

# SKM 100 SKM 300 SKM 500

## Part 1



## TECHNISCHE DATEN

(Werte in Klammern entsprechen typischen Werten)

### HF-TEIL

Frequenzaufbereitung	Phase-Locked-Loop (PLL)-Synthesizer
Frequenzbereiche	518 ... 550 MHz 630 ... 662 MHz 740 ... 772 MHz 790 ... 822 MHz 838 ... 870 MHz
Schaltbandbreite	max. 32 MHz
Kanalanzahl	SKM 500: 16, SKM 300: 8; SKM 100: 4
Frequenzraster	25 kHz
HF-Leistung am Antennenausgang	30 mW, -3 dB
Modulationsart	FM
Nennhub bei 1 kHz NF	±24 kHz
Spitzenhub bei 1 kHz NF	±48 kHz

### NF-TEIL

Kommandersystem	HDX
NF-Frequenzgang (bei 1 kHz)	100 Hz ... 16 kHz; -3dB
Klirrfaktor bei 1 kHz und Nennhub	< 0,9% (0,5%)
S/N Verhältnis (A-bewertet)	≥ 100 dB

### ALLGEMEIN

Nennspannung	9 V
Betriebsspannung	6,0 ... 10 V
Stromverbrauch bei Nennspannung	≤ 56 mA (52 mA)
Ruhestromaufnahme	≤ 100 µA
Batterie	IEC 6 LR 61 (9V Block Alkaline)
Betriebsdauer	≥ 8 Stunden (Varta Nr. 4022 oder 8022)
Zulassung	D810 002L RF / FCC ID: DMOH1EURH

## TECHNICAL DATA

(Values in brackets are typical values)

### RF STAGE

RF Generation and control _____	Phase-Locked-Loop (PLL)-Synthesizer
Frequency ranges _____	518 ... 550 MHz 630 ... 662 MHz 740 ... 772 MHz 790 ... 822 MHz 838 ... 870 MHz
Switching bandwidth _____	max. 32 MHz
Quantity of channels _____	SKM 500: 16, SKM 300: 8; SKM 100: 4
Channel grid _____	25 kHz
RF Power at antenna output _____	30 mW, -3 dB
Modulation _____	FM
Nominal deviation at 1 kHz AF _____	±24 kHz
Peak deviation at 1 kHz AF _____	±48 kHz

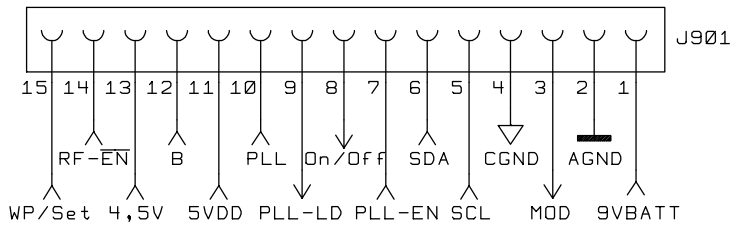
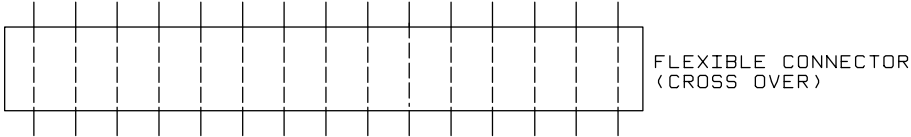
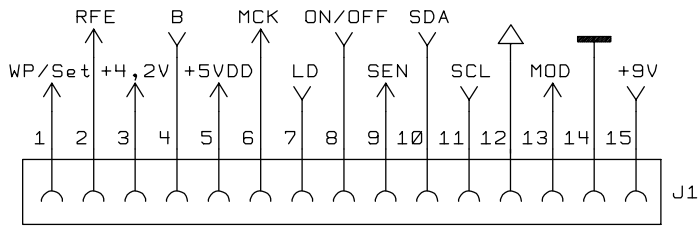
### AF STAGE

