

G2053



# SERVICE MANUAL



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Service  
Manual

Sach-Nr./Part no.  
72010-736.25

## VW ALPHA 4

made by **GRUNDIG**



ALPHA 4 (TN 1HO 035 156 / G.SD 10-00)

**D**

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**Bestückungskordinaten der Bauteile**

- Die Koordinaten X und Y sind sowohl als metrische Koordinaten für die Originalplatine in Millimeter, als auch als absolute Koordinaten für die vergrößerten Abbildungen der Platinen verwendbar.

**Hauptplatte (19353-316.00)**

**Koordinaten für die Bauteile der Lötseite (Unterseite)**

Pos.-Nr./ Pos. No.	Koordinaten/ Coordinates		Pos.-Nr./ Pos. No.	Koordinaten/ Coordinates		Pos.-Nr./ Pos. No.	Koordinaten/ Coordinates	
	X	Y		X	Y		X	Y
CC0003	29	121	CC0215	111	96	CL0006	36	104
CC0004	24	119	CC0219	69	62	CR0001	24	133
CC0005	24	135	CC0220	119	94	CR0003	24	116
CC0007	24	114	CC0222	107	65	CR0005	28	135
CC0008	24	111	CC0401	151	28	CR0006	38	133
CC0009	35	112	CC0402	161	22	CR0007	42	127
CC0010	36	95	CC0406	157	12	CR0009	19	105
CC0011	36	101	CC0407	159	6	CR0010	29	96
CC0012	24	97	CC0408	159	4	CR0011	24	108
CC0013	36	98	CC0411	141	4	CR0012	43	95
CC0014	58	117	CC0412	152	15	CR0018	49	130
CC0015	19	102	CC0416	132	9	CR0022	55	127
CC0016	55	130	CC0419	122	3	CR0100	64	92
CC0017	40	112	CC0803	37	73	CR0101	62	103
CC0018	43	98	CC0804	56	56	CR0102	67	103
CC0019	19	108	CC0806	52	56	CR0103	74	103
CC0021	43	101	CC0807	87	36	CR0104	72	118
CC0023	56	104	CC0811	78	40	CR0105	61	92
CC0024	52	121	CC0812	78	45	CR0107	79	105
CC0025	18	125	CC0813	52	6	CR0108	72	120
CC0026	55	124	CC0819	97	55	CR0112	86	123
CC0027	49	135	CC0821	71	26	CR0113	86	121
CC0030	50	84	CC1101	17	46	CR0117	97	121
CC0031	42	124	CC1102	10	39	CR0119	76	134
CC00101	79	102	CC1109	20	58	CR0123	86	110
CC0102	72	123	CC1111	20	71	CR0201	119	91
CC0106	96	127	CC1603	164	107	CR0202	75	88
CC0108	76	131	CC1607	149	70	CR0206	70	86
CC0109	76	128	CC1657	156	84	CR0208	69	81
CC0112	97	112	CC1832	149	59	CR0209	59	68
CC0113	97	115	CC2003	135	73	CR0211	69	78
CC0114	86	113	CC2006	119	103	CR0213	59	78
CC0200	84	91	CC2007	119	100	CR0216	69	76
CC0203	69	83	CD0001	20	129	CR0217	69	65
CC0204	97	91	CD0002	24	127	CR0218	92	91
CC0205	97	88	CD0003	19	98	CR0221	100	77
CC0206	92	88	CD0006	55	134	CR0222	97	81
CC0207	92	81	CD0801	44	72	CR0223	105	77
CC0208	93	77	CD0802	80	25	CR0224	93	74
CC0210	105	74	CD0803	89	42	CR0226	93	61
CC0211	100	74	CD2003	113	102	CR0229	84	63
CC0212	93	68	CD2401	11	104	CR0231	101	61
CC0213	93	65	CL0001	9	131	CR0237	107	71
CC0214	84	66	CL0004	43	104	CR0400	146	18

**GB**

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**Assembly coordinates of the components**

