

ENGLISH

4S-0303-03E0

01 SEP 1997

**HAMEG**<sup>®</sup>  
Instruments

**Oscilloscope  
HM 303-3**

**SERVICE-MANUAL**

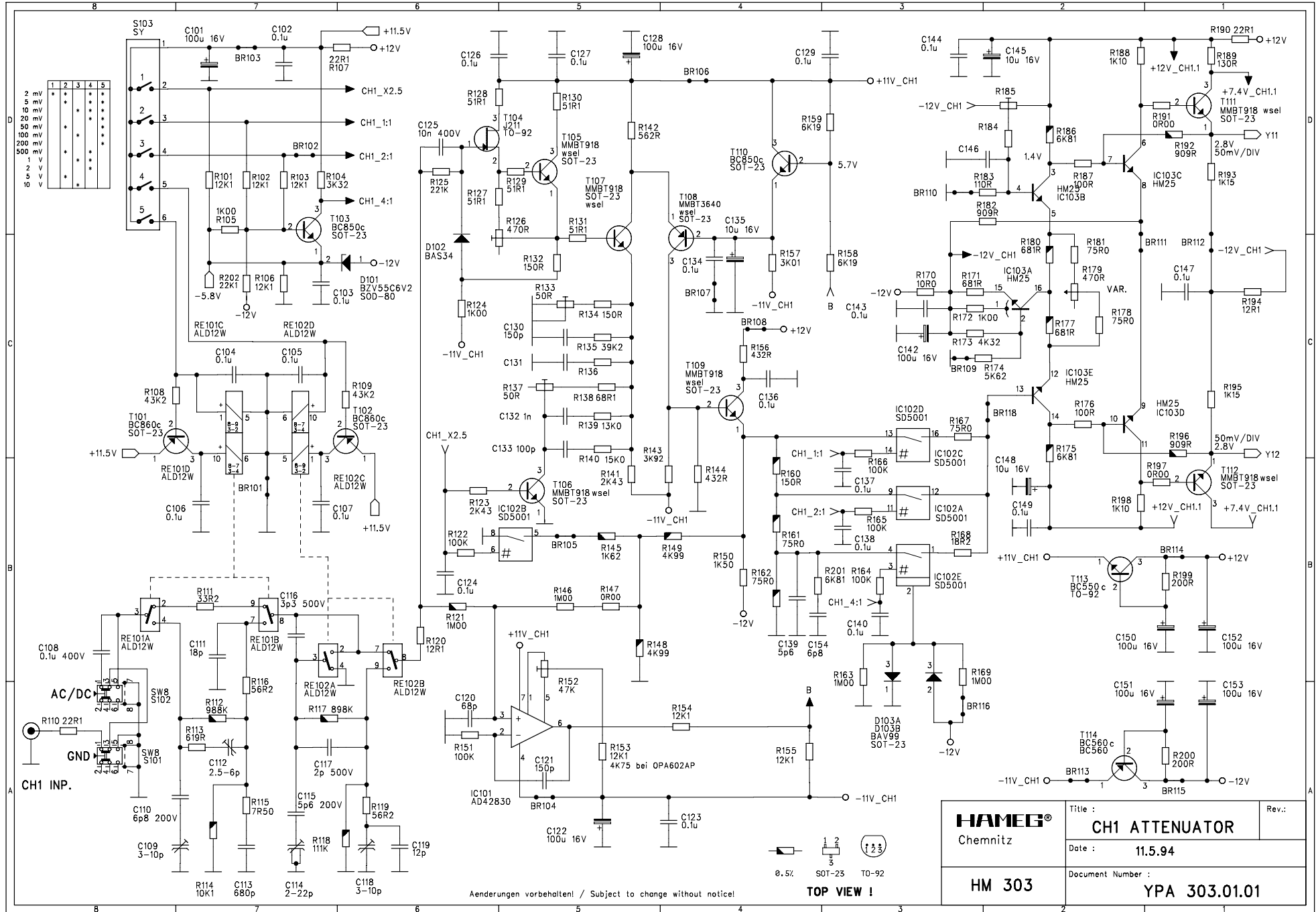
**HM303-3**



Circuit Diagrams  
**HM303** /-2 /-3

HM303 .....	3
HM303-2 .....	13
HM303-3 .....	35

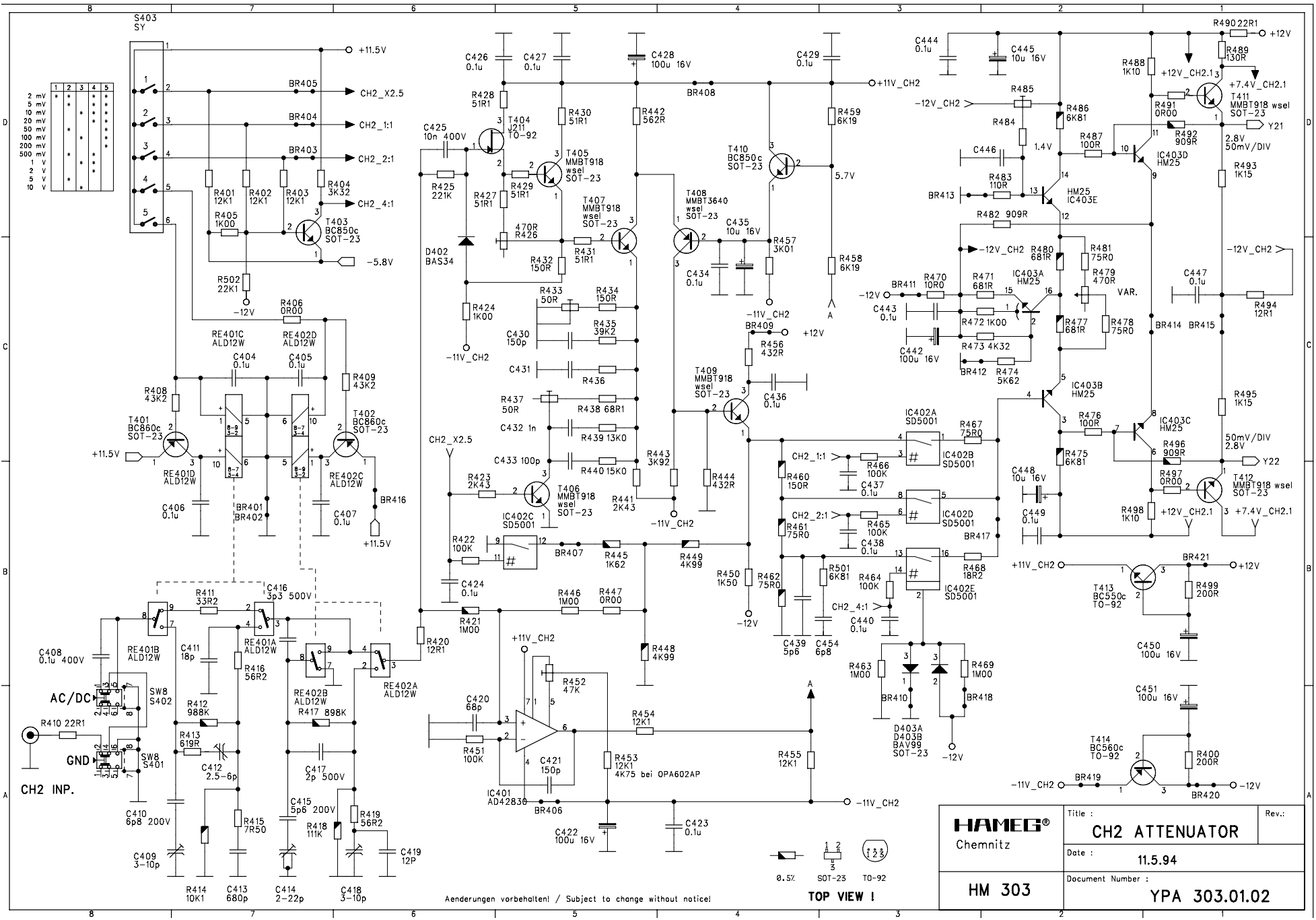




<b>HAMEG®</b> Chemnitz  <b>HM 303</b>	Title :	CH1 ATTENUATOR	Rev.:
	Date :	11.5.94	
	Document Number :	YPA 303.01.01	

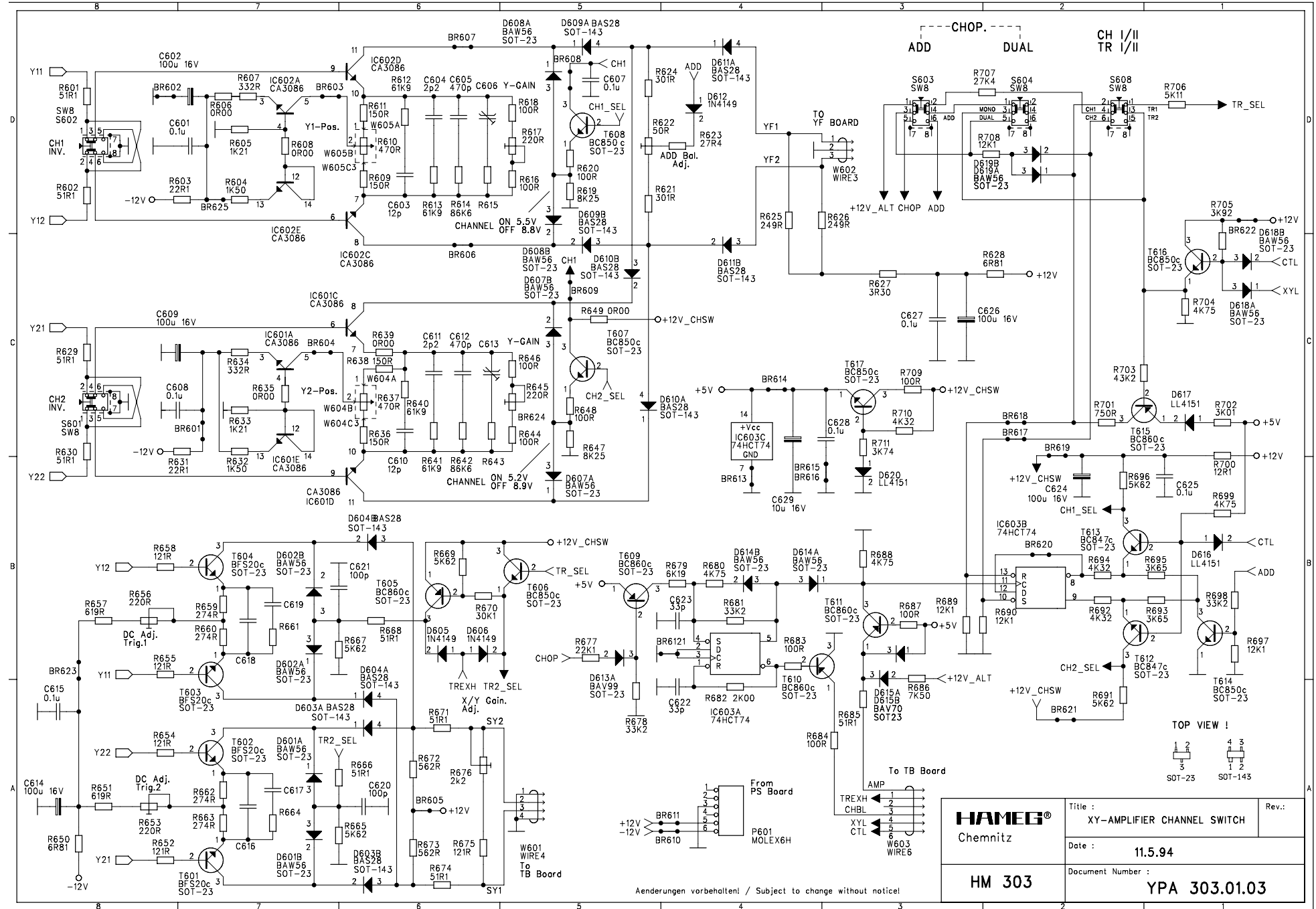
Aenderungen vorbehalten! / Subject to change without notice!

TOP VIEW !



Subject to change without notice

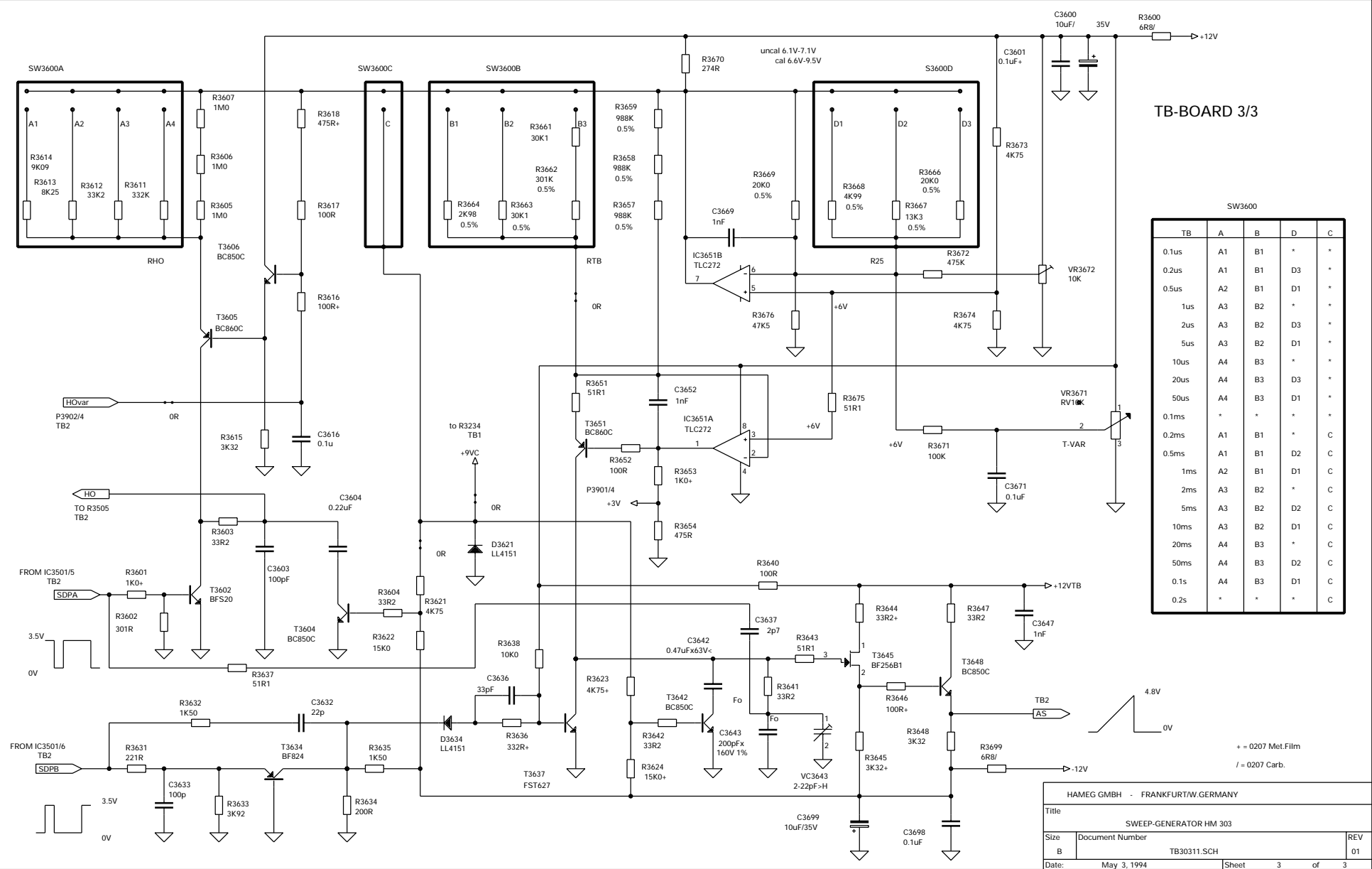
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<b>HAMEG®</b> Chemnitz  <b>HM 303</b>	Title :	XY-AMPLIFIER CHANNEL SWITCH	Rev.:
	Date :	11.5.94	
	Document Number :	YPA 303.01.03	

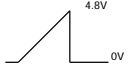
Änderungen vorbehalten! / Subject to change without notice!