Compander system _____	HDX
AF-Frequency response (Ref. 1 kHz) _____	100 Hz ... 16 kHz; -3dB
THD at 1 kHz and nominal deviation _____	< 0.9% (0.5%)
S/N A-weighted _____	≥ 100 dB

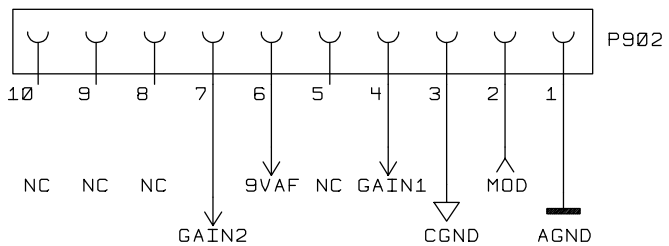
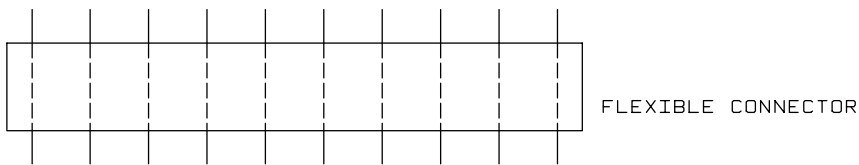
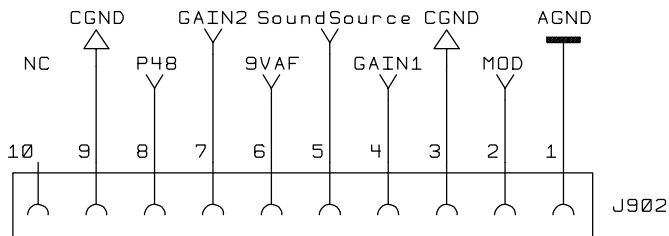
### GENERAL

Nominal supply voltage _____	9 V
Operating voltage _____	6.0 ... 10 V
Current consumption at nominal voltage _____	≤ 56 mA (52 mA)
Stand-by current _____	≤ 100 μA
Battery _____	IEC 6 LR 61 (9V Block Alkaline)
Operating time _____	≥ 8 Hours (Varta No. 4022 or 8022)
Approbation _____	D810 002L RF / FCC ID: DMOH1EURH