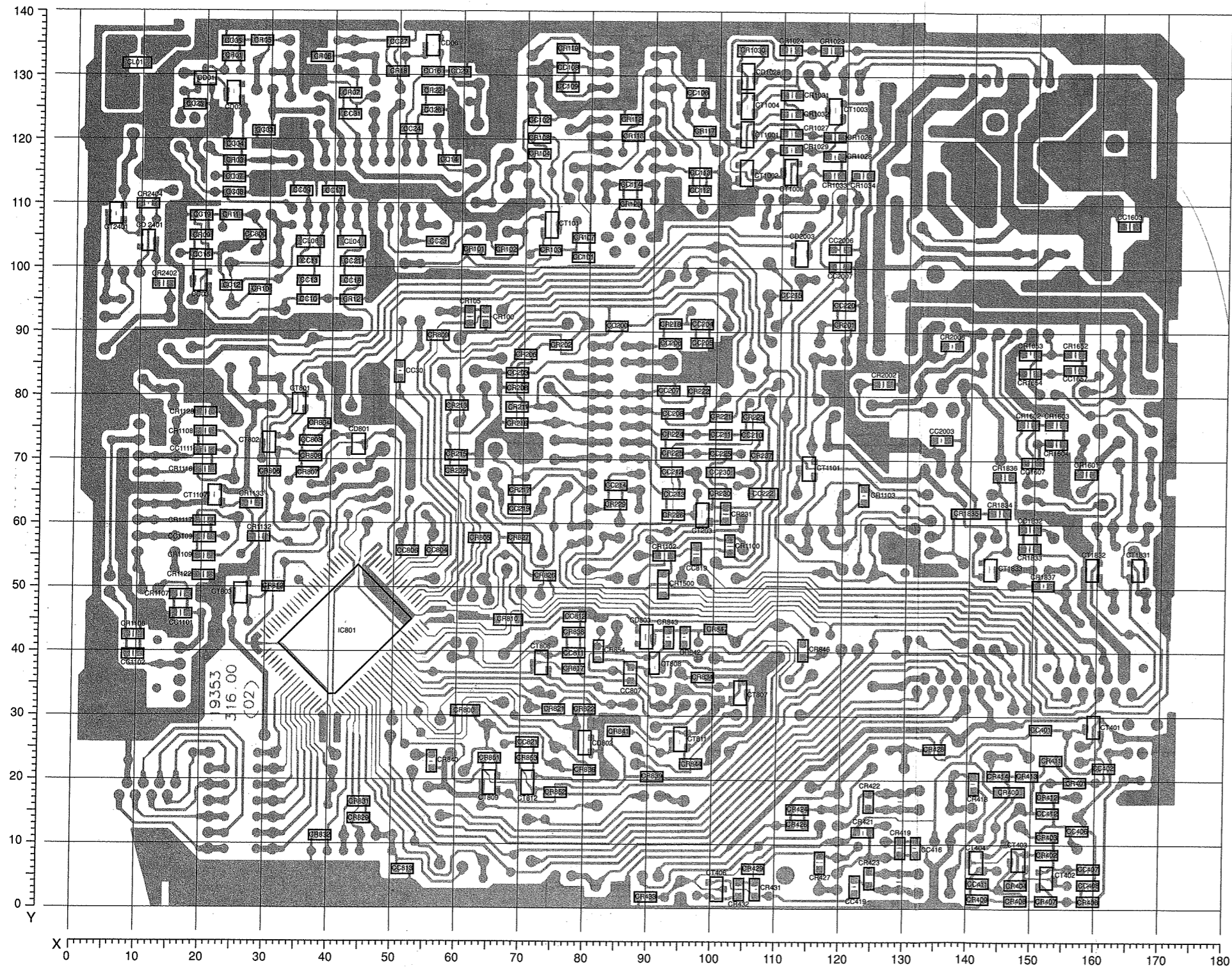
- The X and Y coordinates can be used as both metric coordinates in mm for the original circuit board and absolute coordinates for the enlarged diagrams of the circuit boards.

**Main Board (19353-316.00)**

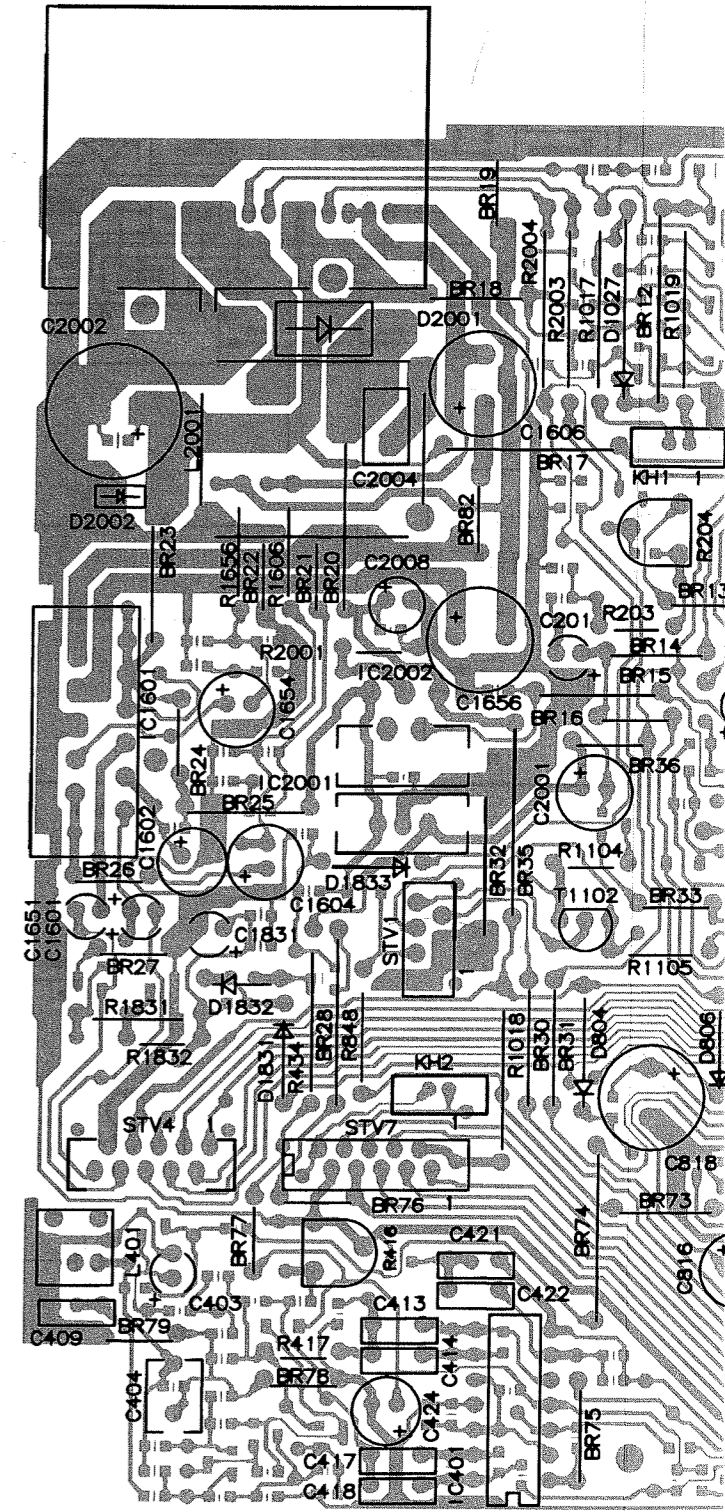
**Coordinates of the components on the solder side (bottom side)**

