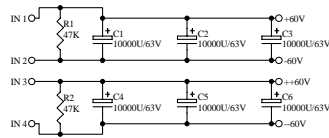
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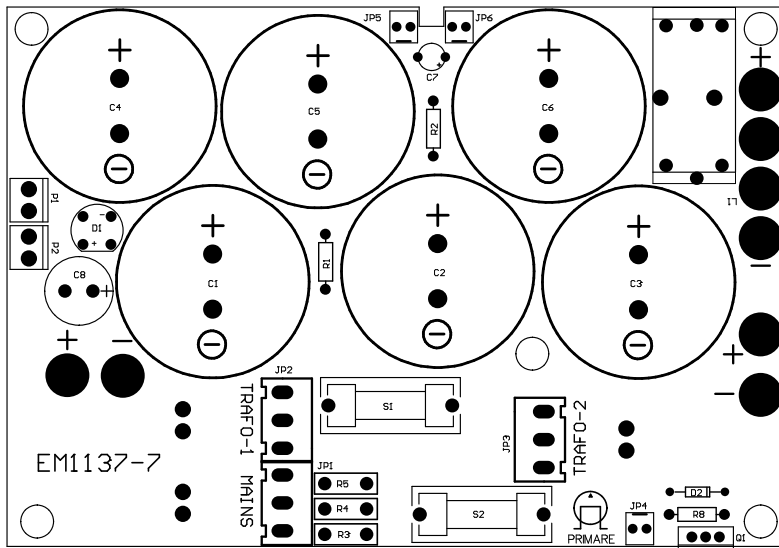

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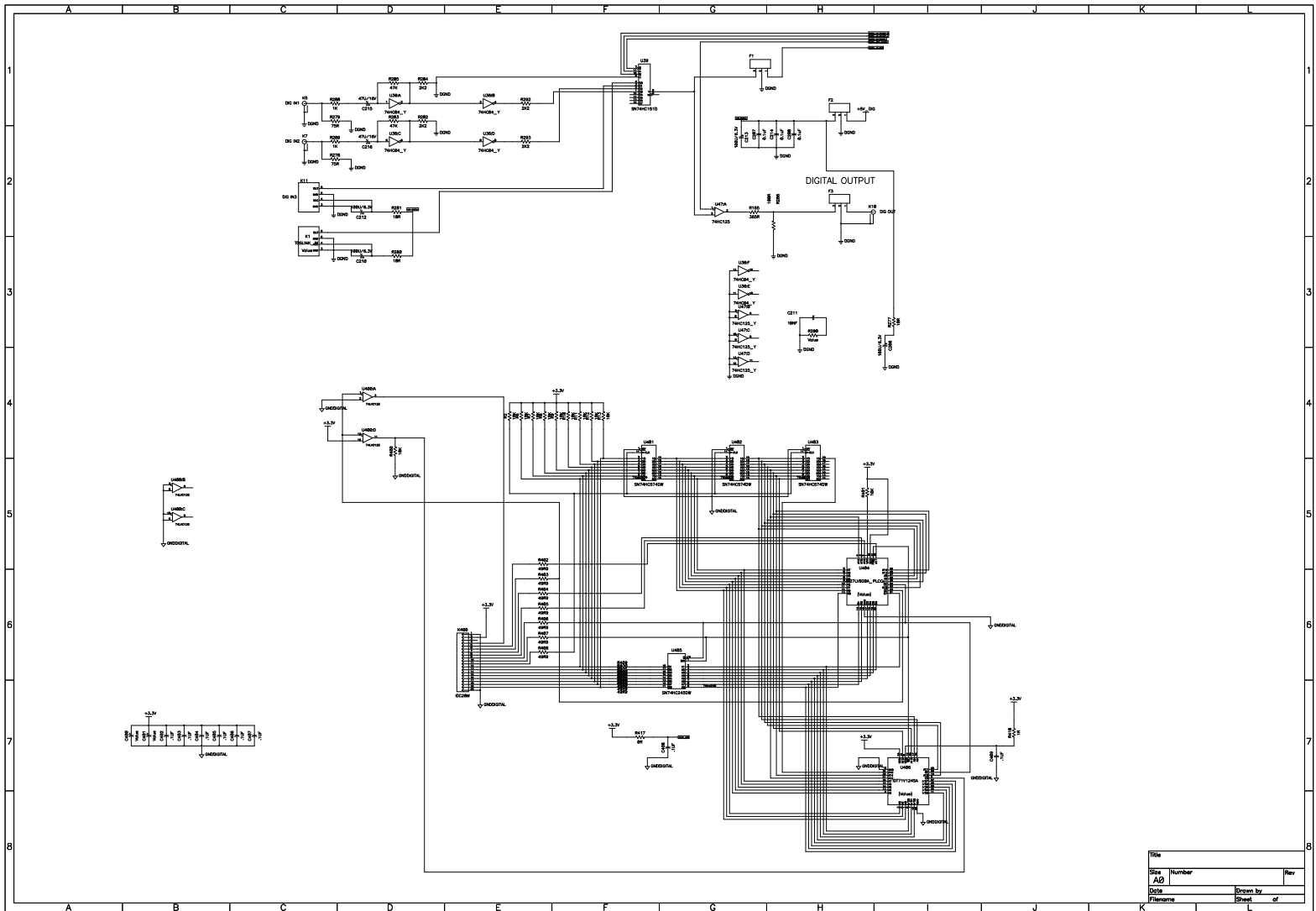