RF MOD A022 DRAWING 79923



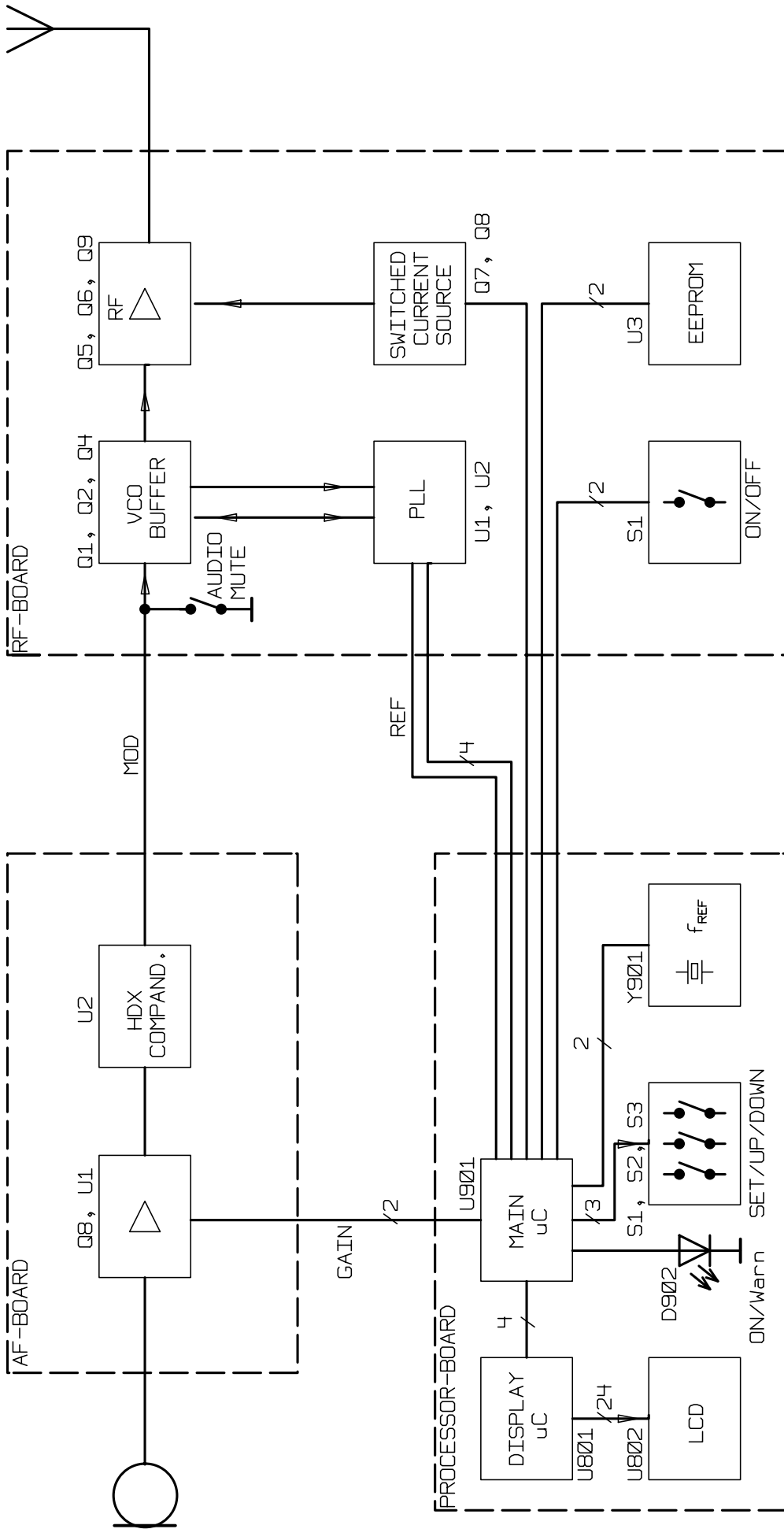
PROCESSOR MOD A023 DRAWING 79924



AF BOARD DRAWING 79960

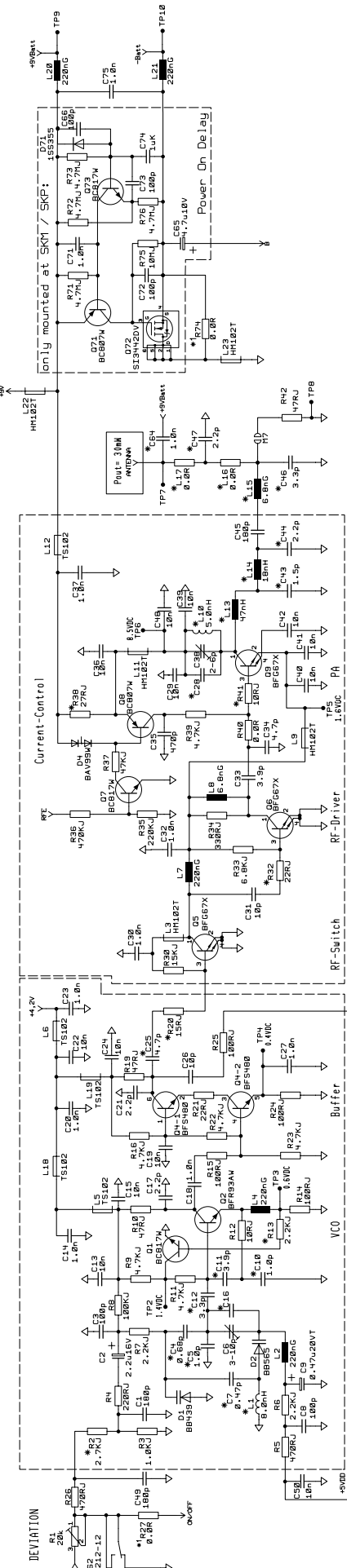
130300KRA1015

SKM 100, SKM 300, SKM 500  
SIGNALFLUSSZUWEISUNG  
INTERCONNECTOR ASSIGNMENT



BLOCKDIAGRAM SKM 100 / 300 / 500

**SKM 100, SKM 300, SKM 500  
HF-MODUL, BLOCKSCHALTBILD  
RF MODULE, BLOCK DIAGRAM**

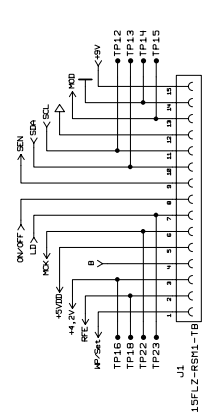


RF-Parts shown Range 790-822MHz

\*COMPONENTS SK/SKM/SKP/SR Versions: SK=1, SKM=2, SR=3, SKP=4

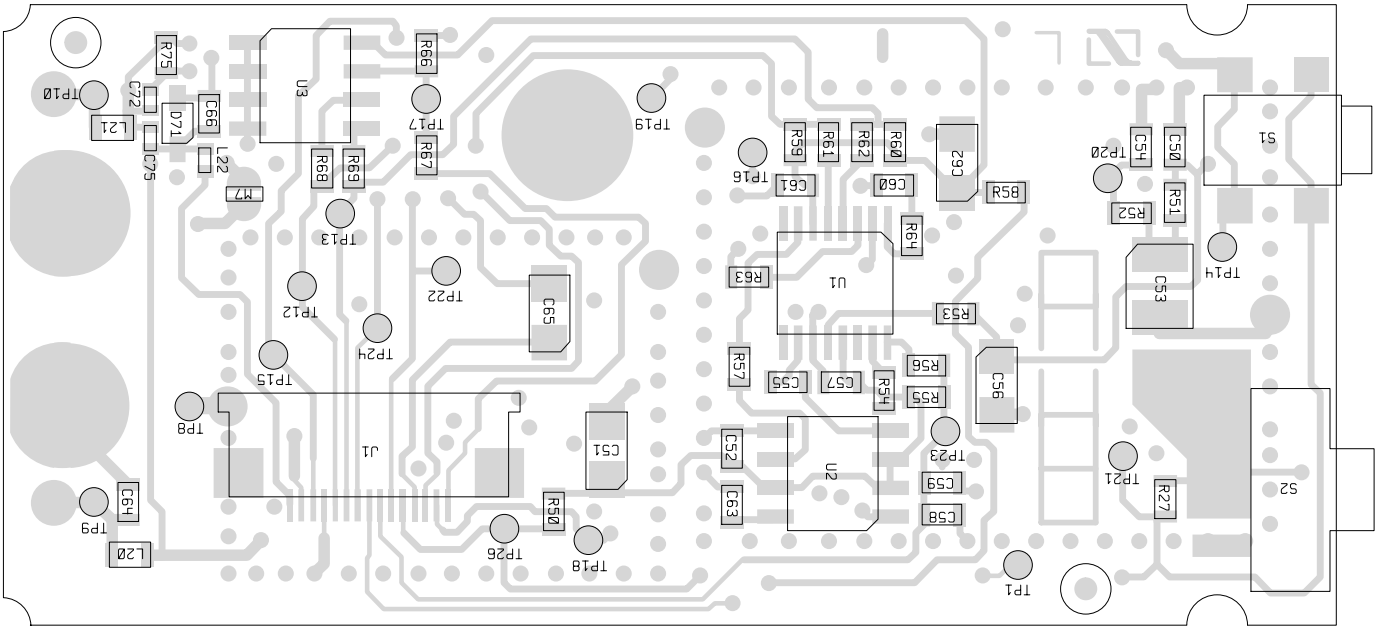
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11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
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561	562	563	564	565	566	567	568	569	570
571	572	573	574	575	576	577	578	579	580
581	582	583	584	585	586	587	588	589	590
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611	612	613	614	615	616	617	618	619	620
621	622	623	624	625	626	627	628	629	630
631	632	633	634	635	636	637	638	639	640
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671	672	673	674	675	676	677	678	679	680
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721	722	723	724	725	726	727	728	729	730
731	732	733	734	735	736	737	738	739	740
741	742	743	744	745	746	747	748	749	750
751	752	753	754	755	756	757	758	759	760
761	762	763	764	765	766	767	768	769	770
771	772	773	774	775	776	777	778	779	780
781	782	783	784	785	786	787	788	789	790
791	792	793	794	795	796	797	798	799	800
801	802	803	804	805	806	807	808	809	810
811	812	813	814	815	816	817	818	819	820
821	822	823	824	825	826	827	828	829	830
831	832	833	834	835	836	837	838	839	840
841	842	843	844	845	846	847	848	849	850
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861	862	863	864	865	866	867	868	869	870
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931	932	933	934	935	936	937	938	939	940
941	942	943	944	945	946	947	948	949	950
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961	962	963	964	965	966	967	968	969	970
971	972	973	974	975	976	977	978	979	980
981	982	983	984	985	986	987	988	989	990
991	992	993	994	995	996	997	998	999	1000