Pos.-Nr./ Pos. No.	Koordinaten/ Coordinates		Pos.-Nr./ Pos. No.	Koordinaten/ Coordinates		Pos.-Nr./ Pos. No.	Koordinaten/ Coordinates		Pos.-Nr./ Pos. No.	Koordinaten/ Coordinates	
	X	Y		X	Y		X	Y		X	Y
CR0401	156	20	CR0838	78	43	CR2002	126	82			
CR0402	152	8	CR0839	90	20	CR2402	14	97			
CR0403	152	11	CR0840	56	23	CR2404	11	110			
CR0404	147	4	CR0841	85	27	CT0101	74	107			
CR0406	159	1	CR0842	95	42	CT0203	98	61			
CR0407	152	1	CR0843	93	42	CT0401	159	28			
CR0408	147	1	CR0844	96	22	CT0402	152	5			
CR0409	141	1	CR0846	114	40	CT0403	148	7			
CR0411	153	23	CR0847	100	43	CT0404	141	7			
CR0412	152	17	CR0851	65	23	CT0406	101	3			
CR0413	149	21	CR0852	75	18	CT0801	35	79			
CR0414	144	21	CR0853	71	23	CT0802	30	72			
CR0418	141	19	CR0854	82	40	CT0803	26	49			
CR0419	129	9	CR1030	105	134	CT0806	73	38			
CR0421	123	12	CR1031	111	127	CT0807	104	34			
CR0422	124	17	CR1032	111	124	CT0808	91	38			
CR0423	124	5	CR1033	118	114	CT0809	65	19			
CR0424	113	15	CR1034	122	114	CT0811	95	26			
CR0426	113	13	CR1100	102	56	CT0812	71	19			
CR0427	117	7	CR1102	92	55	CT1004	104	125			
CR0428	134	25	CR1103	123	64	CT1006	111	115			
CR0429	106	6	CR1106	10	42	CT1101	114	69			
CR0431	107	3	CR1107	17	49	CT1107	22	64			
CR0432	104	3	CR1108	20	74	CT1831	166	53			
CR0433	90	2	CR1109	20	55	CT1832	159	53			
CR0800	61	31	CR1116	20	68	CT1833	143	53			
CR0804	38	76	CR1117	20	60	CT2401	6	108			
CR0805	63	58	CR1122	20	52	IC0801	42	43			
CR0806	30	68	CR1128	20	77						
CR0807	36	68	CR1132	29	58						
CR0808	37	71	CR1133	28	63						
CR0809	56	89	CR1500	92	50						
CR0810	68	45	CR1601	158	68						
CR0812	31	50	CR1602	148	76						
CR0817	78	37	CR1603	153	76						
CR0821	75	31	CR1604	153	73						
CR0822	80	31	CR1652	156	87						
CR0826	73	52	CR1653	149	87						
CR0827	69	58	CR1654	149	84						
CR0829	45	14	CR1833	149	56						
CR0831	45	16	CR1834	144	62						
CR0832	39	11	CR1835	139	62						
CR0834	98	36	CR1836	145	67						
CR0836	80	21	CR1837	151	50						