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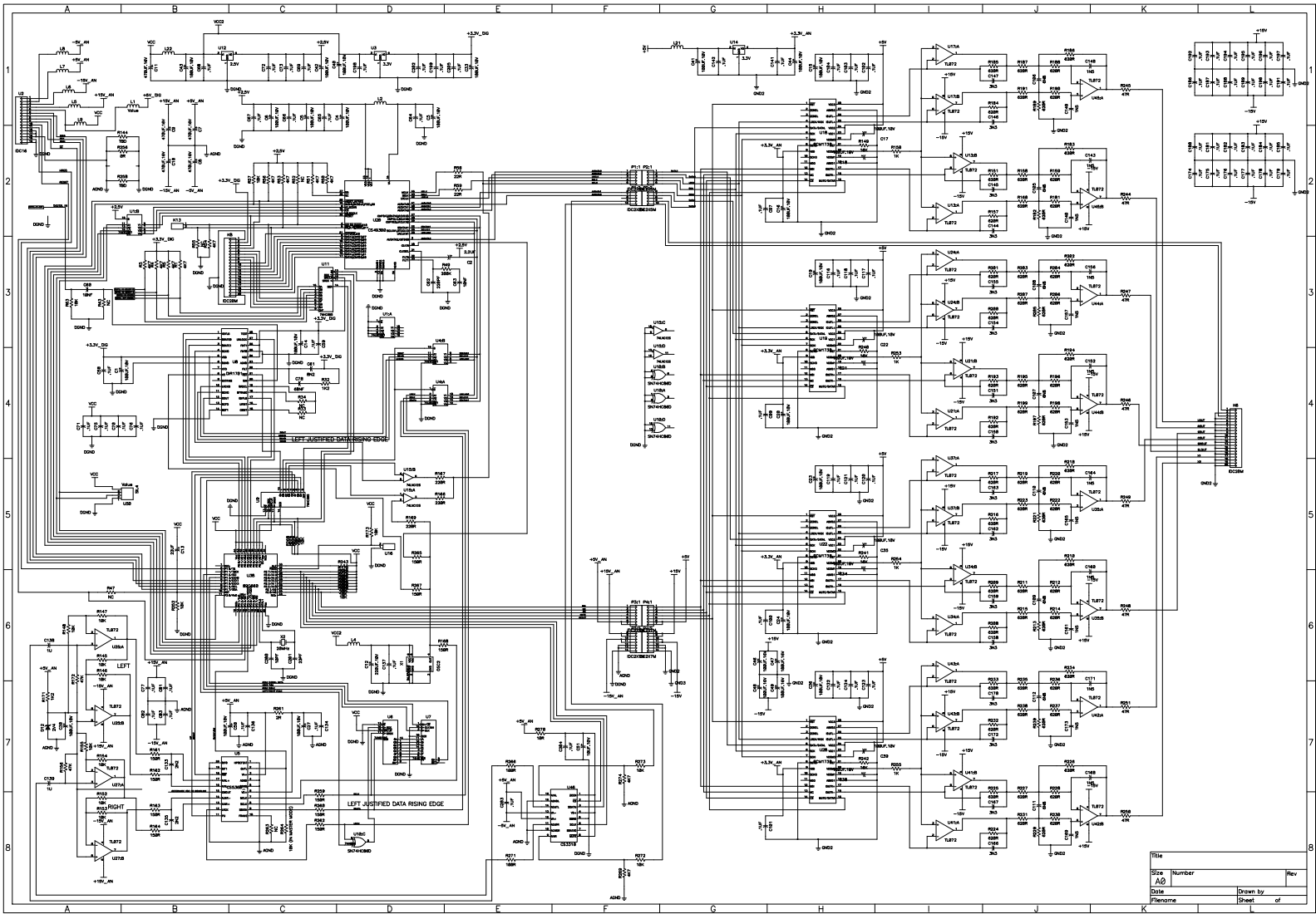