TB-BOARD 3/3



SW3600

TB	A	B	D	C
0.1us	A1	B1	*	*
0.2us	A1	B1	D3	*
0.5us	A2	B1	D1	*
1us	A3	B2	*	*
2us	A3	B2	D3	*
5us	A3	B2	D1	*
10us	A4	B3	*	*
20us	A4	B3	D3	*
50us	A4	B3	D1	*
0.1ms	*	*	*	*
0.2ms	A1	B1	*	C
0.5ms	A1	B1	D2	C
1ms	A2	B1	D1	C
2ms	A3	B2	*	C
5ms	A3	B2	D2	C
10ms	A3	B2	D1	C
20ms	A4	B3	*	C
50ms	A4	B3	D2	C
0.1s	A4	B3	D1	C
0.2s	*	*	*	C



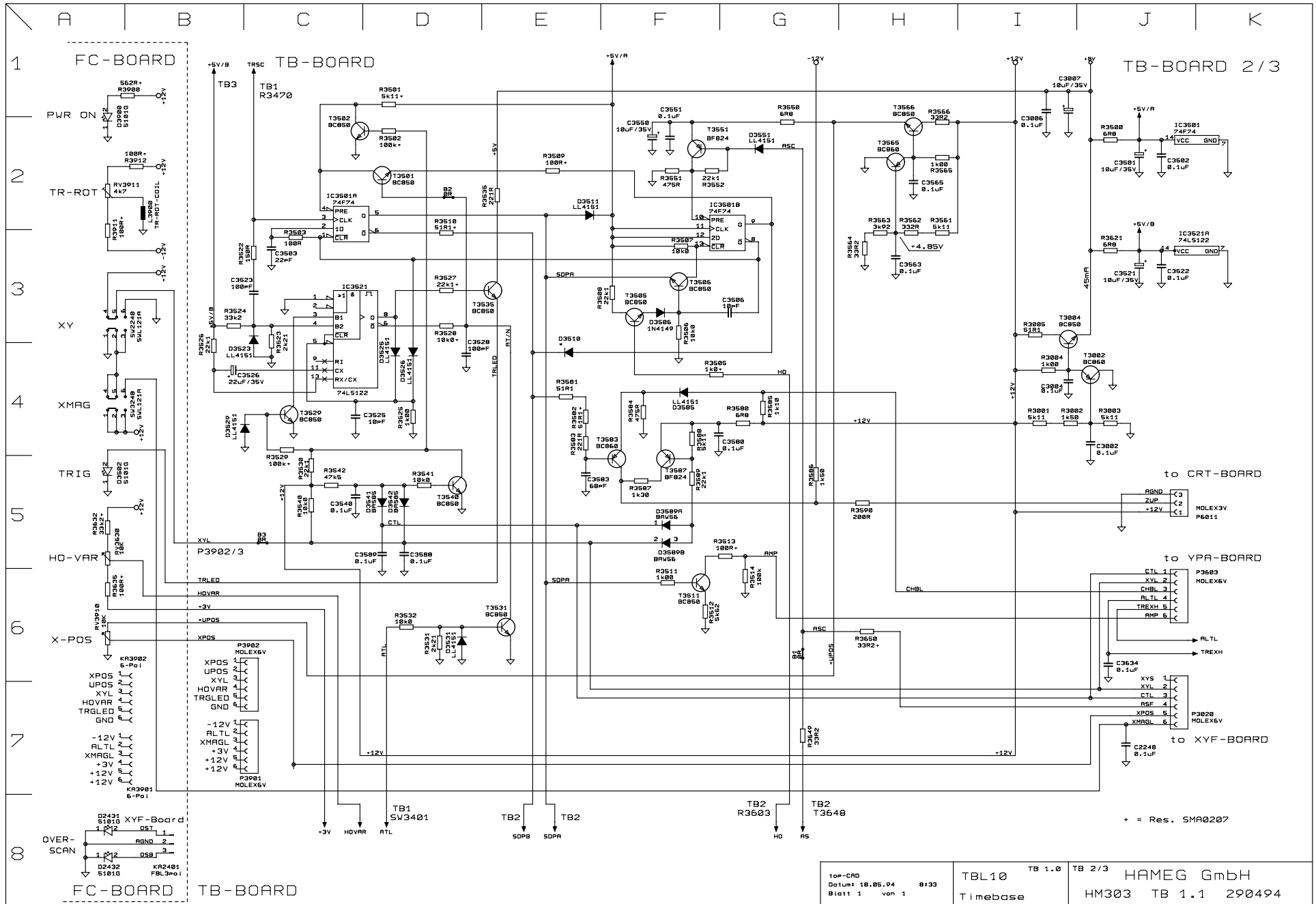
HAMEG GMBH - FRANKFURT/W.GERMANY

Title: SWEEP-GENERATOR HM 303

Size	Document Number	REV
B	TB30311.SCH	01

Date: May 3, 1994 Sheet 3 of 3

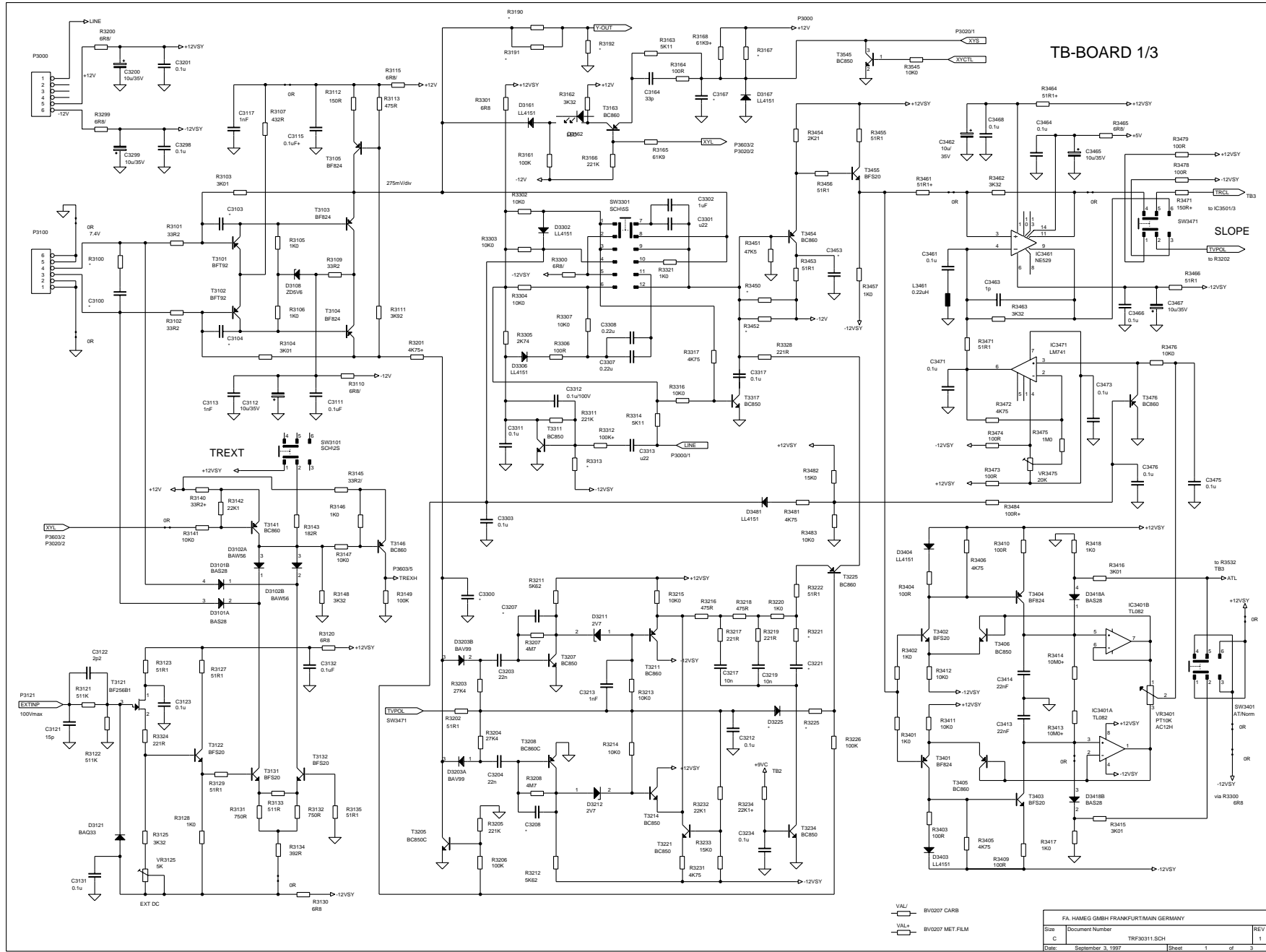
Subject to change without notice



10P-CAD Datum: 10.05.94 Blatt 1 von 1	8133	TB 1.0	TB 2/3	HAMEG GmbH HM303 TB 1.1 290494
Timebase				



Subject to change without notice



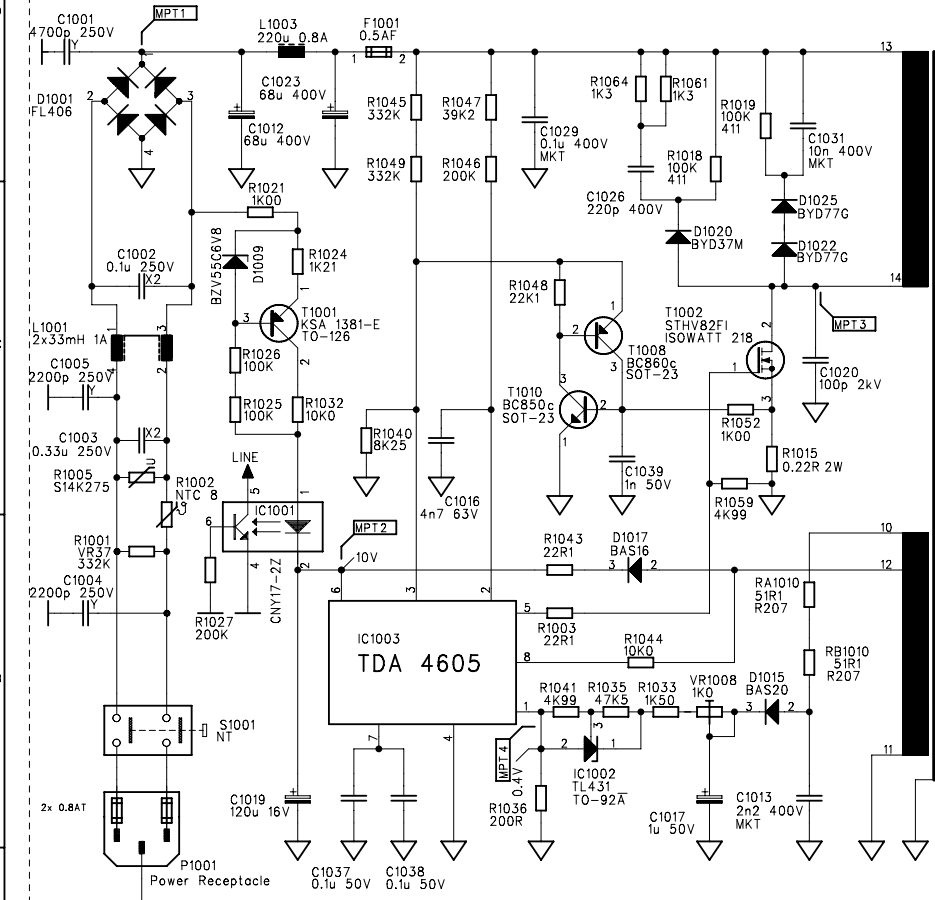
TB-BOARD 1/3

FA. HAMEG GMBH FRANKFURT/MAIN GERMANY

Size	Document Number	REV
C	TRF30311.SCH	1
Date:	September 3, 1997	Sheet 1 of 3

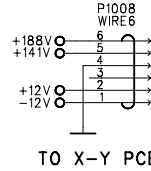
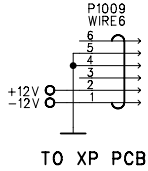
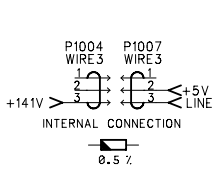
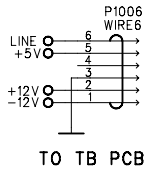
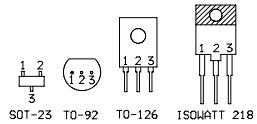
Änderungen vorbehalten! / Subject to change without notice!

**CAUTION:** SOURCE AC POTENTIAL IS PRESENT AT THE POWER SUPPLY!  
FLYBACK CONVERTER CONTAINS SAFETY RELEVANT PARTS!

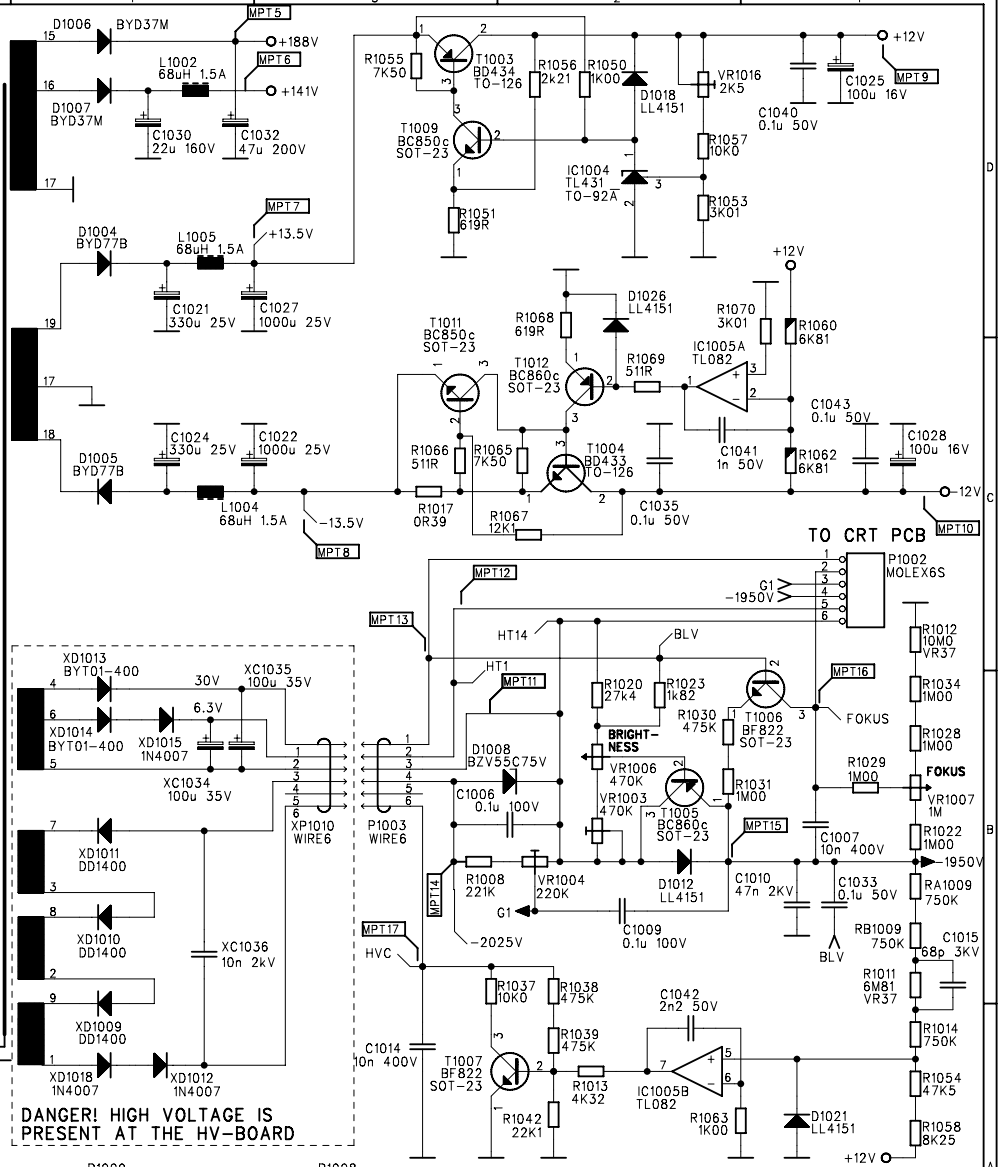


**FLYBACK CONVERTER (FBC MAINBOARD)**

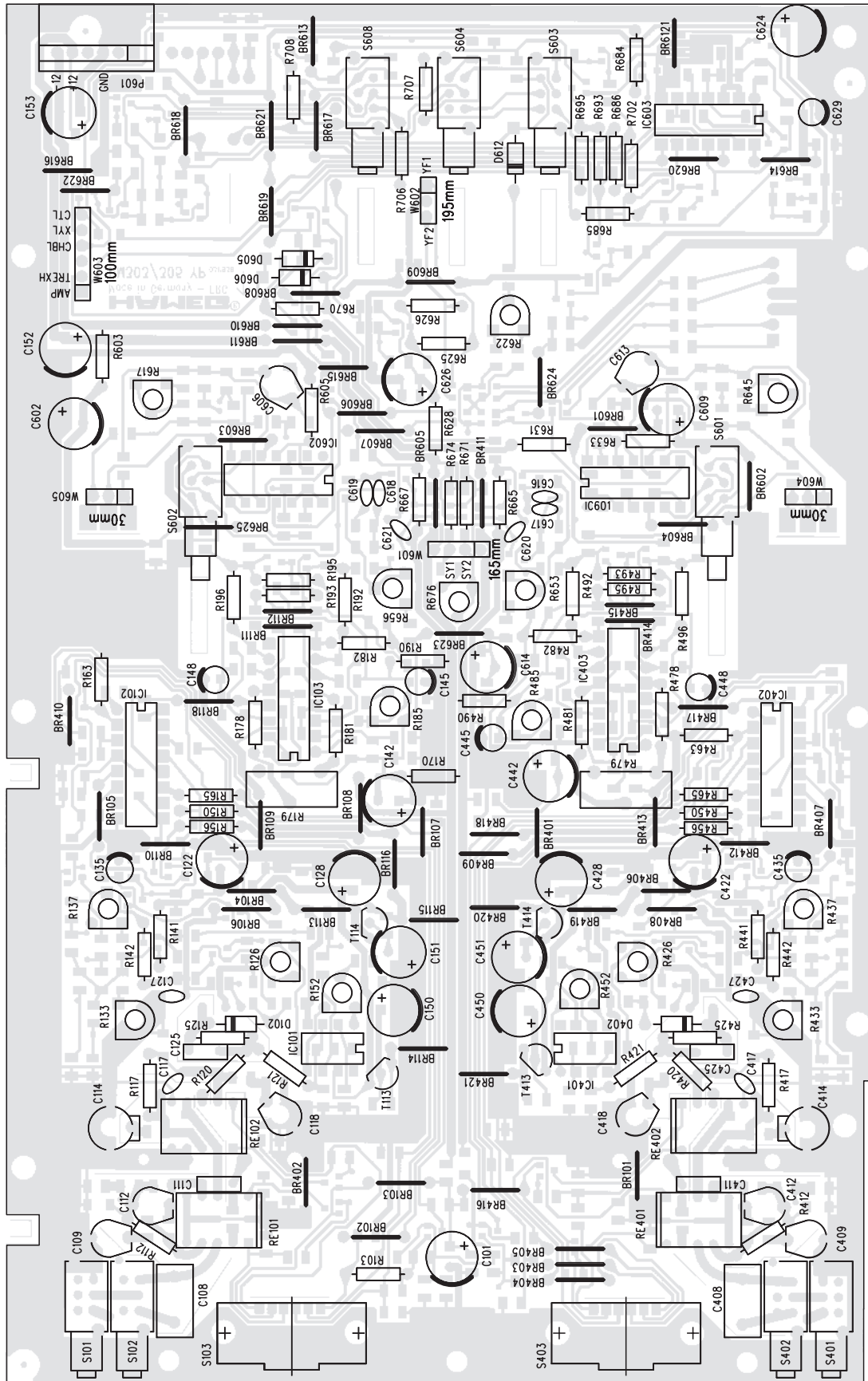
TOP VIEW !