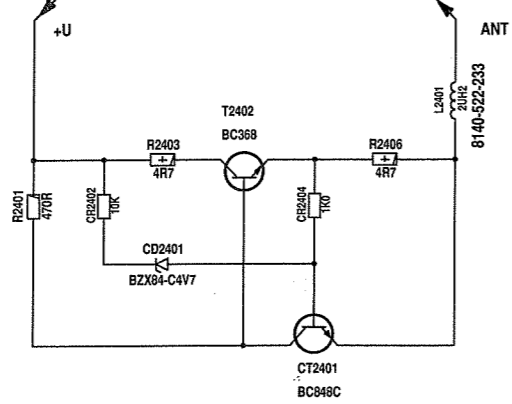
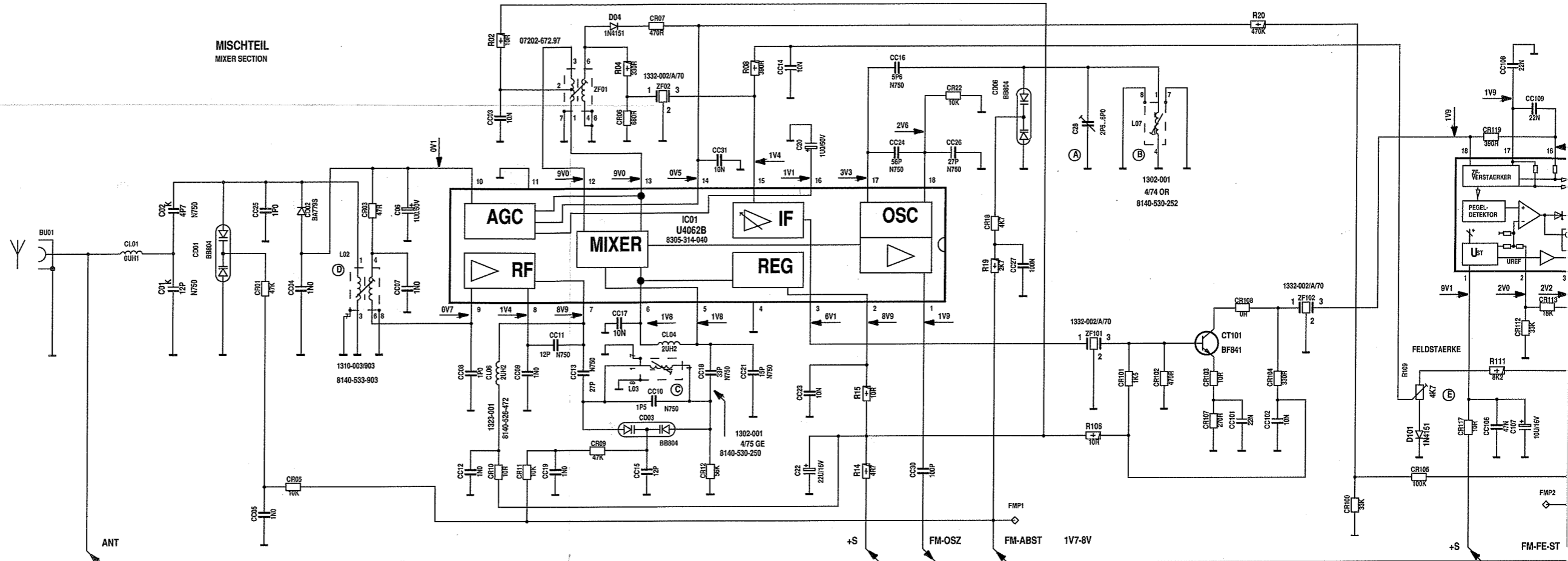
Sicht auf Lötseite  
View on Solder Side



Sicht auf Bestückungsseite  
View on Component Side





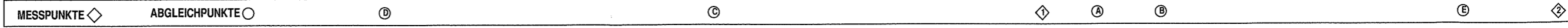


SPANNUNGSVERSORGUNG FUER AKTIVANTENNE  
VOLTAGE SUPPLY FOR ACTIVE AERIAL (DC)