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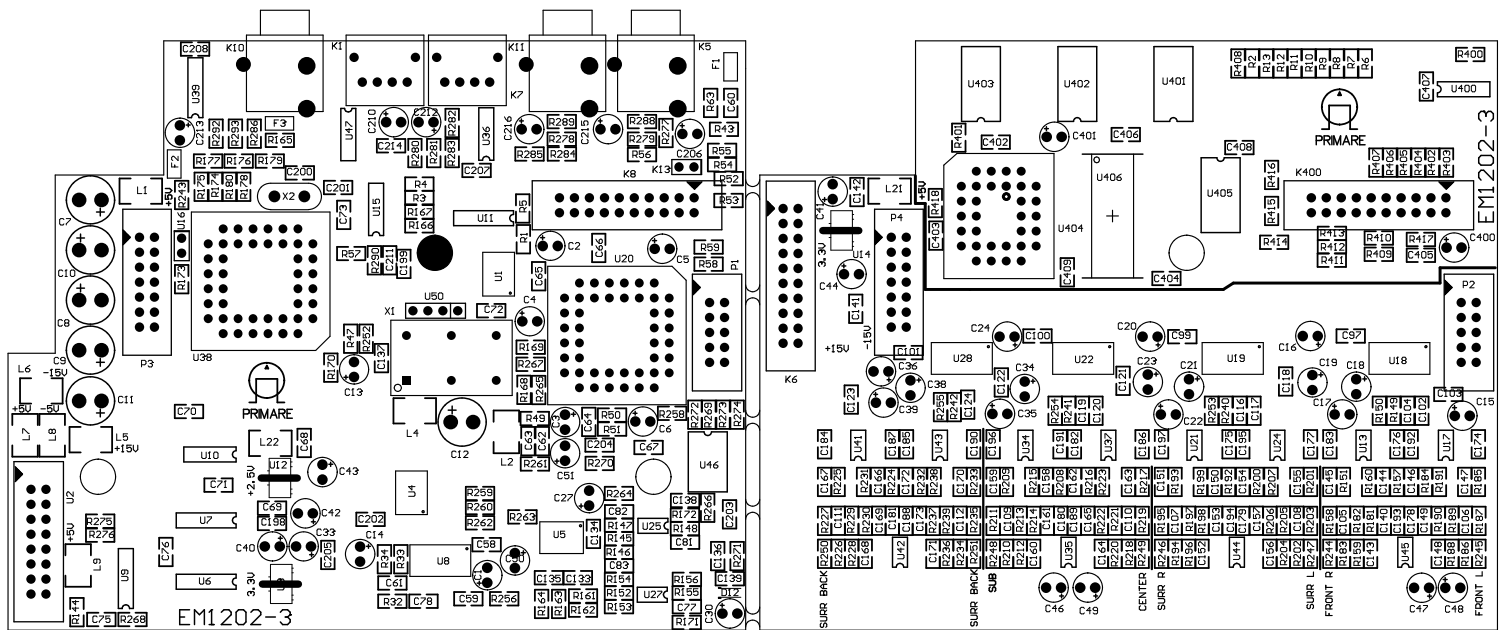




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Bias Adjustment SPA20

If anything in the output stage has been repaired, the bias needs to be readjusted.

Measure the bias over one of the green emitter resistor (0.22R) for each channel, in later SPA20 models there is a measure contact on each channel (2pin header).

Important is that the mains power is exactly the one specified, this affect the bias quite a bit and that the room temperature is constant during the procedure, no wind or drag in the room.

These steps describe the procedure.

1. Switch the amplifier on
2. Let the amplifier run for 1h.
3. Adjust the bias to 8mV
4. Wait 1h
5. Measure the bias and if needed readjust to 8mV
6. Wait 1h
7. Measure the bias and if needed readjust to 8mV
8. Wait 1h
9. Measure the bias and if needed readjust to 8mV

Now you are done.

Technical Specifications

Output power: 5x100 W/ 8R All channels driven

Analogue inputs: 9 RCA

Digital inputs: 2 RCA, 2 TOS-link

Video inputs: 4 Composite, 2 S-Video, 2 Component

Analogue outputs: Front (L&R), Center, Sub, Surr. (L&R), Surr. back (L&R)

Analogue Record Output: 1 RCA (L&R)

Digital Output: 1 RCA

Video Output: 2 Composite, 2 S-Video, 1 Component

Video: NTSC/PAL

Power consumption: Stand by<42 W

Modes: Dolby ProLogic, Dolby ProLogic II, Dolby Digital 5.1, Dolby Digital Surround EX 6.1, Dolby Digital Matrix 6.1, DTS Neo:6, DTS 5.1, DTS ES 6.1, DTS ES 6.1 discrete, "Surround EX 7.1"

THD: <0,07%, 20 Hz-20 kHz

Signal-to-noise: -100dB

Frequency response: <10 Hz-100 kHz, -3 dB

Frequency response: <20 Hz-20 kHz, -3 dB+/-0,2 dB

Dimensions (WxDxH): 430x400x135 mm

Weight: 22,5 kg