**DANGER! HIGH VOLTAGE IS PRESENT AT THE HV-BOARD**

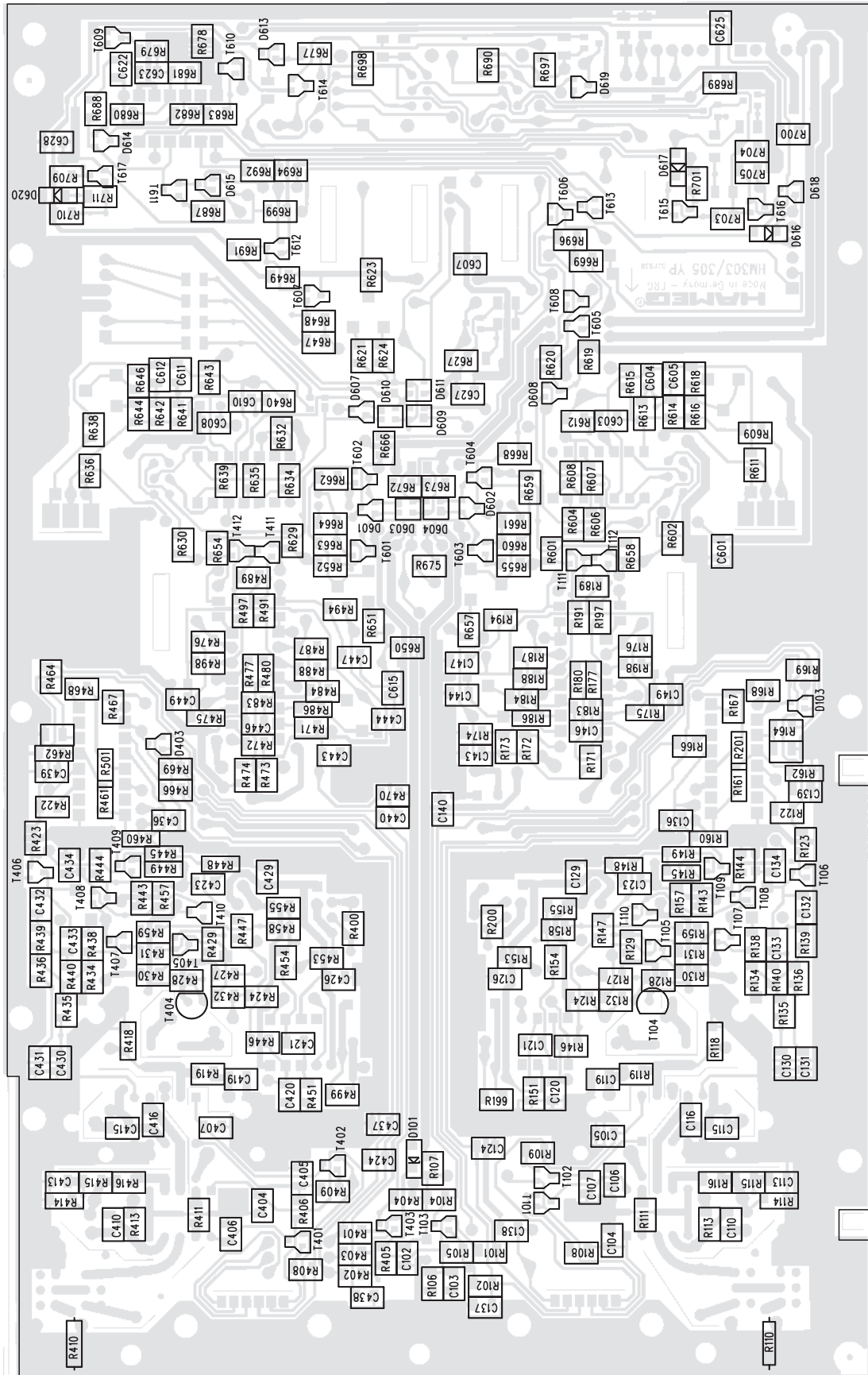


<b>HAMEG®</b> Chemnitz	Title : <b>PS - PCB</b>	Rev.: <b>1.D</b>
	Date : <b>16.03.94</b>	
<b>HM 303</b>	Document Number :	Sheet 8 of 8



HM 303 YPA BESTUECKUNGSPLAN TOP

HM 303 YPA BESTUECKUNGSPLAN LEITERSEITE





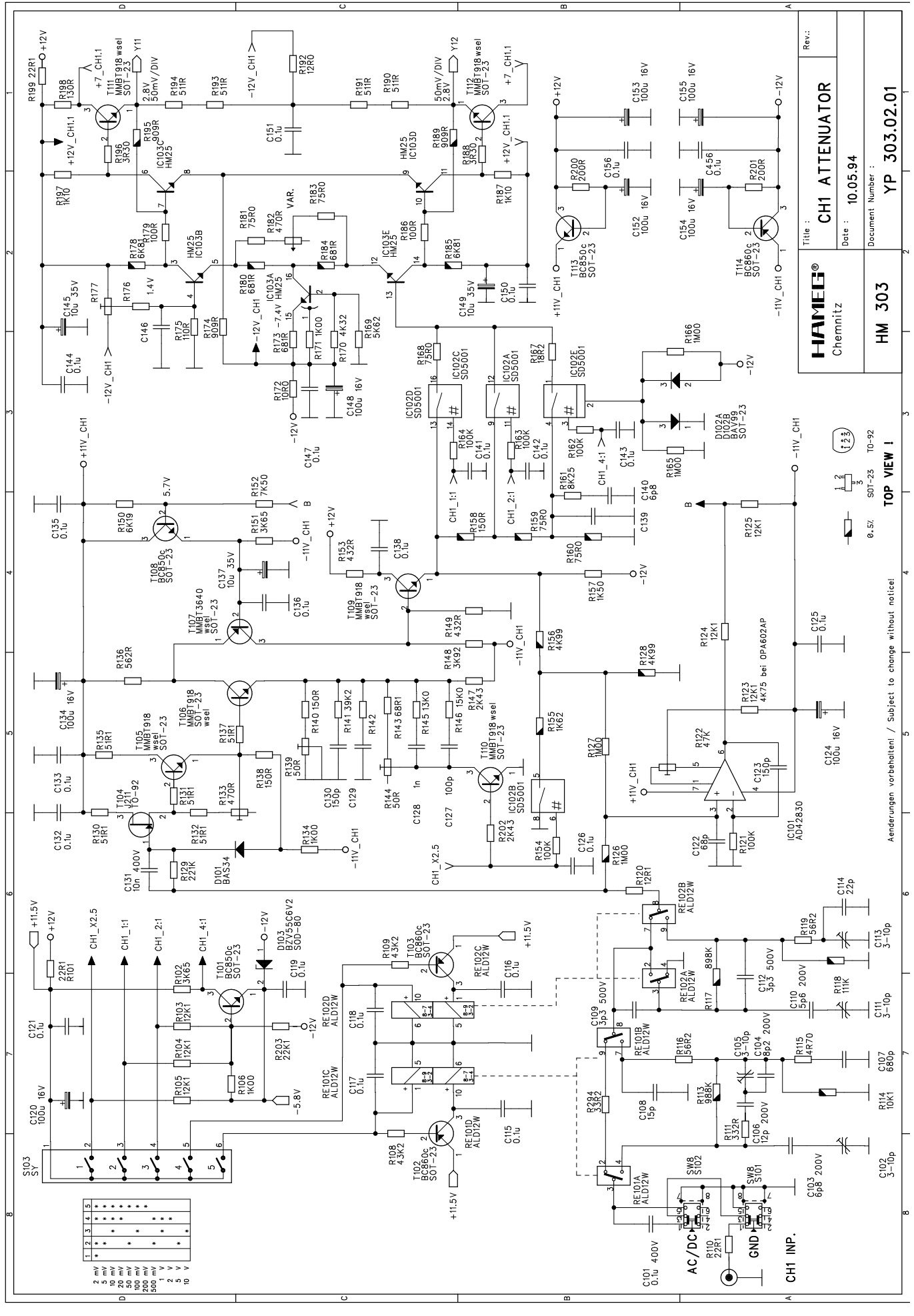
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# Oscilloscope

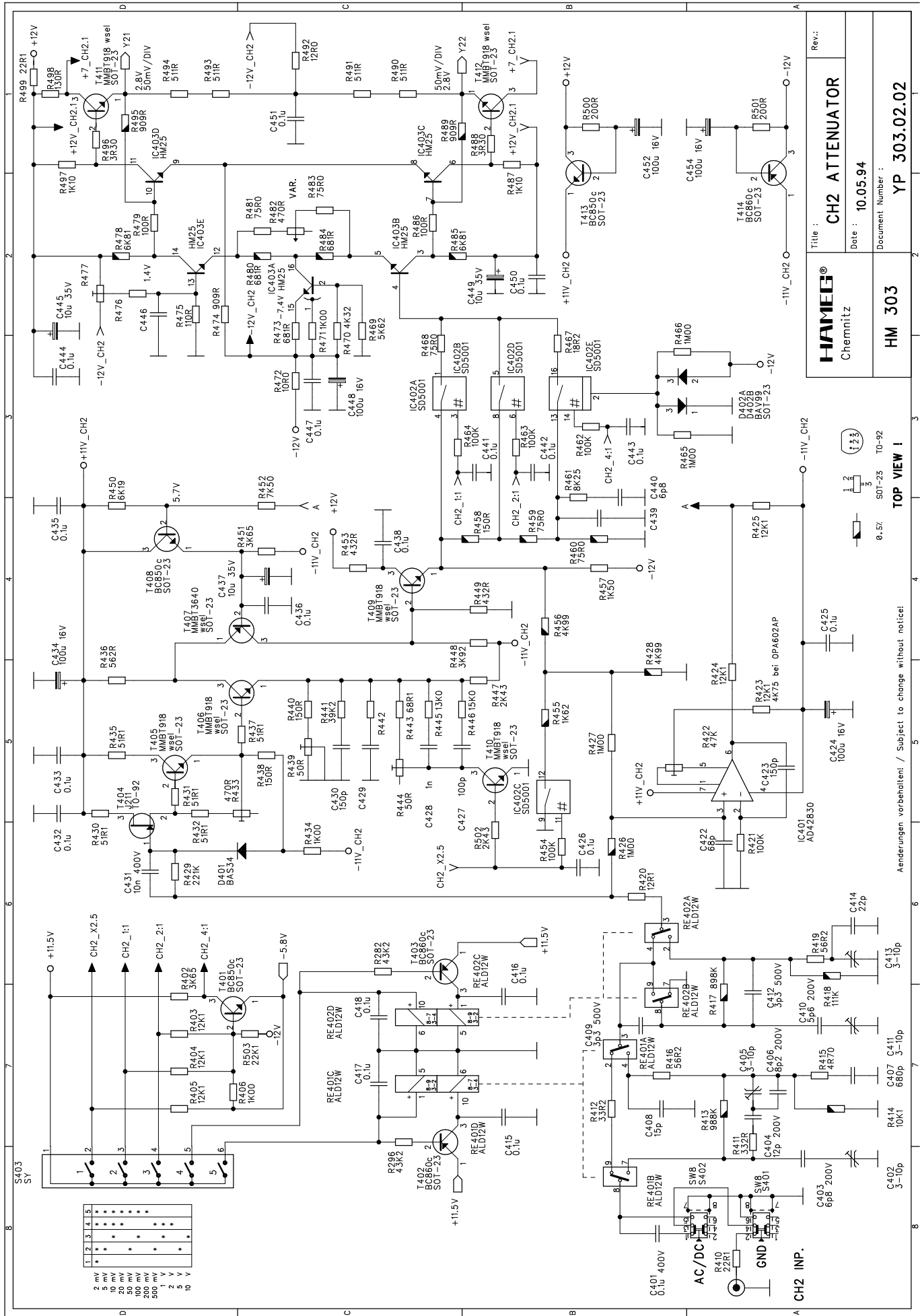
Circuit diagrams HM303 - 2

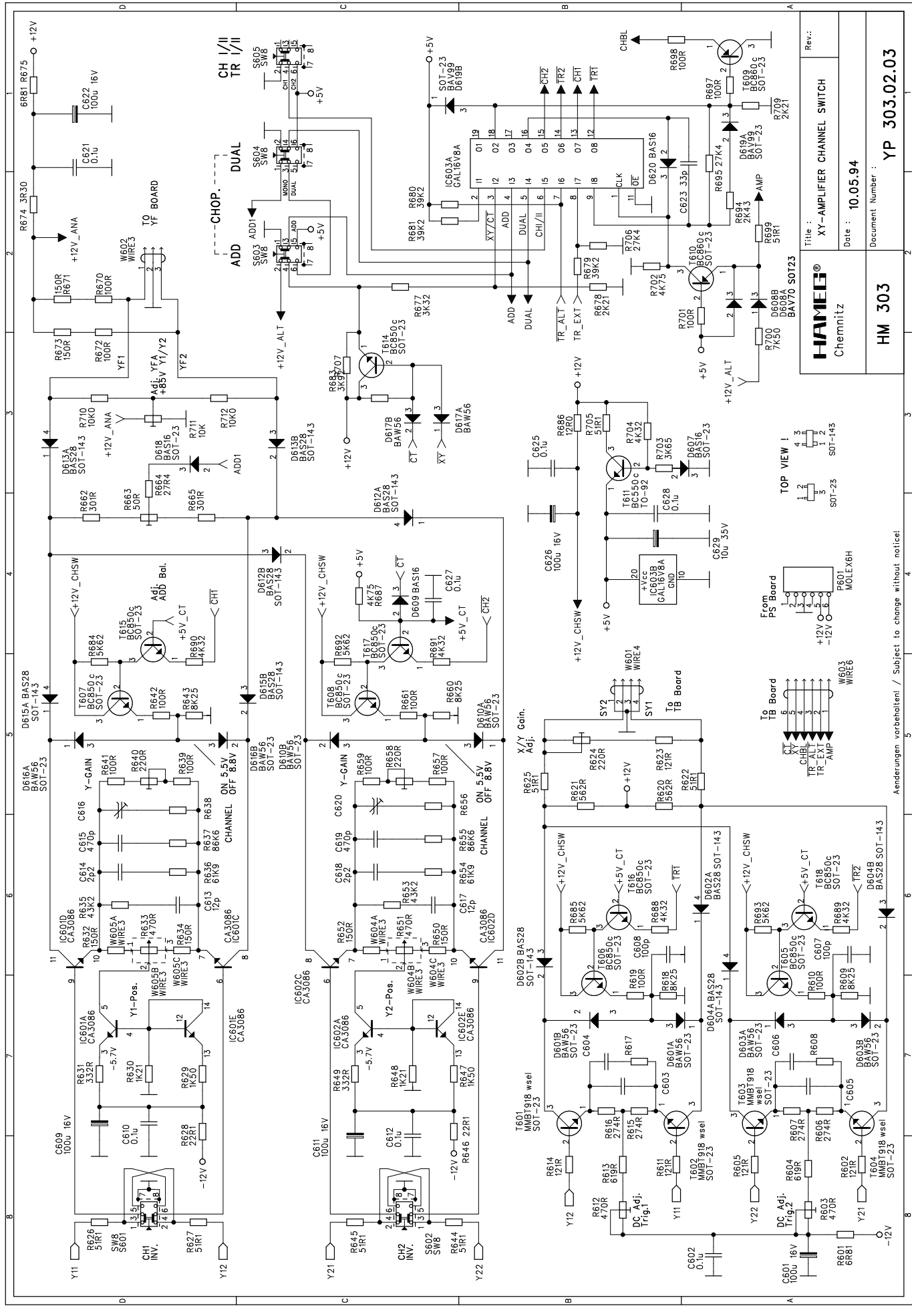
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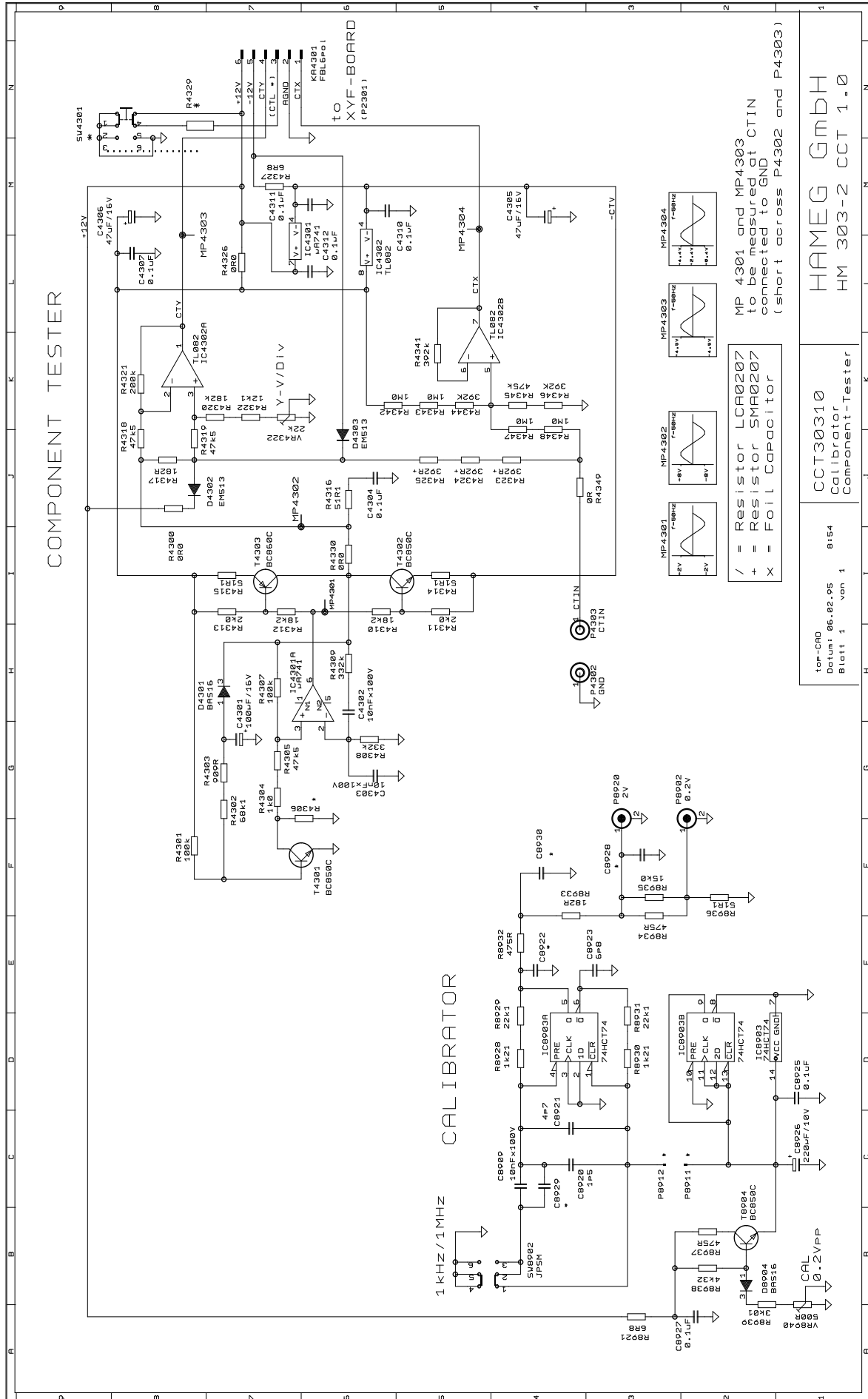