ALLE SPANNUNGEN GEMESSEN BEI UB=14V GEGEN MINUS  
ALL VOLTAGES MEASURED AT UB=14V WITH RESPECT TO NEGATIV

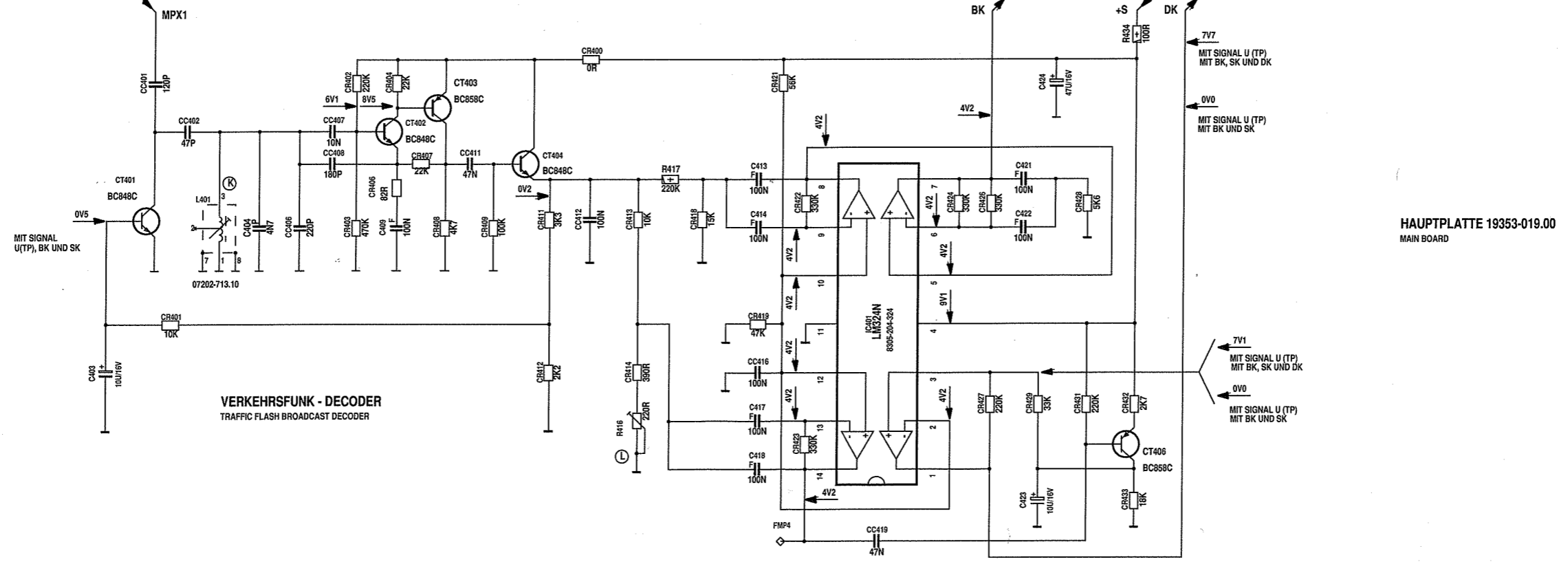
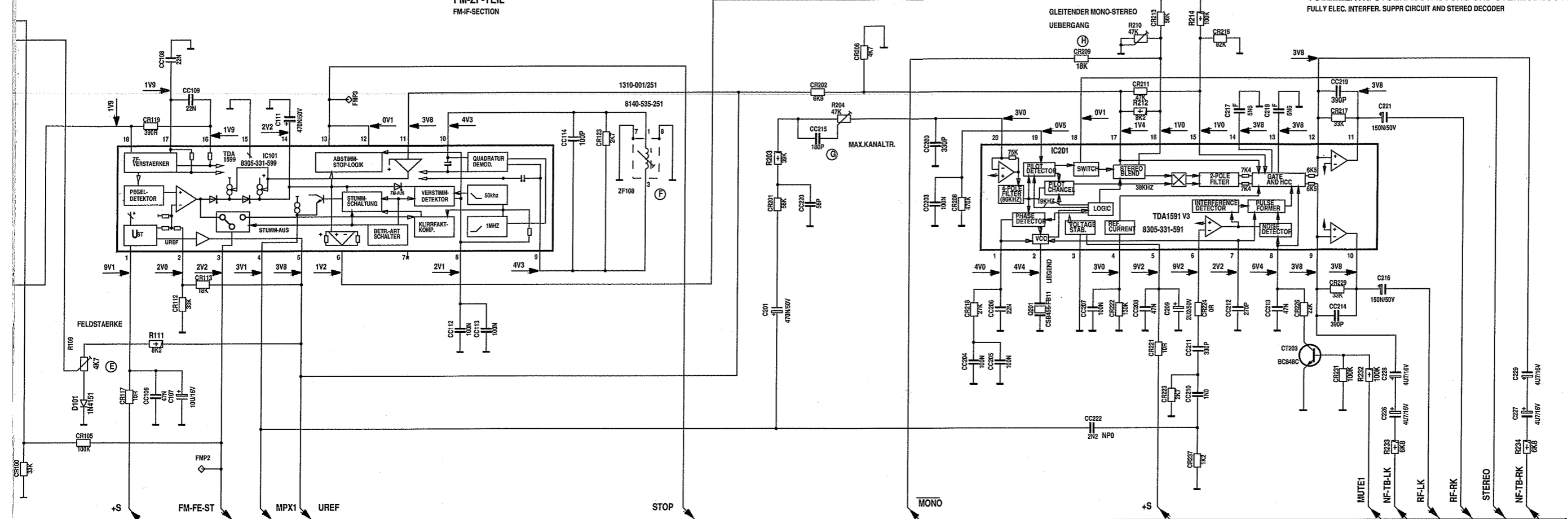
← OHNE SIGNAL  
WITHOUT SIGNAL