NOTE: C16, C28, C64 mounted if necessary.  
 \*1 only mounted at SK/SR  
 \*2 only mounted at SKM/SKP

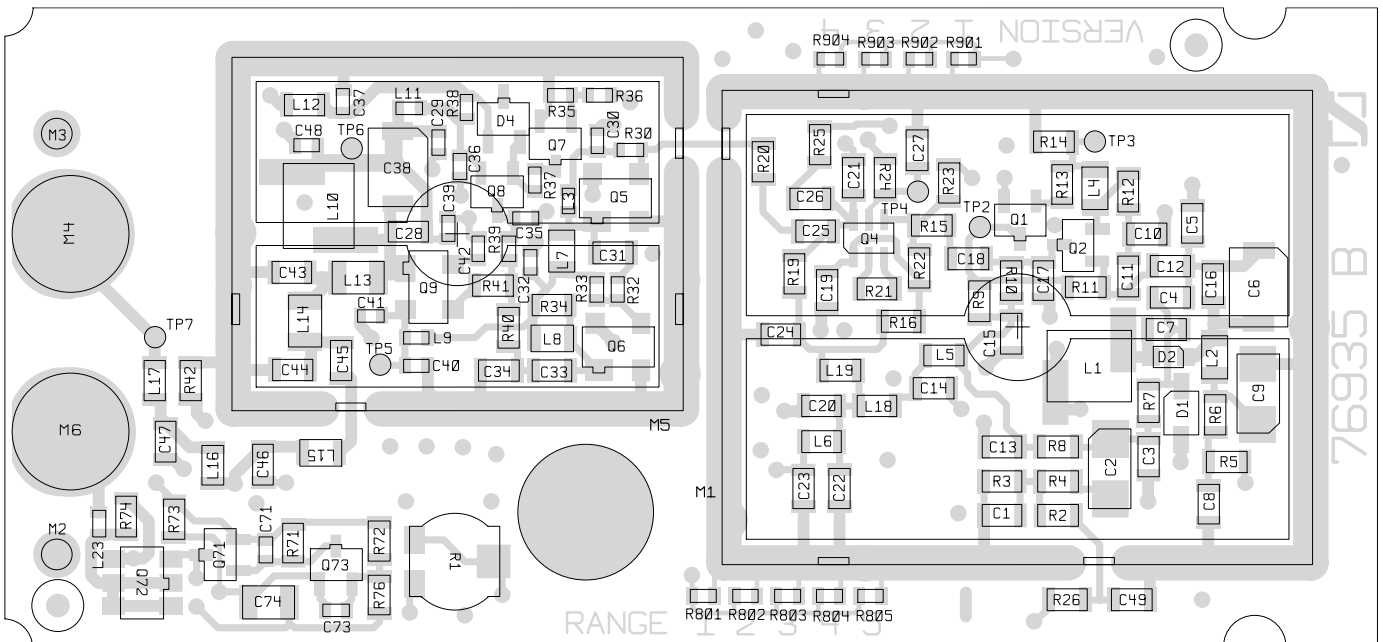


SKX 1XX0 UHF  