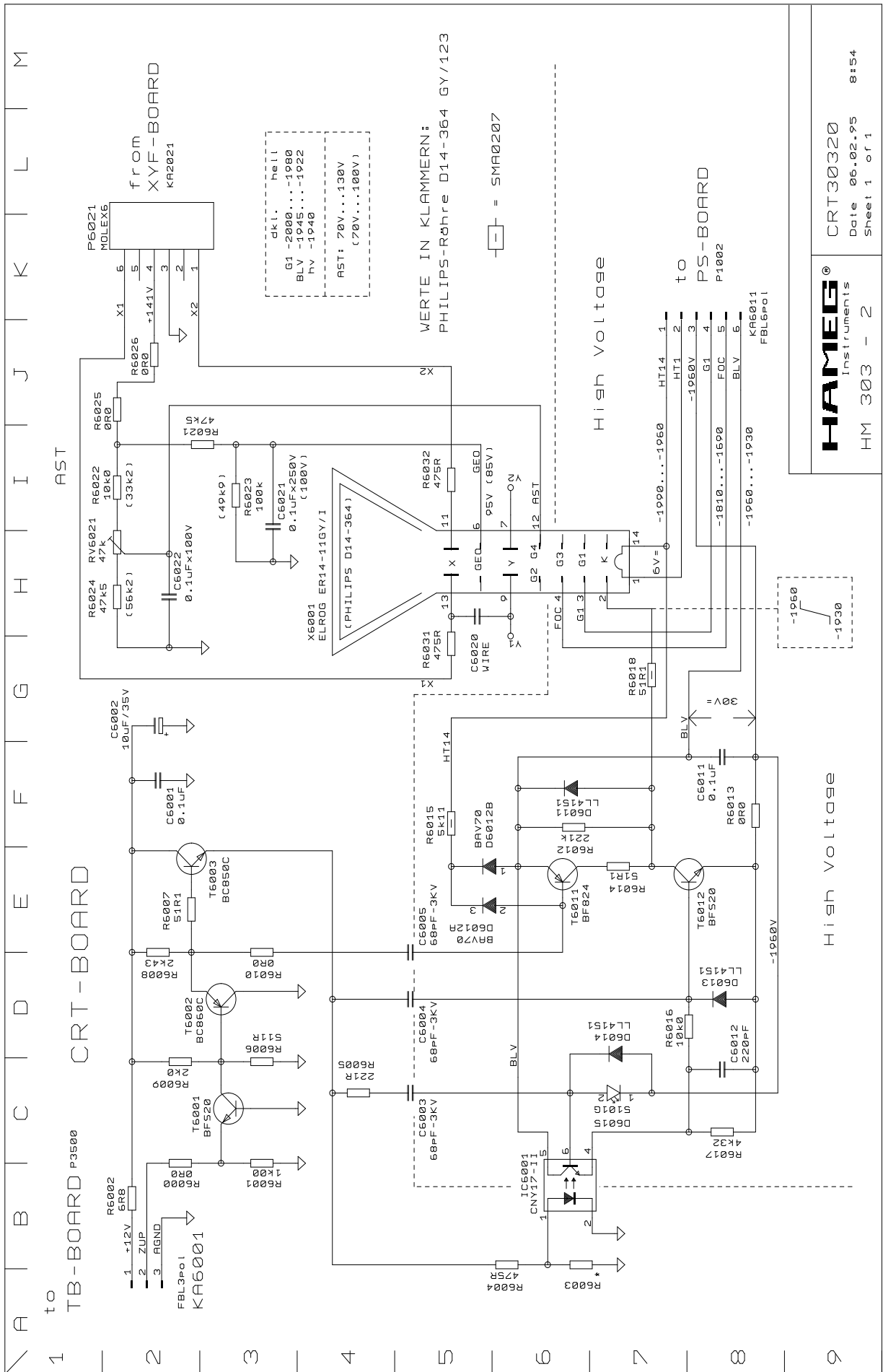










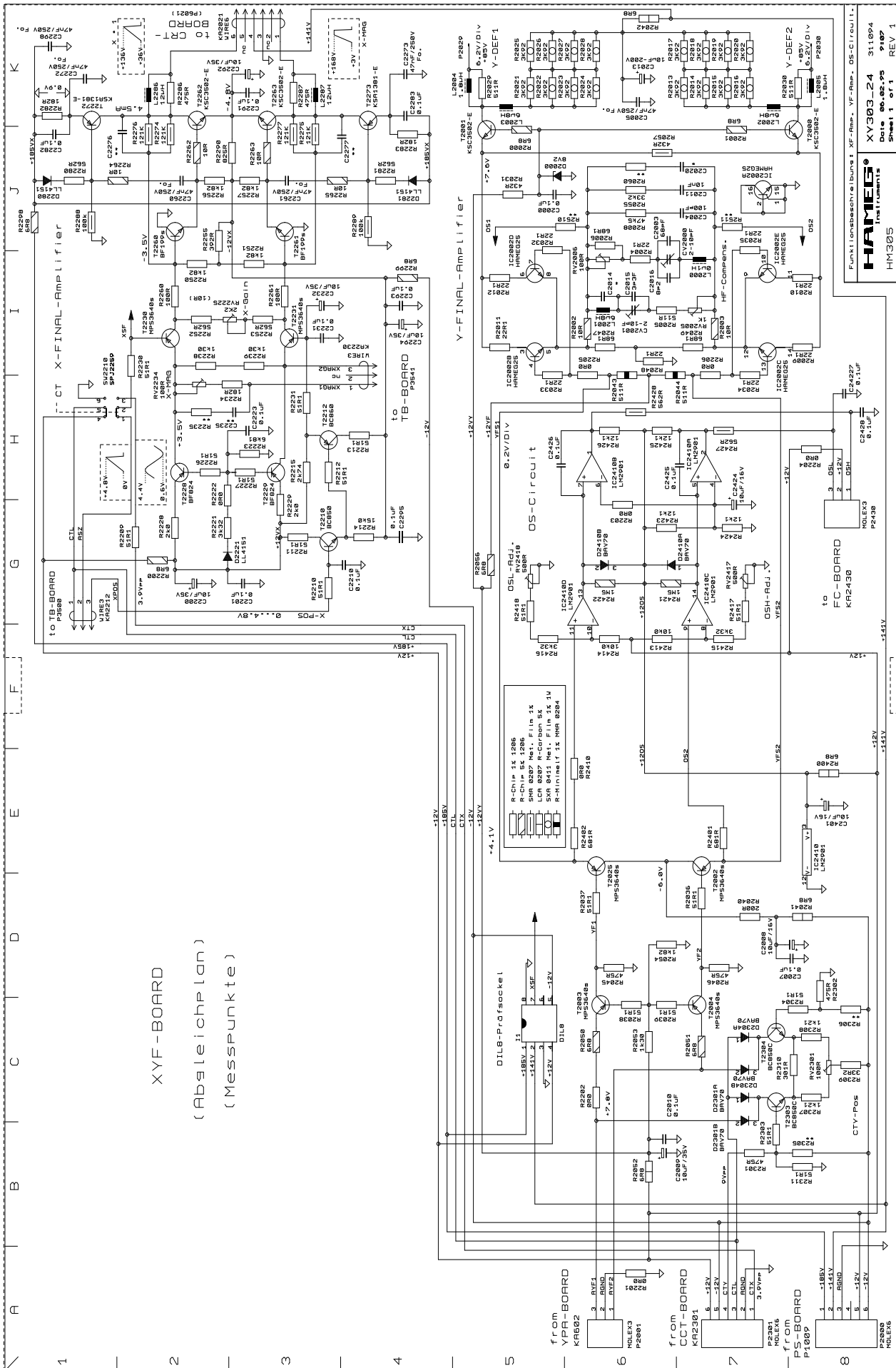


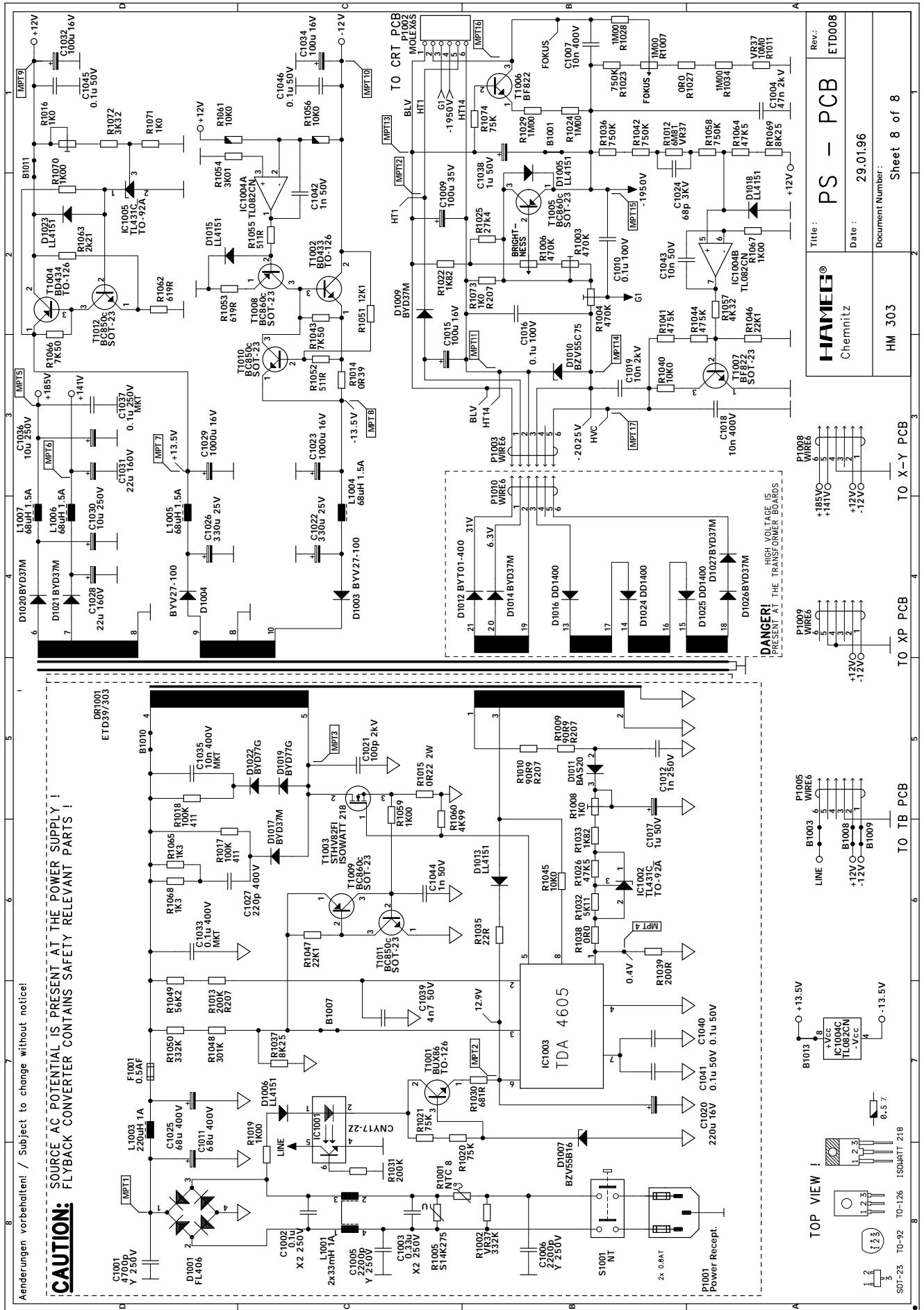
CRT30320  
Date 06.02.95 8:54  
Sheet 1 of 1