▭ MIT SIGNAL:TB  
WITH SIGNAL:TR

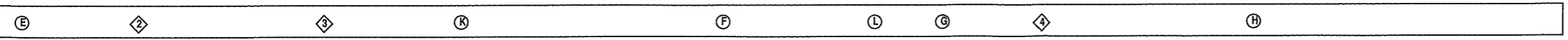


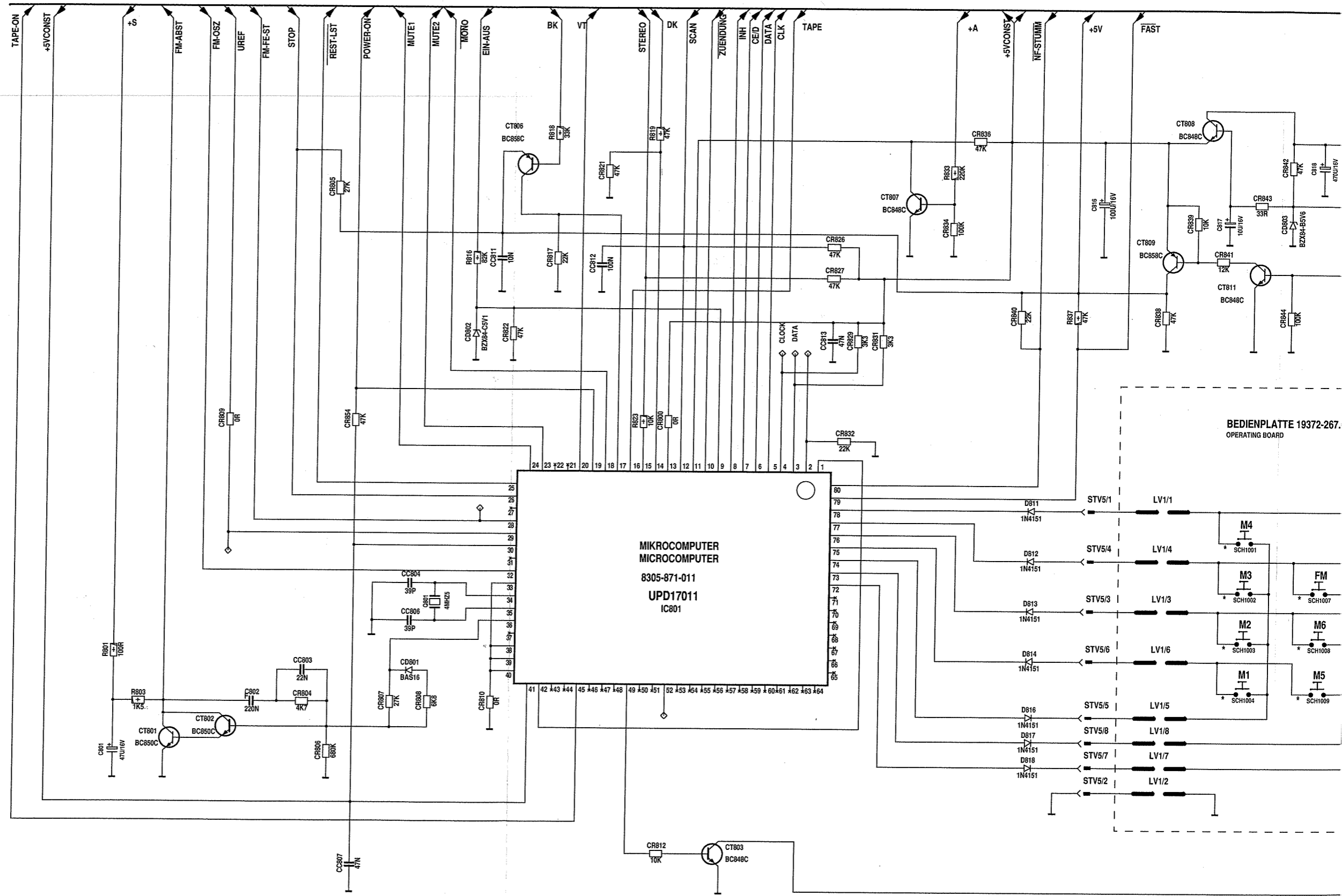
**FM-ZF-TEIL**  
FM-IF-SECTION

**VOLLELEKTR. STORAUSTAUNG UND STEREODECODER**  
FULLY ELEC. INTERFER. SUPPR CIRCUIT AND STEREO DECODER