 HF-Teil  
 STROMLAUFPLAN

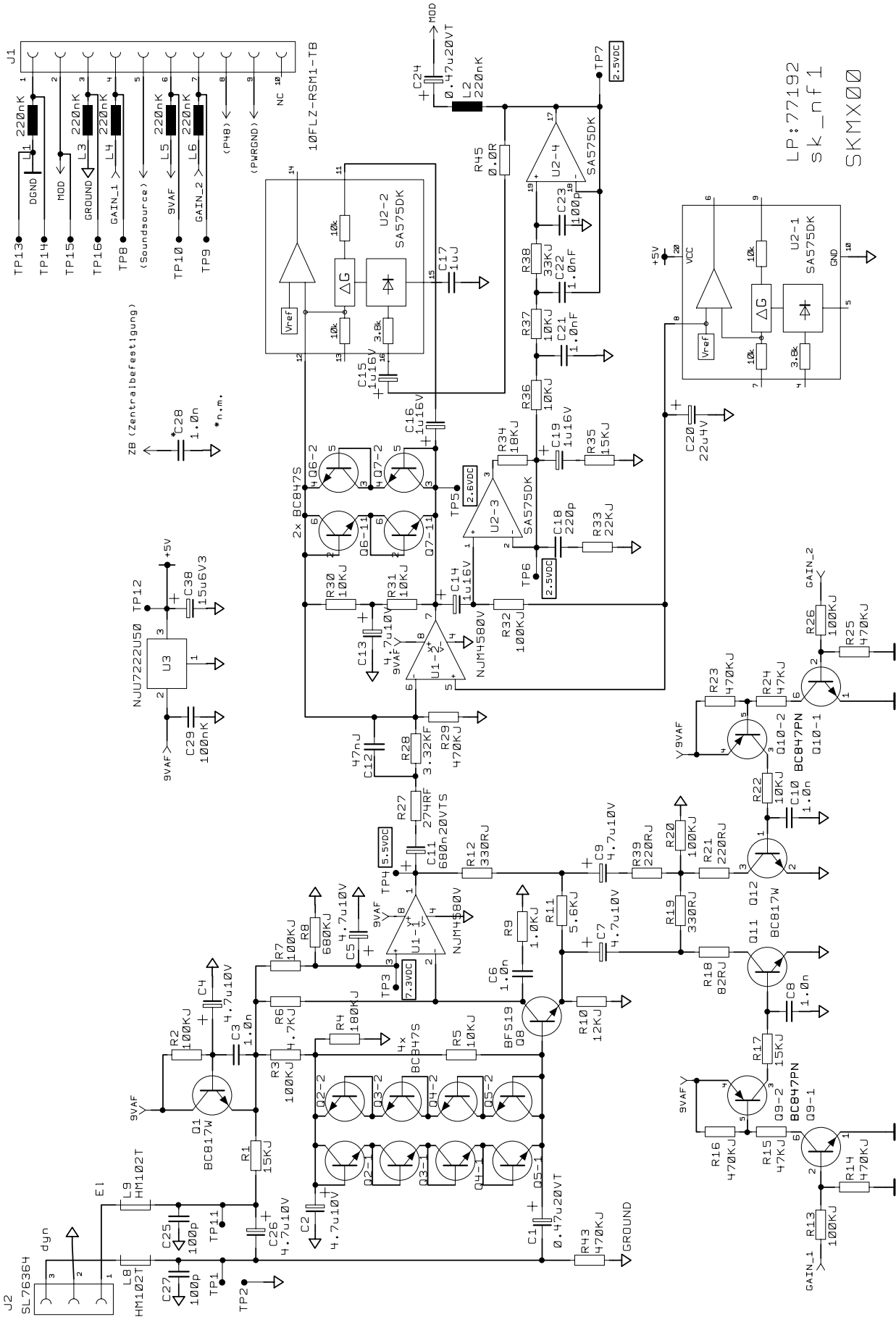
SKM 100, SKM 300, SKM 500  
 HF-MODUL, STROMLAUFPLAN  
 RF MODULE, CIRCUIT DIAGRAM