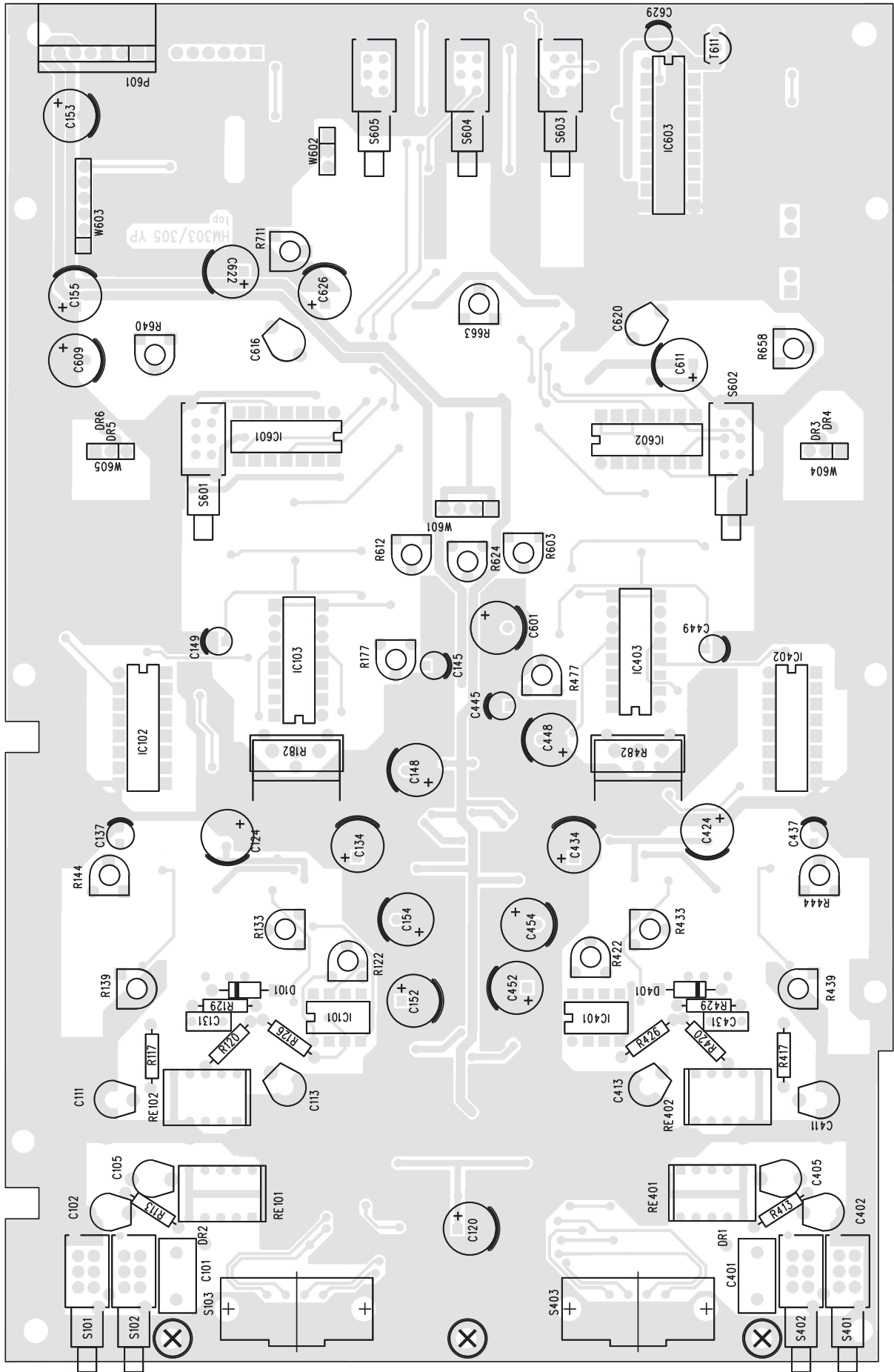
**HAMEG®**  
Instruments  
HM 303 - 2

High Voltage

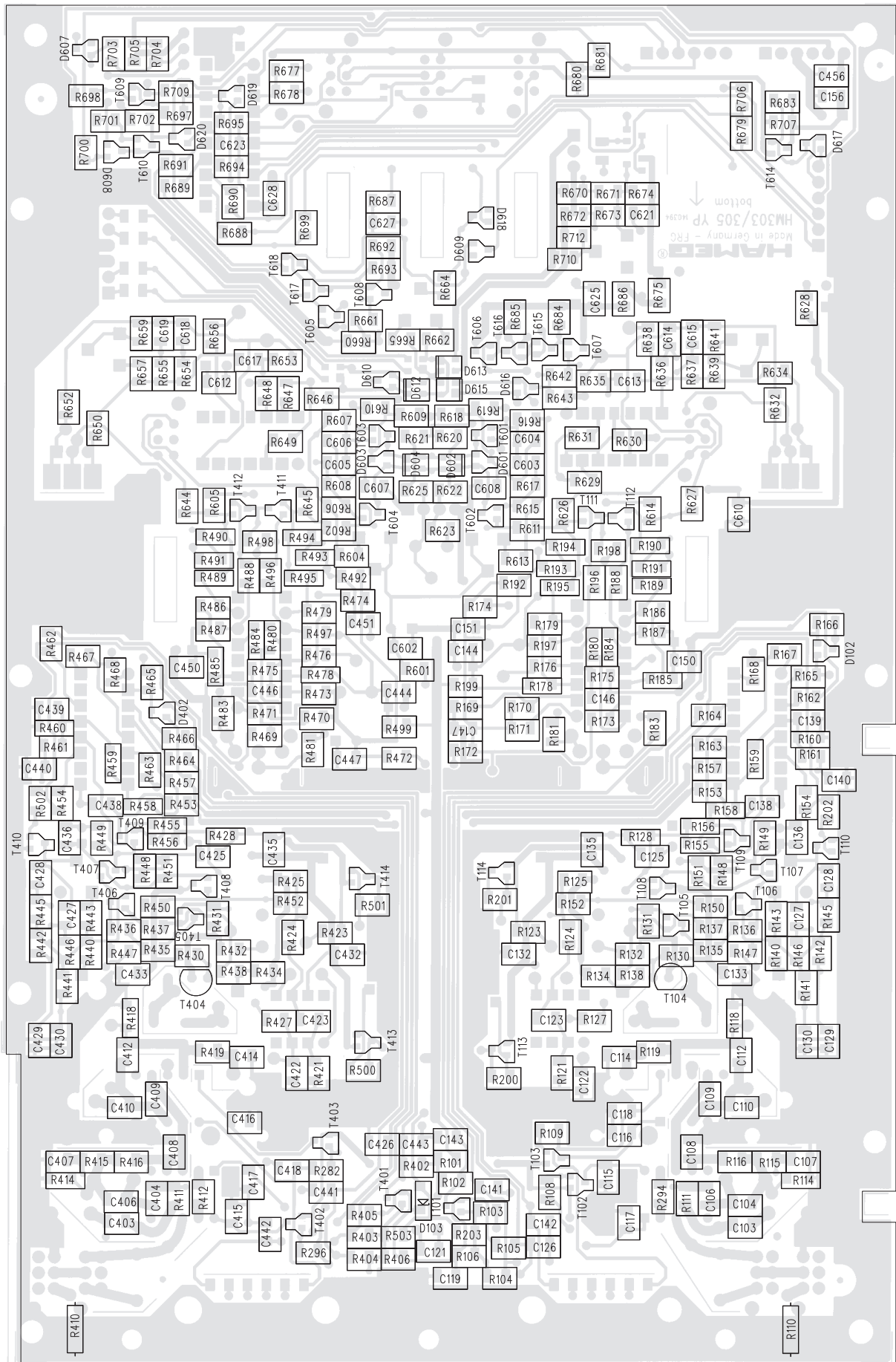
High Voltage





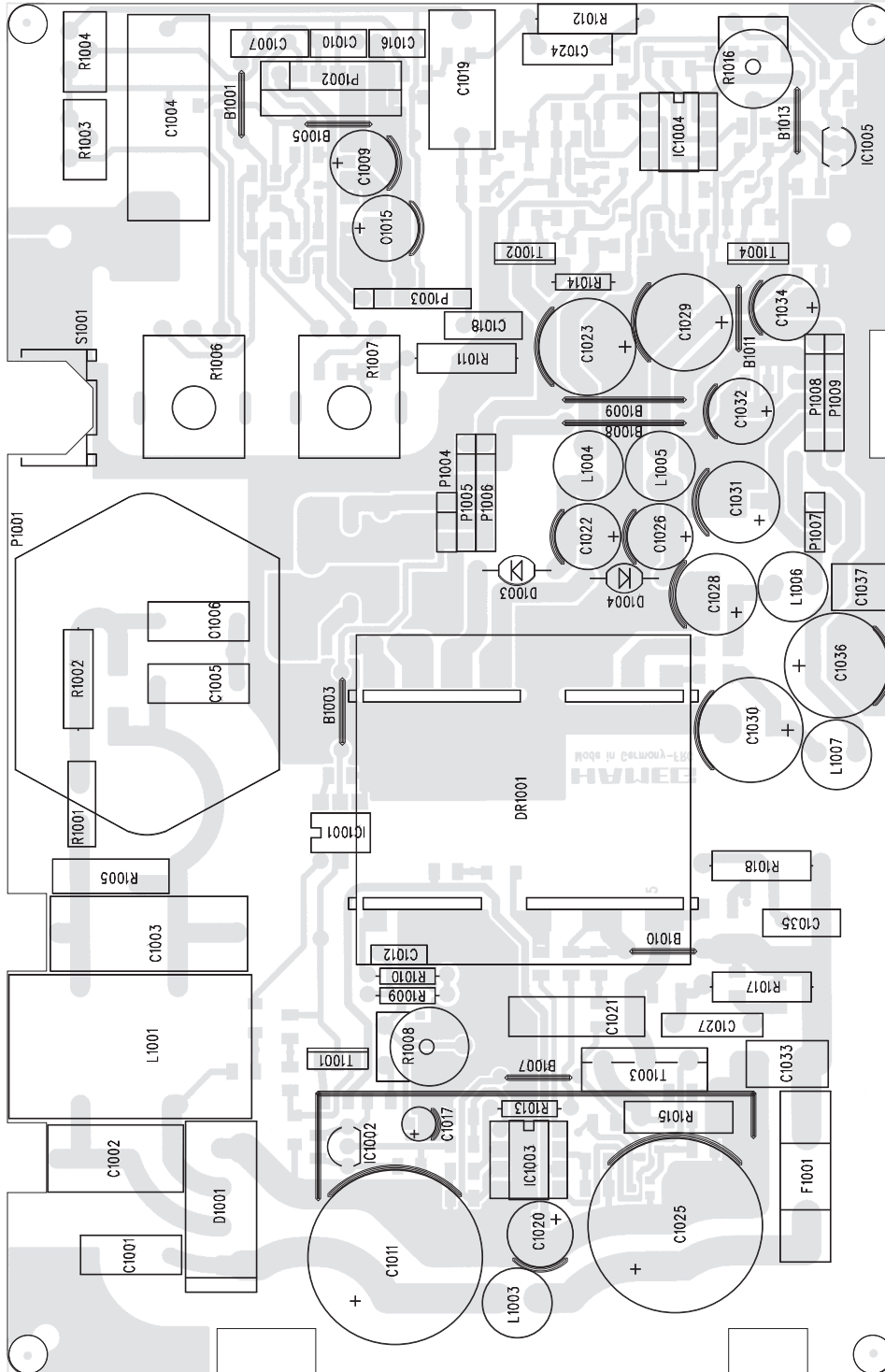






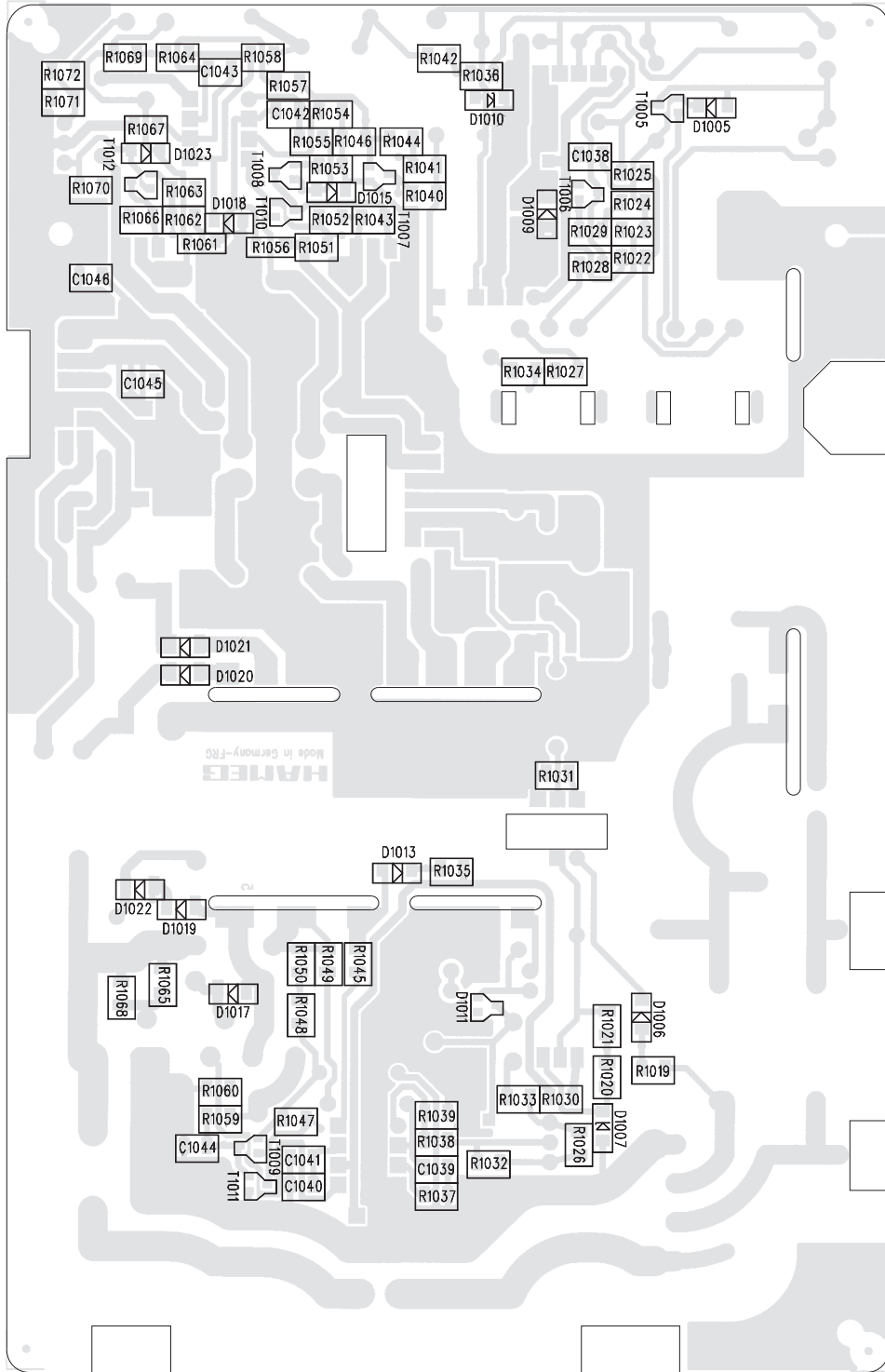


HM303



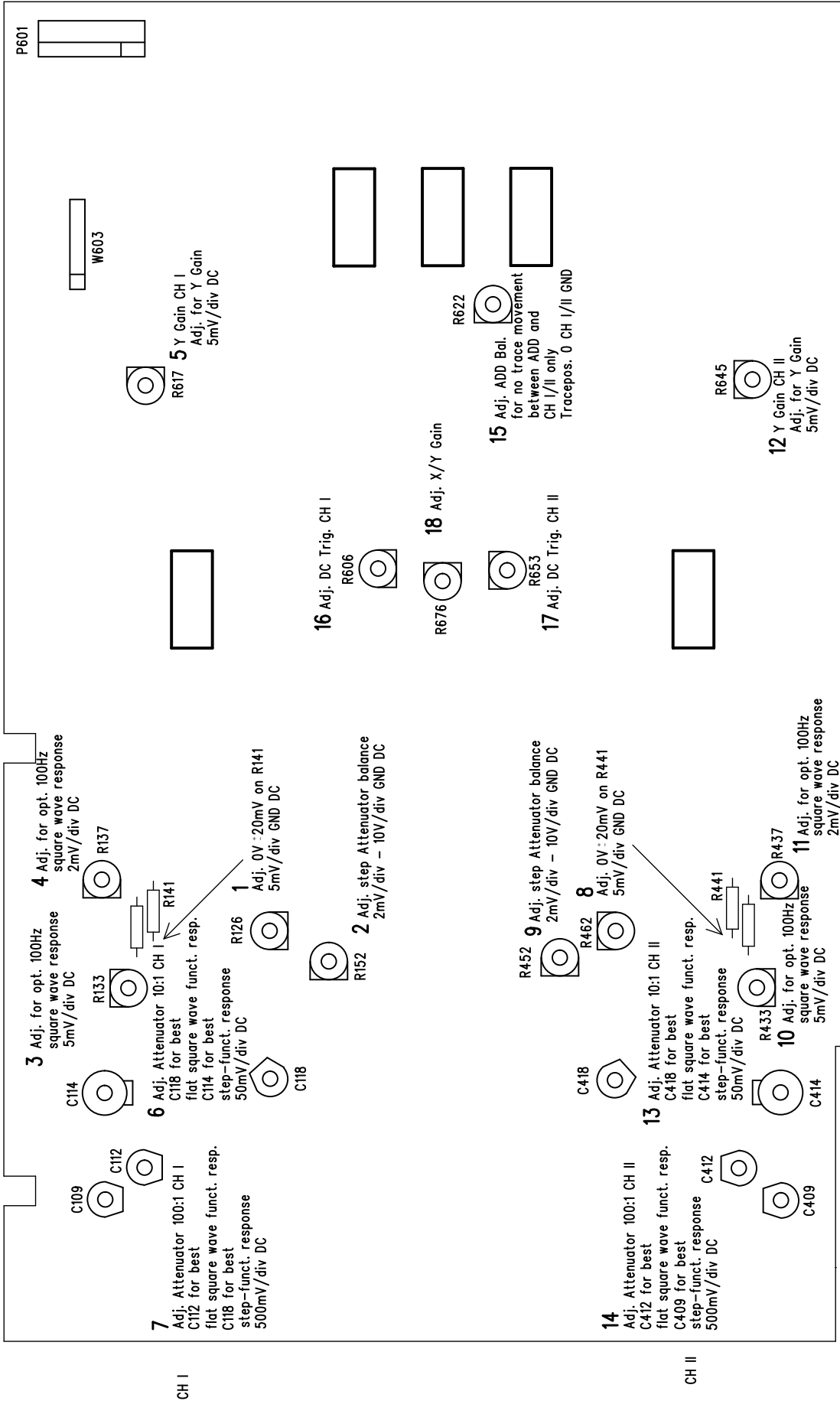
Bestueckungsplan bedrahtete BE's

Bestückungsplan SMD BE's



HM303

TO TB BOARD



Remark: Square wave testgen. 50 Ohm:  
fo = 10 Hz to 10 kHz  
6 div. ampl./Y-setting