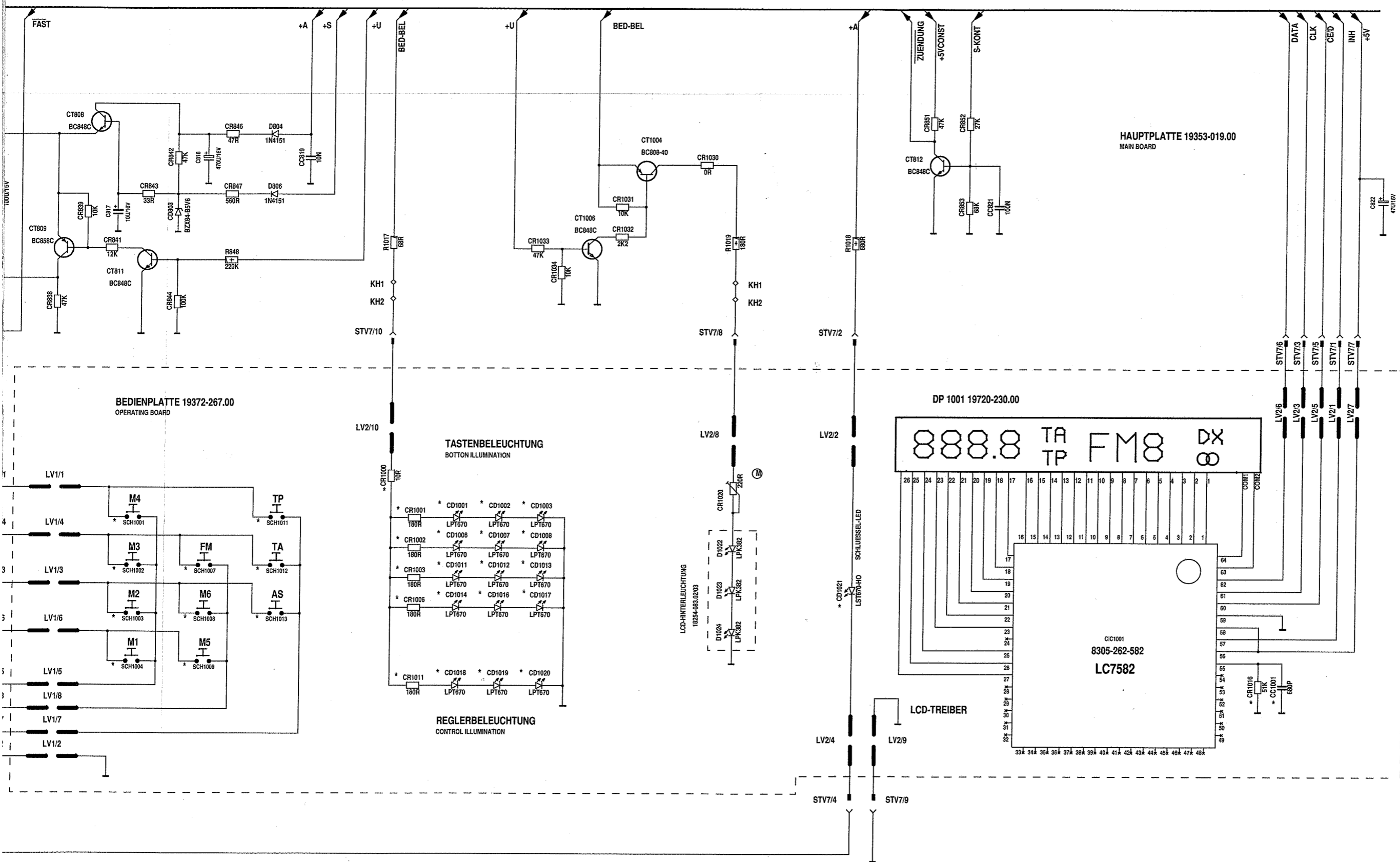


**HAUPTPLATTE 19353-019.00**  
MAIN BOARD





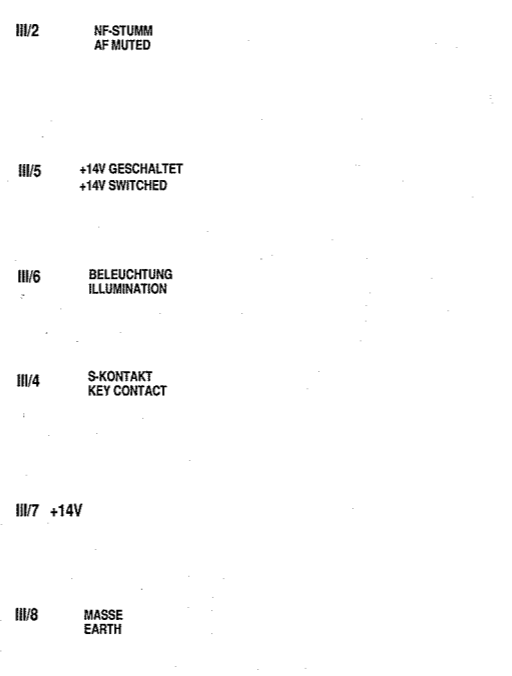
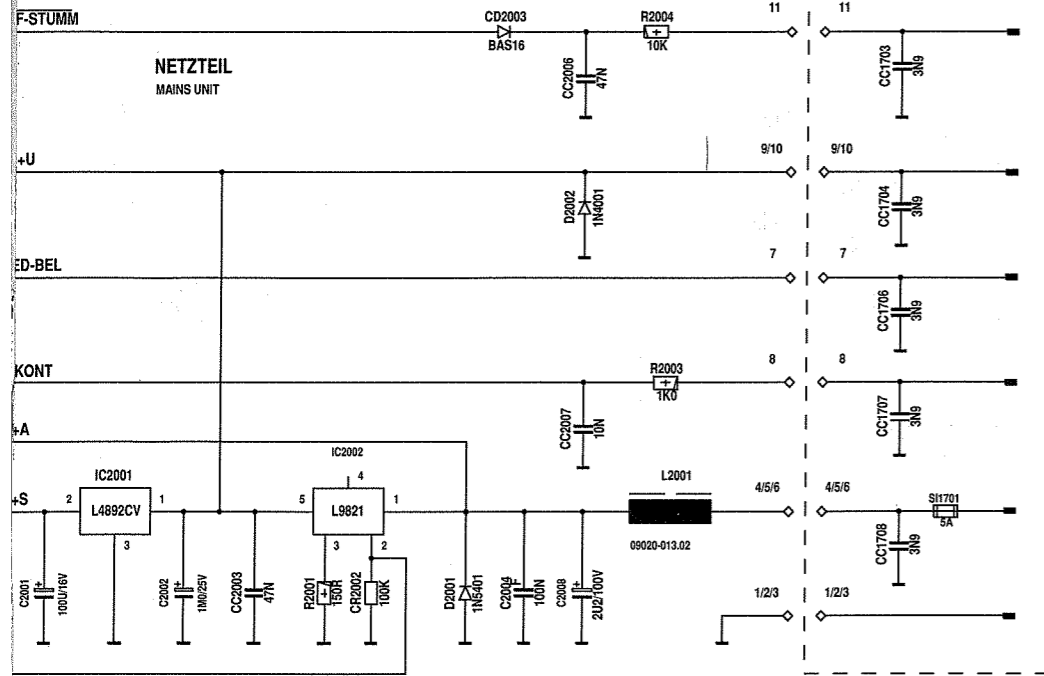
ABGLEICHPUNKTE ○