**SKM 100, SKM 300, SKM 500  
HF-MODUL, GEDRUCKTE SCHALTUNG, LÖTSEITE  
RF MODULE, PRINTED CIRCUIT BOARD, SOLDER SIDE**



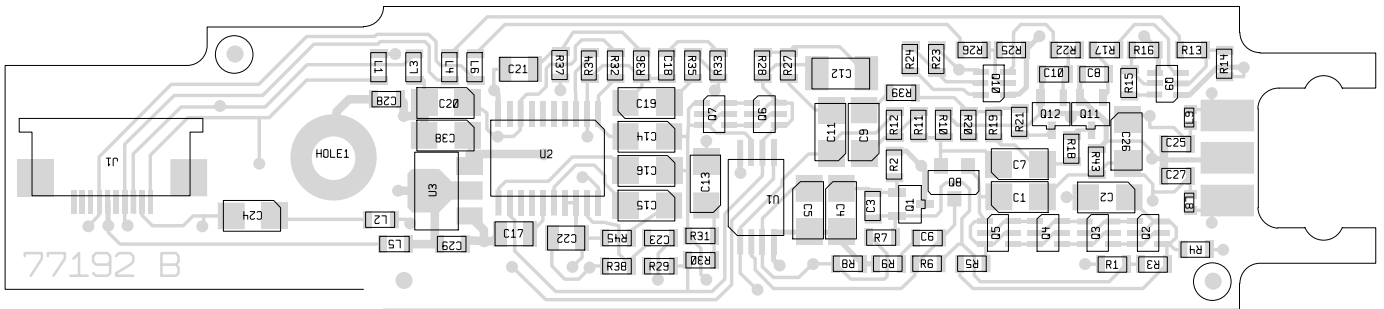
**SKM 100, SKM 300, SKM 500  
HF-MODUL, GEDRUCKTE SCHALTUNG, BESTÜCKUNGSSEITE  
RF MODULE, PRINTED CIRCUIT BOARD, COMPONENT SIDE**