HM303 YPA BOARD ABGLEICHPLAN  
HM303 YPA BOARD ADJUSTING PLAN

K

J

I

H

G

F

E

D

C

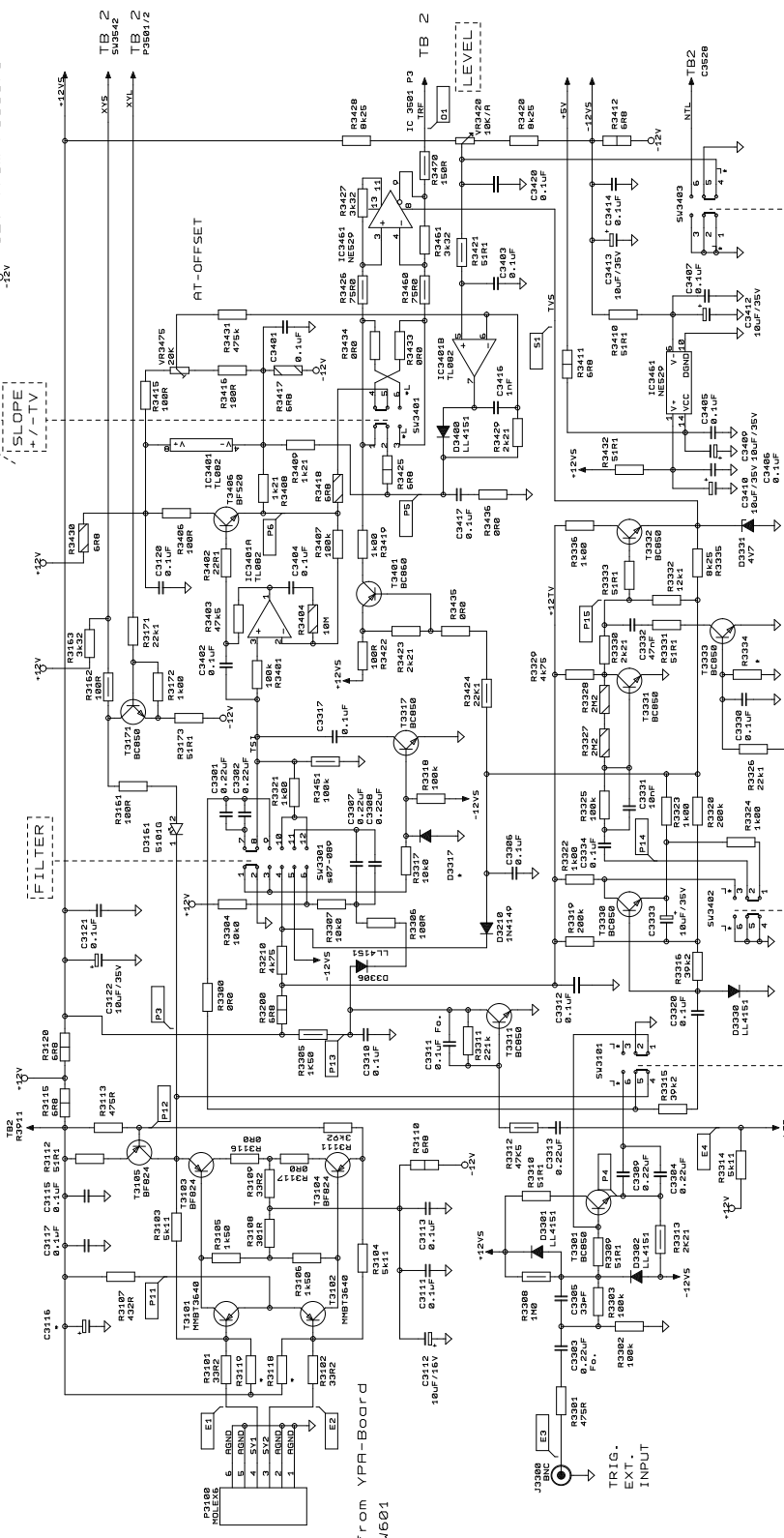
B

A

1

+12V from P3000/5 } TB2  
-12V from P3000/6 } TB2

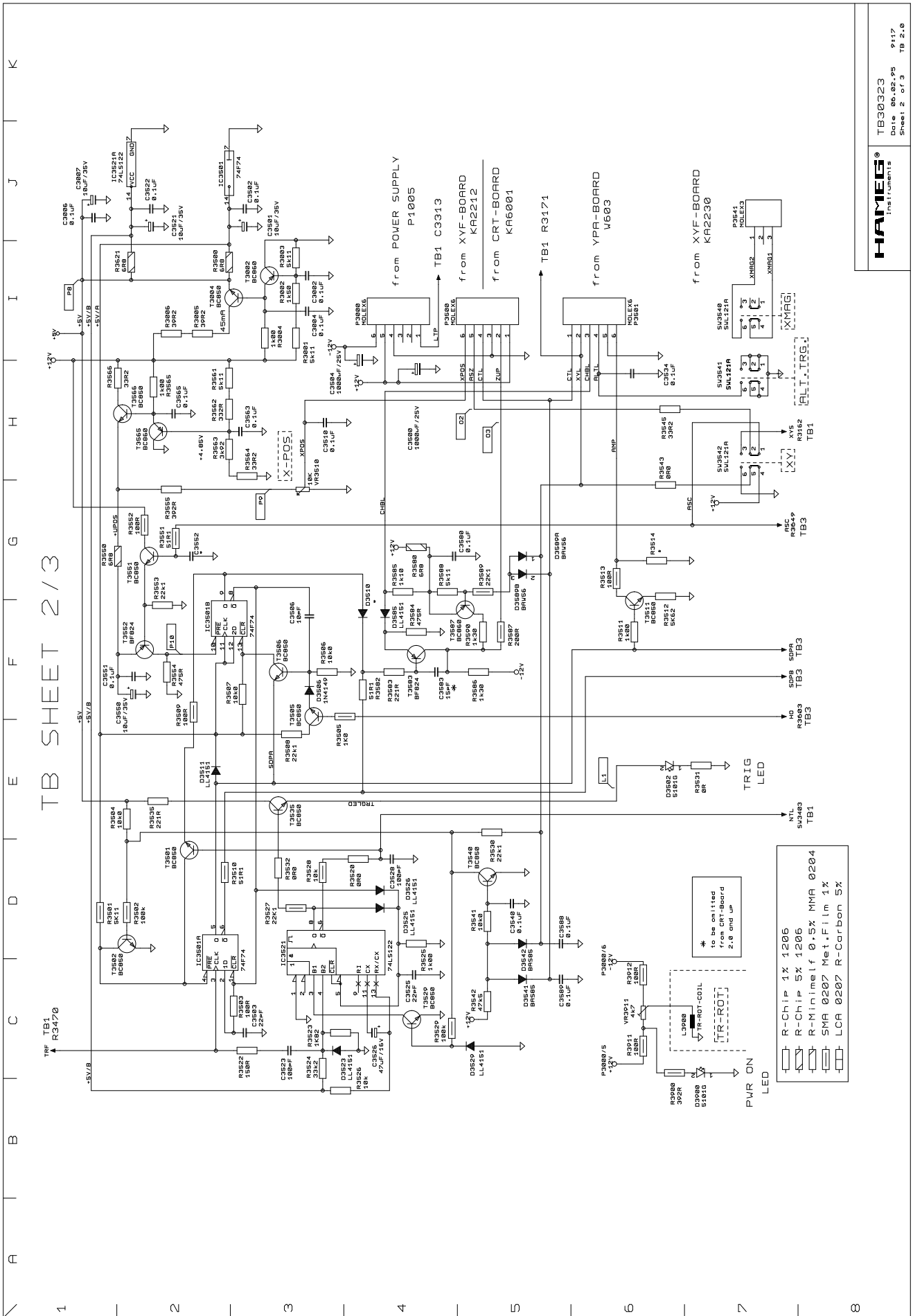
TB SHEET 1/3



- R-Chip 1x 1206
- R-Chip 5x 1206
- R-Minimelf 0.5% MRA 0204
- SMA 0207 Met. Film 1%
- LCA 0207 R-Carbon 5%

**HAMEG**  
Instruments

TB30323  
Date 06.02.95  
Sheet 1 of 3 TB 2-0

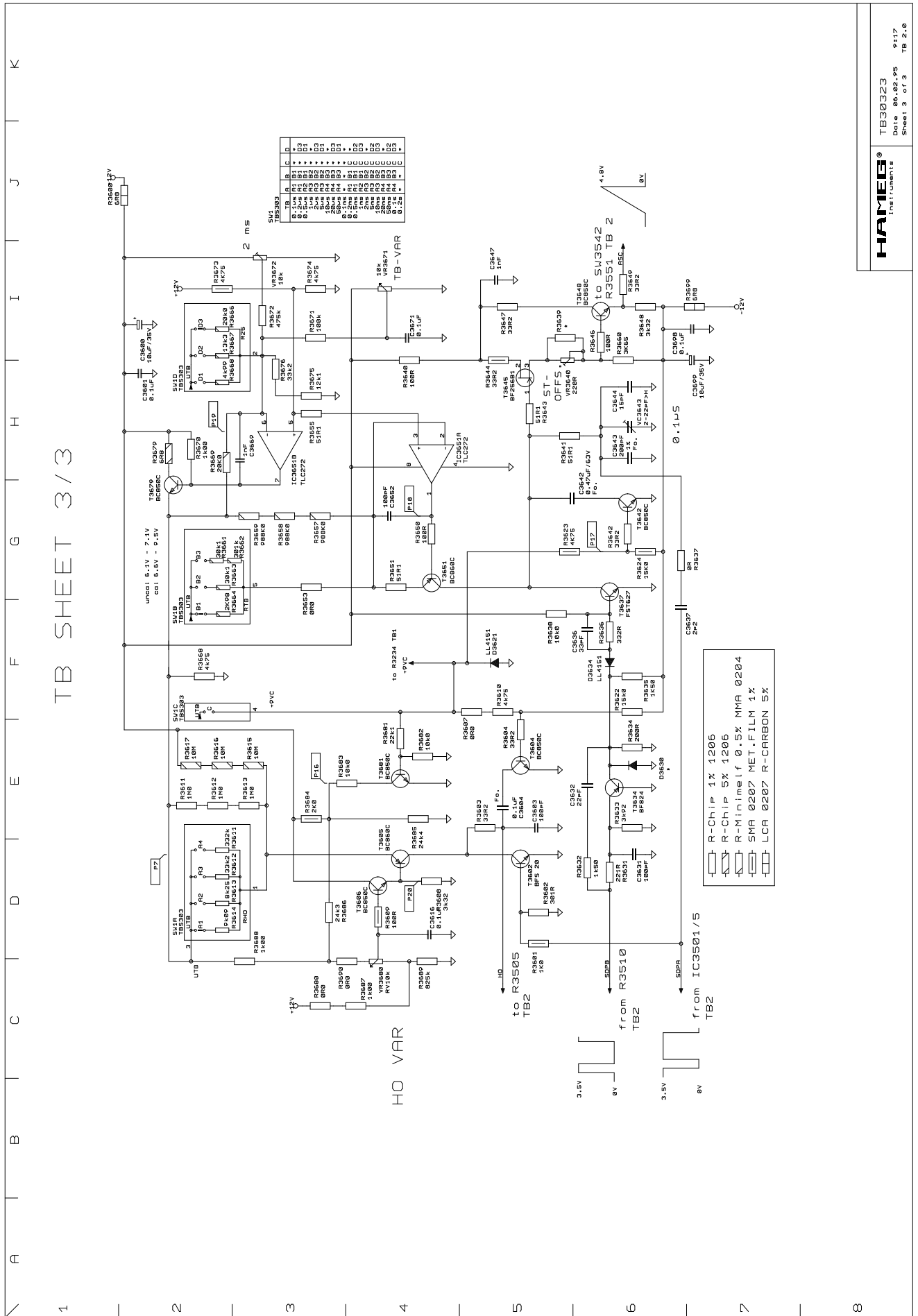


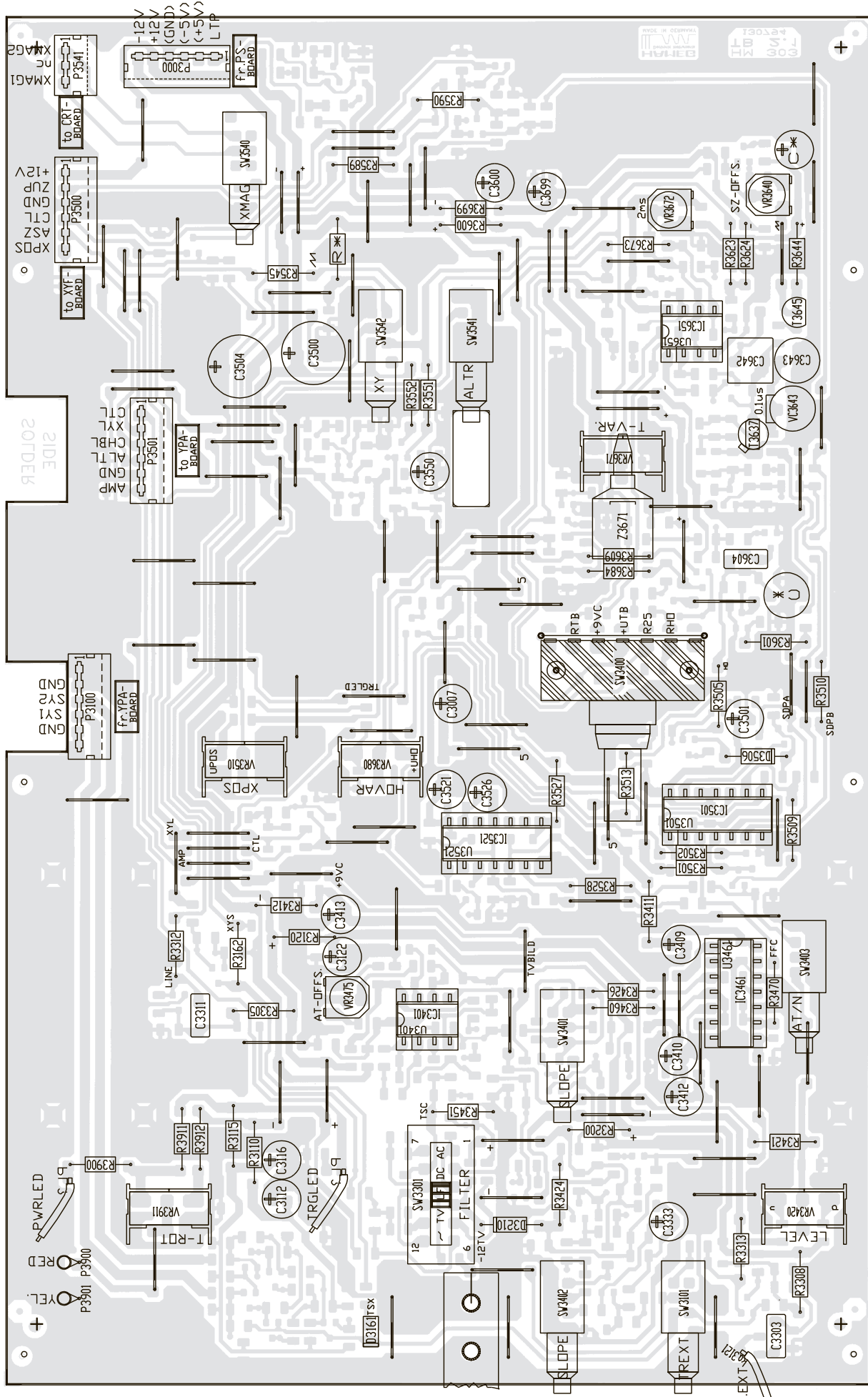
**HAMEG**  
Instruments

TB30323  
Date: 06.02.95  
Sheet 2 of 3

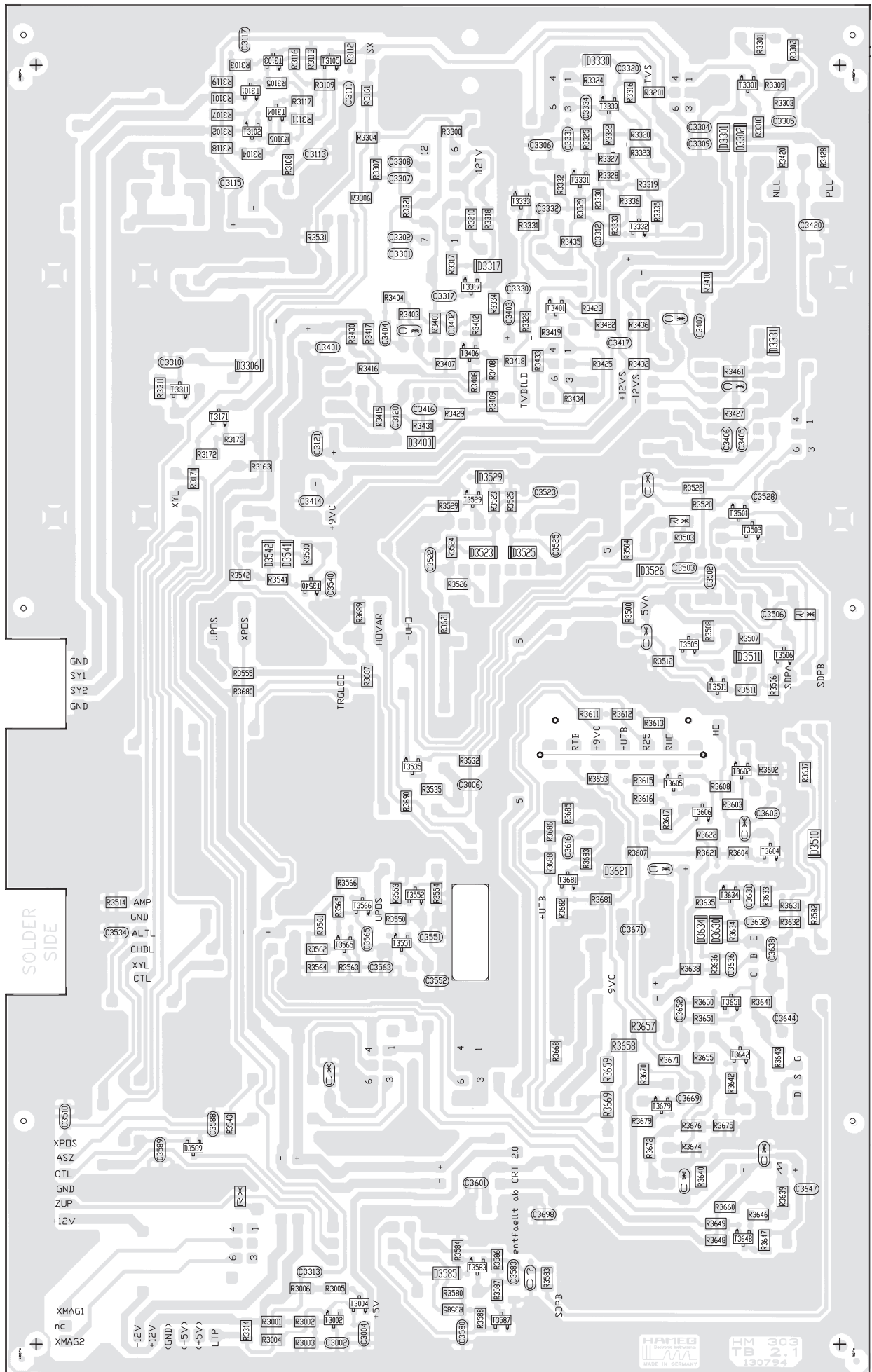
- R-Chip 1x 1206
- R-Chip 5x 1206
- R-Minimelf 0.5x MMA 0204
- SMA 0207 Met.Film 1x
- LCA 0207 R-Carbon 5x