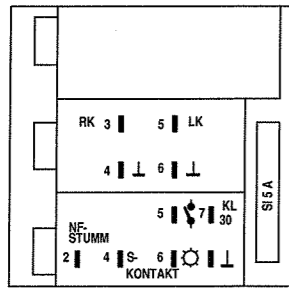




ANSCHLUSSPLATTE 19353-021.00  
CONNECTING BOARD



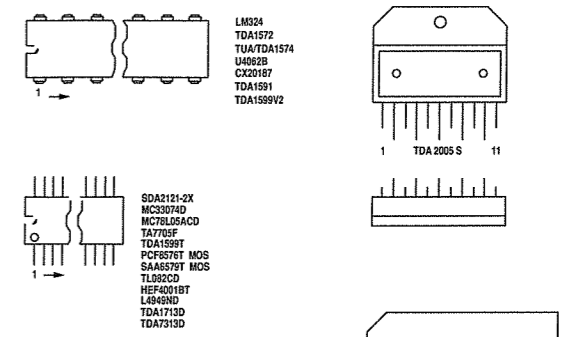
ANSCHLUSSEGEHAEUSE



I ZUSATZ-ANSCHLUSS  
II LS-ANSCHLUSS  
III VERSORGUNGS-ANSCHLUSS

ÄNDERUNGEN VORBEHALTEN  
SUBJEKT TO ALTERATION

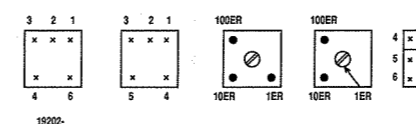
ACHTUNG!  
VORSCHRIFTEN BEIM UMGANG MIT  
MOS-BAUTEILEN BEACHTEN!  
ATTENTION!  
OBSERVE MOS COMPONENT HANDLING  
INSTRUCTIONS WHEN SERVICING!



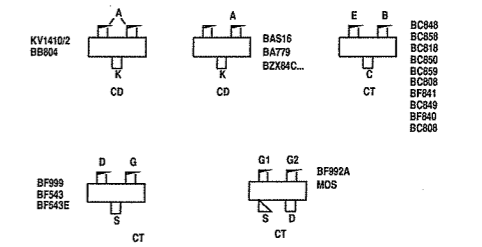
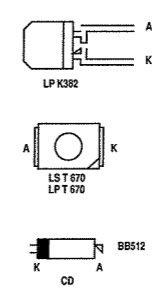
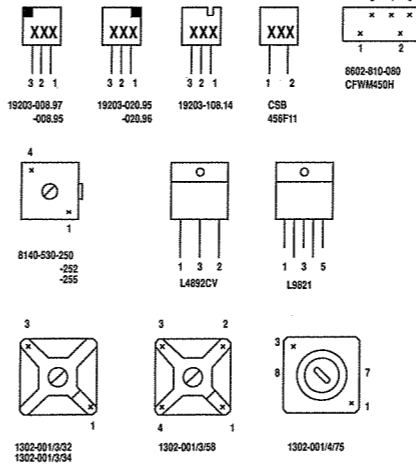
- WIDERSTANDRESISTOR: KSW 0204 DIN, MSW 0204 DIN, KSW 0207 DIN, MSW 0207 DIN, KSW 0414 DIN, MSW 0414 DIN, KSW 0517 DIN, MSW 0517 DIN, MSW 0309 DIN, NTC, DRAHT WIRE, METALLOXYDSCHICHT METAL OXYDE, RAUSCHARM LOW NOISE, SCHWER ENTFLAMMBAR LOW FLAMMABILITY

- KONDENSATOR/CAPACITOR: ELKO ELECTROLYTIC, TANTALEKO TANTALUM ELECTROLYTIC, FOLIE FOIL, KERAMIK CERAMIC, POLYPROPYLEN (KS-KP), BIPOLAR

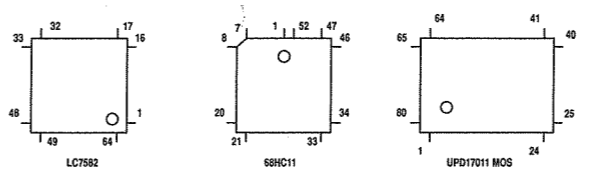
- KENNZEICHNUNG VON CHIP-BAUTEILEN CODING OF CHIP-COMPONENTS: SW = SCHWARZ BLACK, BN = BRAUN BROWN, RT = ROT RED, GE = GELB YELLOW, GN = GRUEN GREEN, BL = BLAU BLUE, VI = VIOLETT VIOLET, GR = GRAU GREY, WS = WEISS WHITE, RS = ROSA PINK, OR = ORANGE, NF = NATURFARBEN NATURAL COLOUR



FARBKODIERUNG VON FILTERN  
COLOUR CODE FOR FILTERS



VON OBEN GESEHEN  
TOP VIEW



TE 19353-019.00