\* to be omitted from CRT-board 2.0 and up

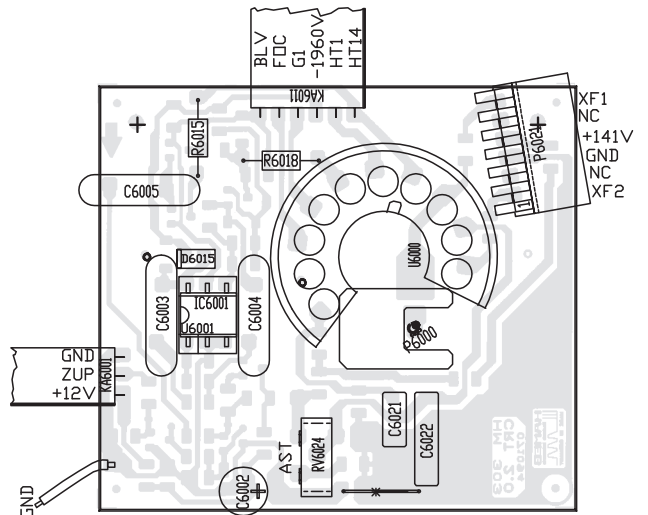
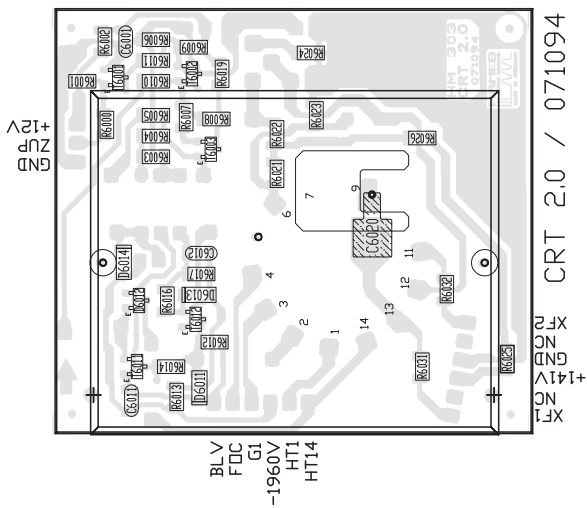
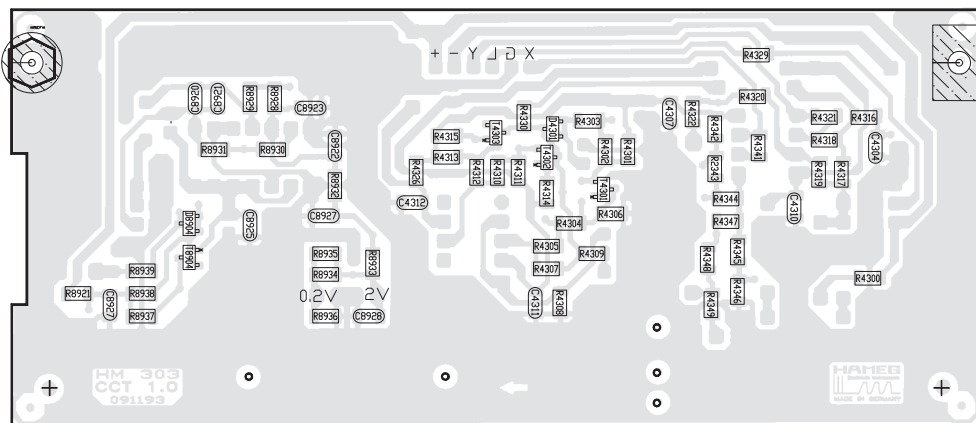
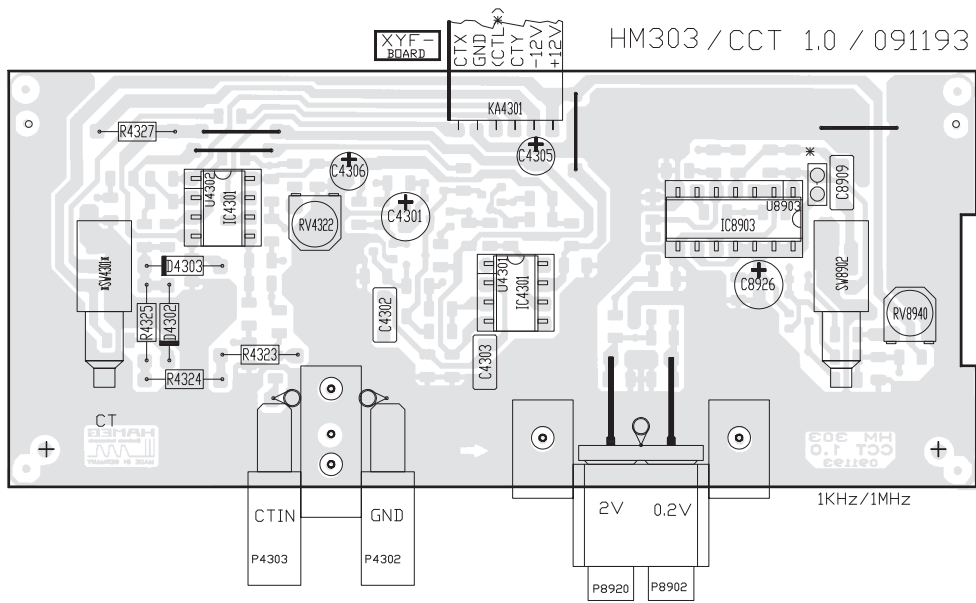




HM303 / TB 2.1 / 130794 / Component Side

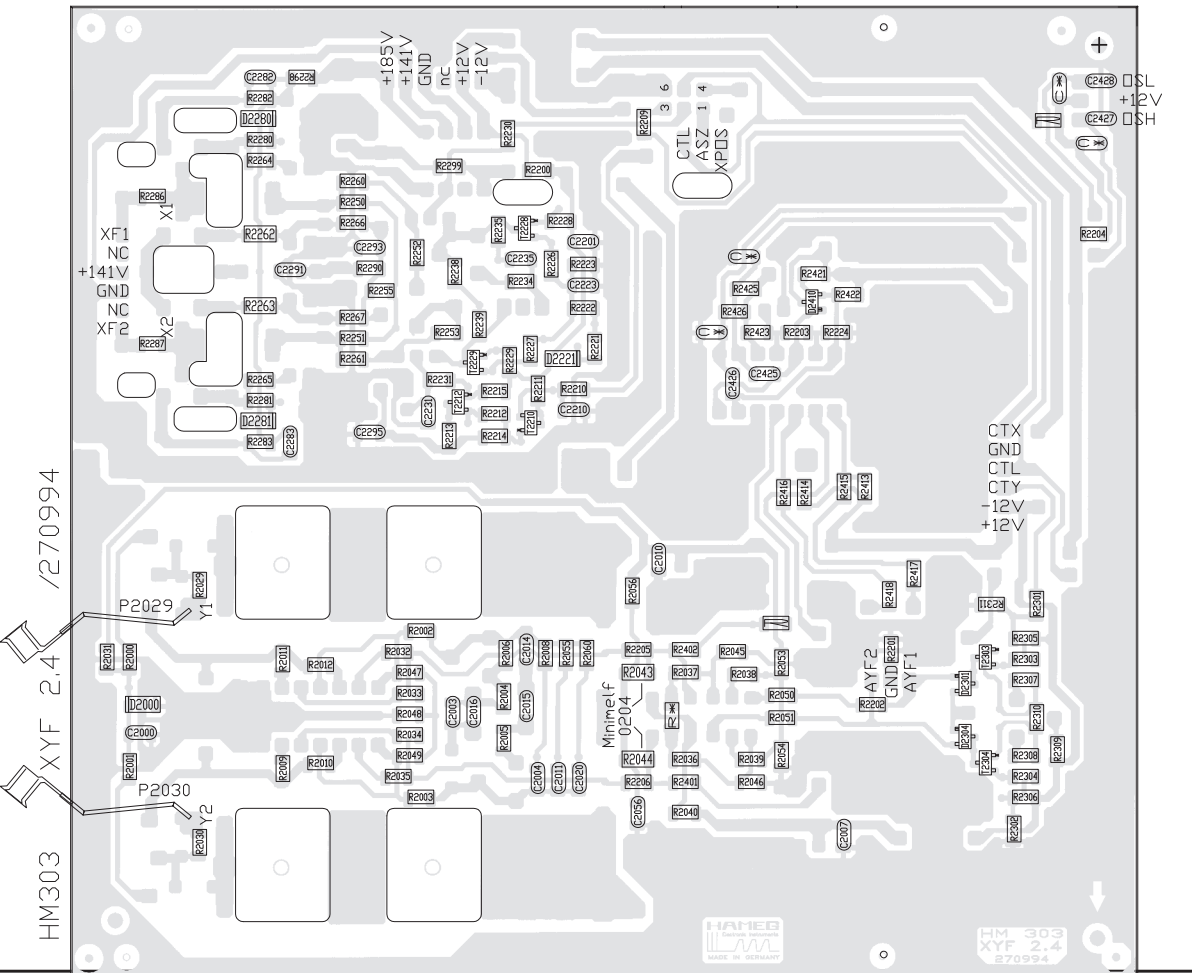
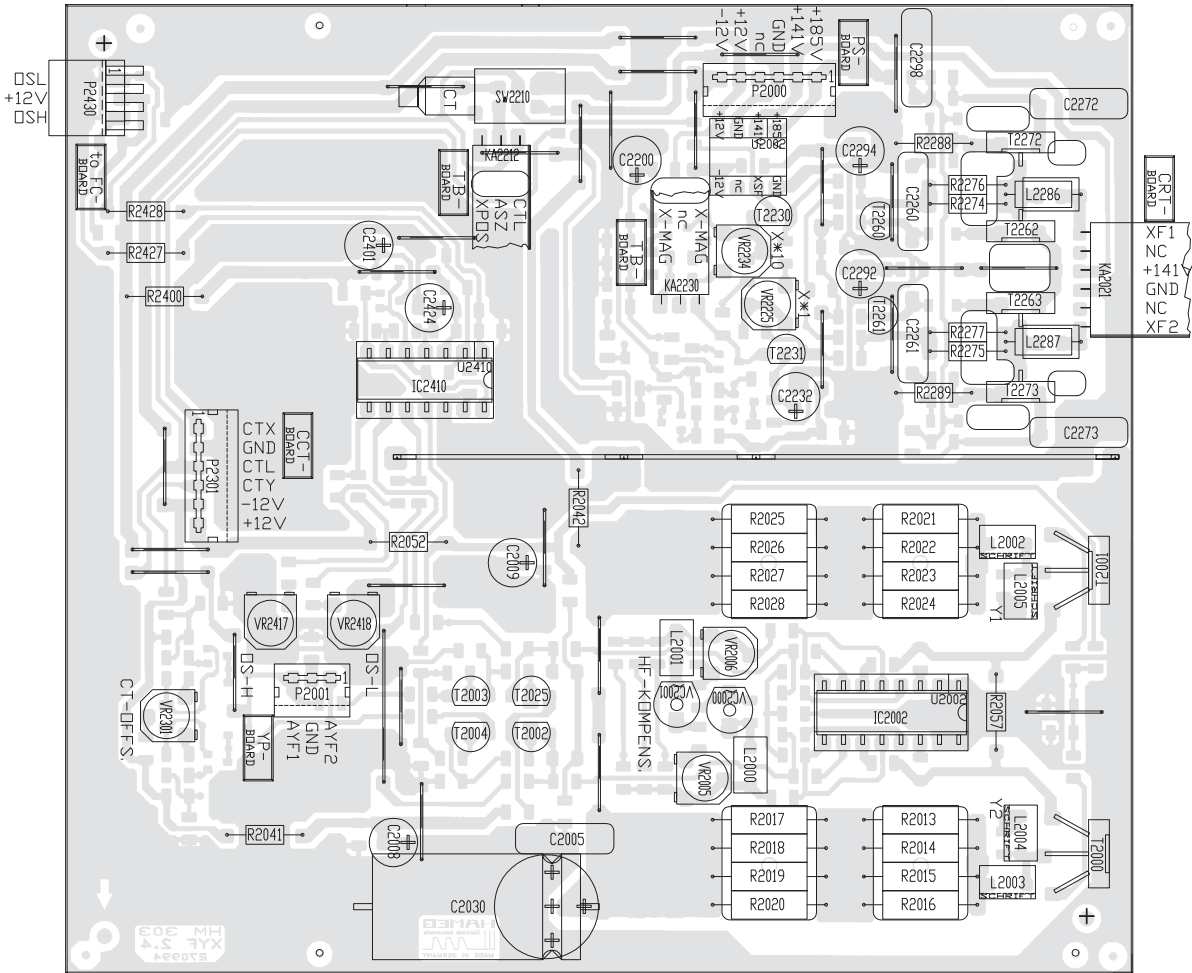






Component Location XY-Board (Top and Solderside)

HM303-2



Subject to change without notice



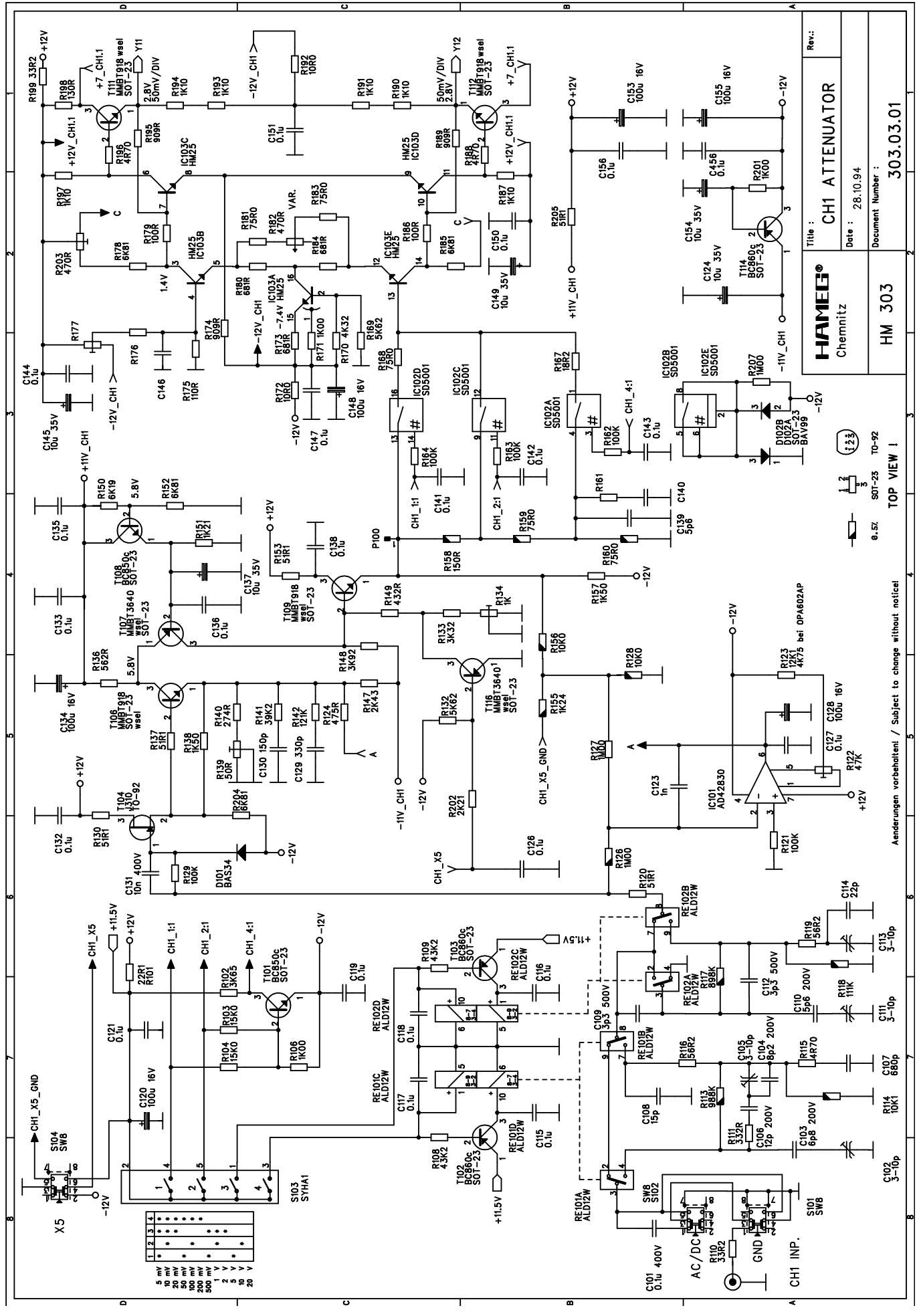
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# Oscilloscope

Circuit diagrams HM303 - 3

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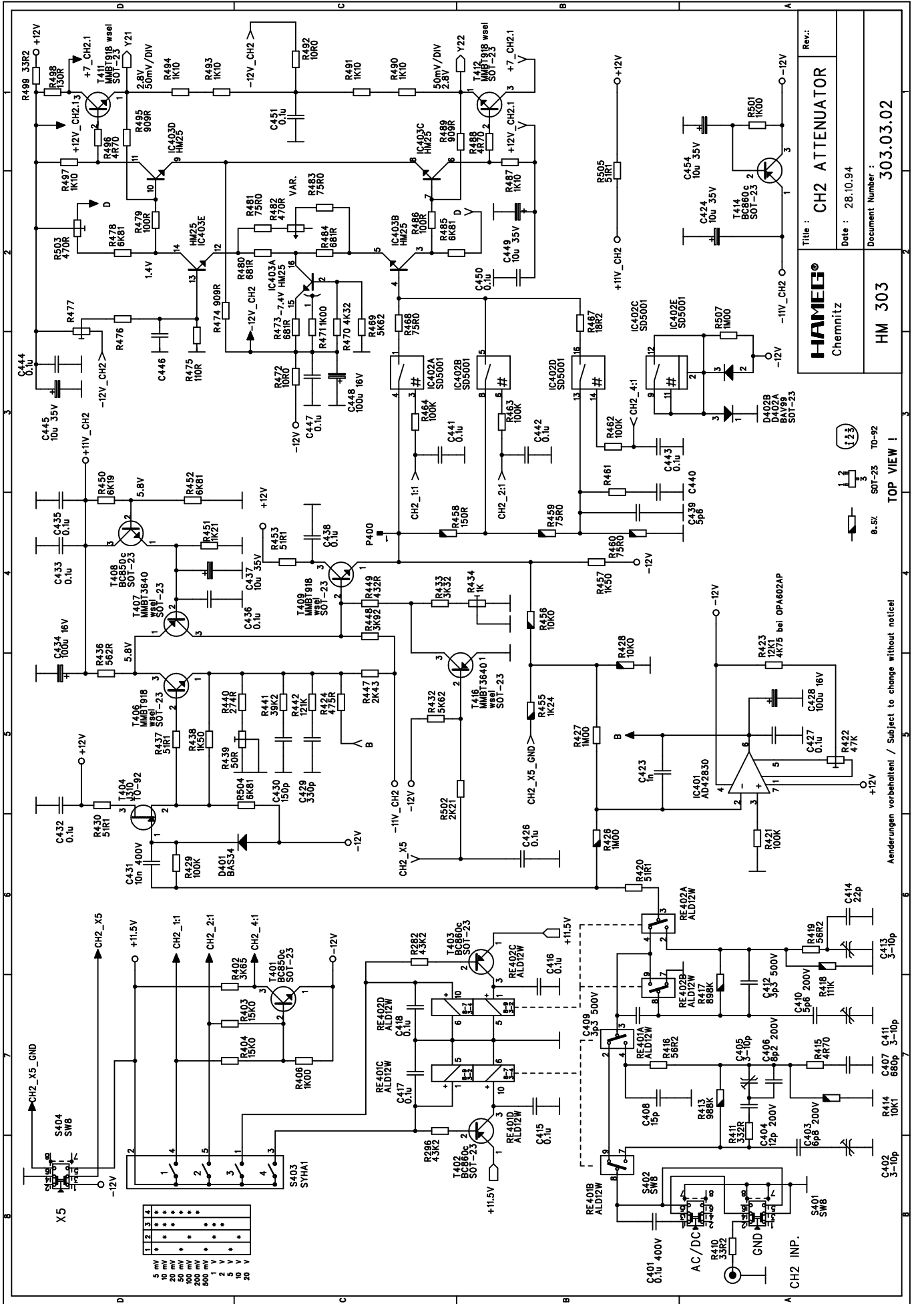


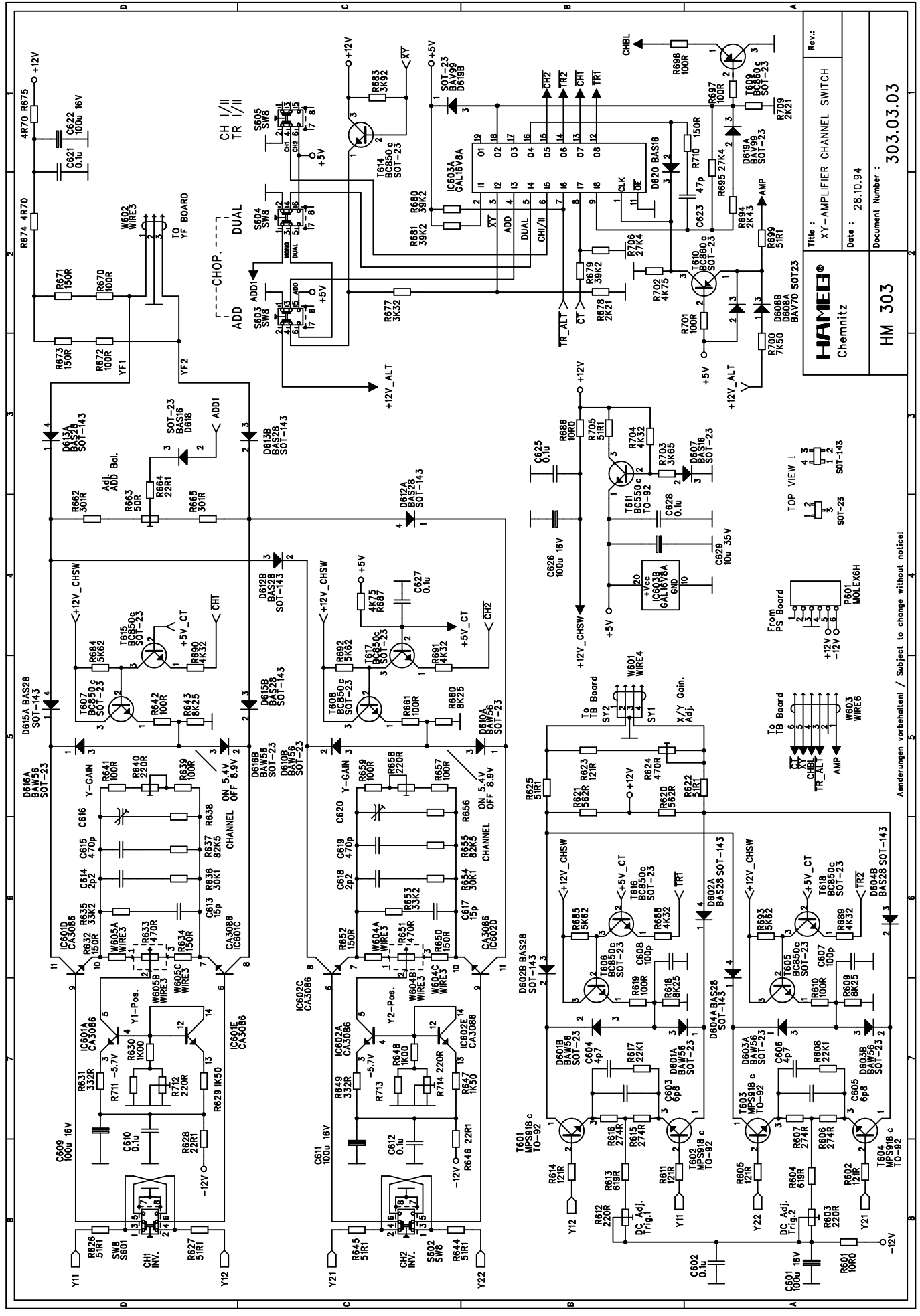


Rev.:  
**HAMEG®**  
 Chemnitz  
 Title : **CH1 ATTENUATOR**  
 Date : 28.10.94  
 Document Number : **303.03.01**

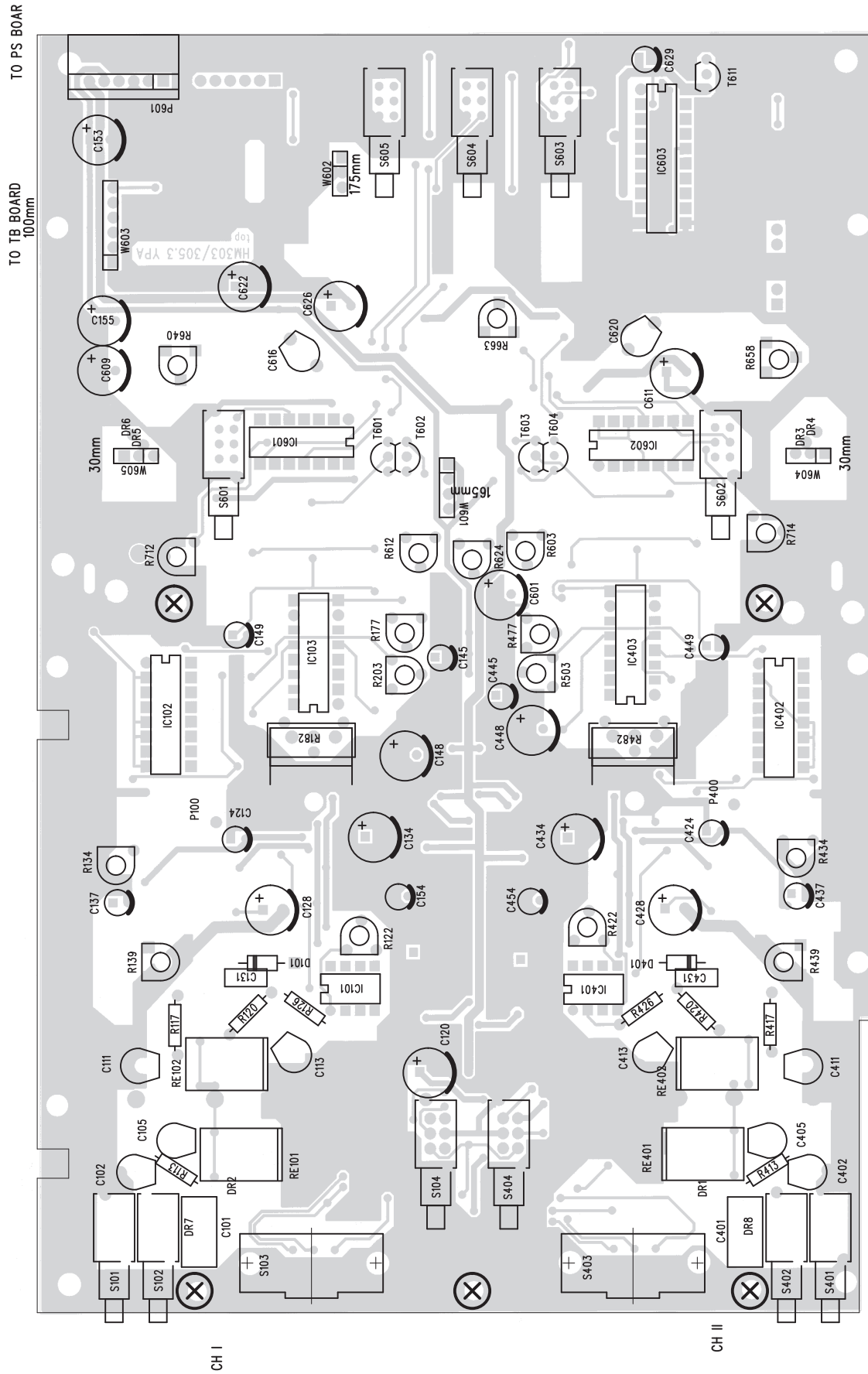
HM 303  
 TOP VIEW I  
 0.57 80T-23 10-92  
 1 2 3  
 4 5

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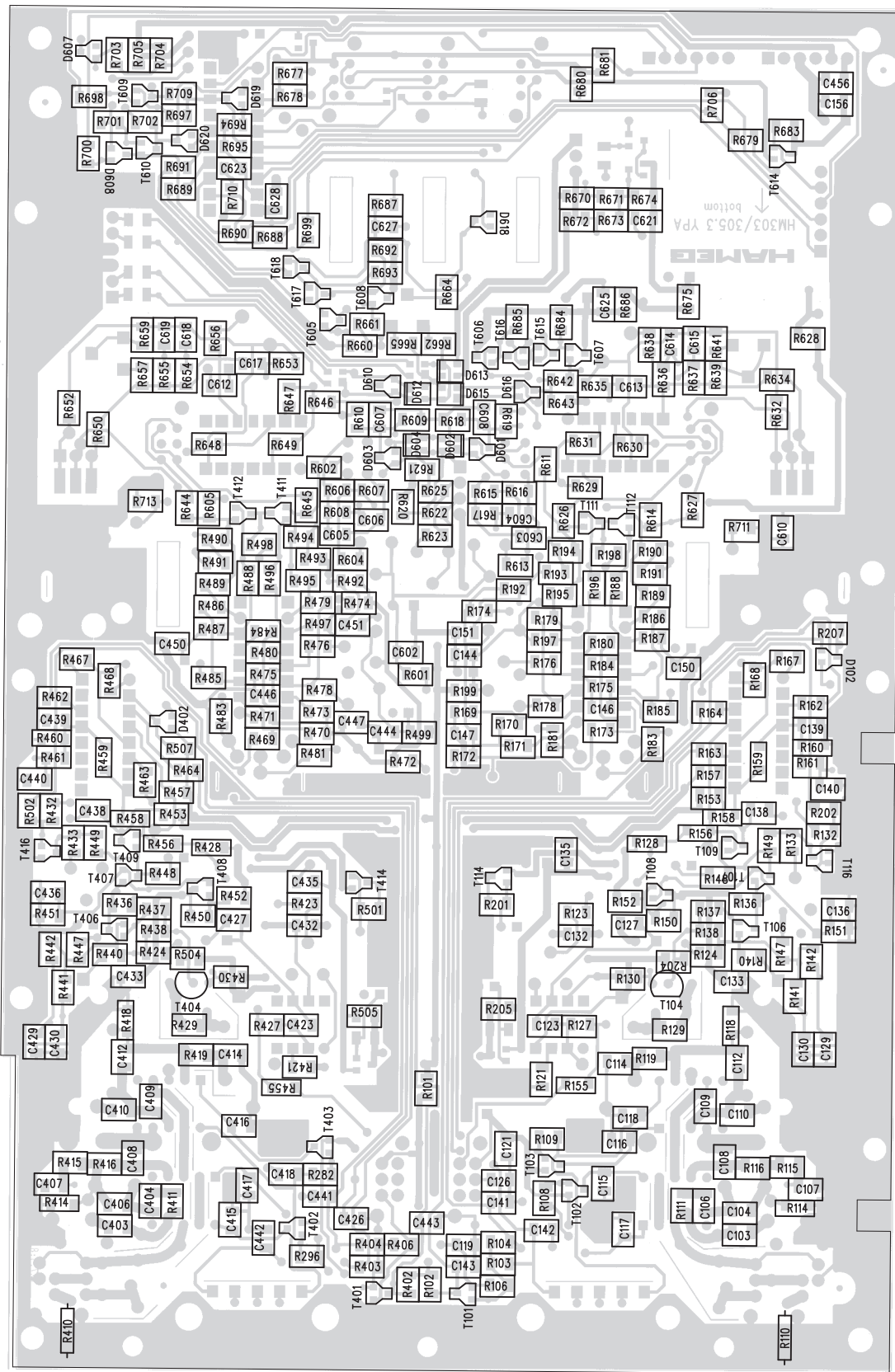








28.10.94  
HM 303/305.3 YPA REF BOTTOM  
28.10.94



# **HAMEG<sup>®</sup>**

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**Multimeters**

**Counters**

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**R- and LC-Meters**

**Spectrum Analyzers**

**Power Supplies**

**Curve Tracers**

**Time Standards**

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Telefax (852) 2 763 5236  
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4S-0303-03E0