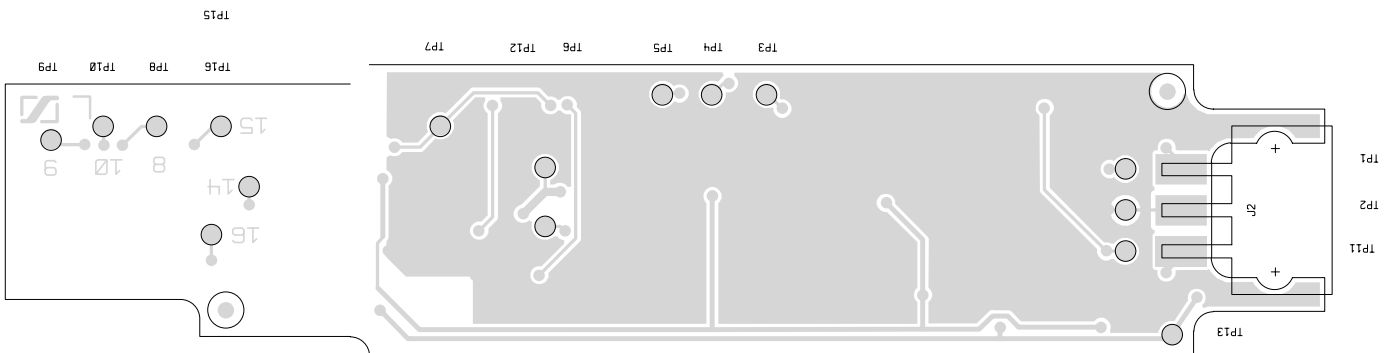
LP:77192  
sk\_n f 1  
SKMX00

**SKM 100, SKM 300, SKM 500  
NF-MODUL, STROMLAUFPLAN  
AF MODULE, CIRCUIT DIAGRAM**

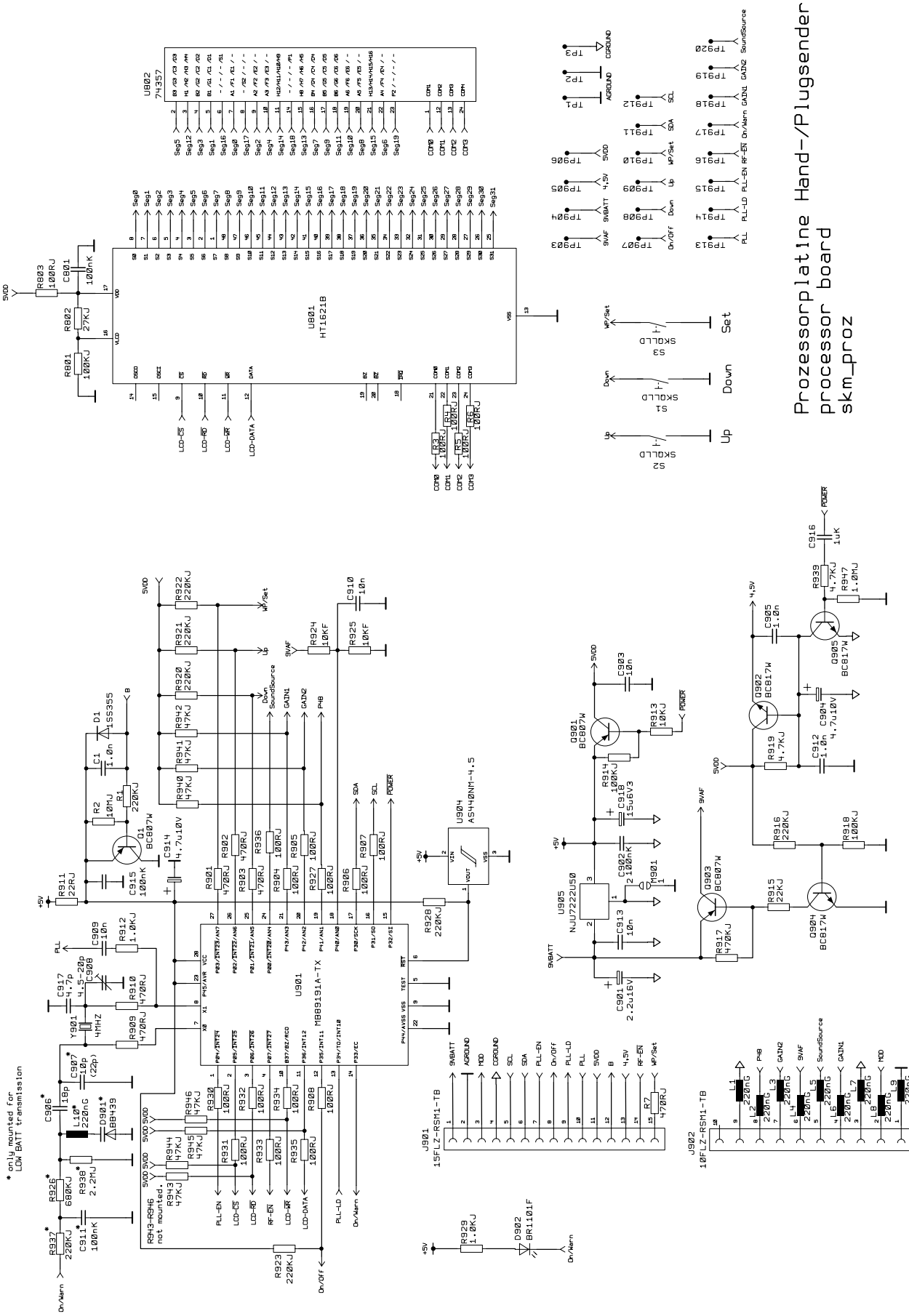




**SKM 100, SKM 300, SKM 500  
 NF-MODUL, GEDRUCKTE SCHALTUNG, BESTÜCKUNGSSEITE  
 AF MODULE, PRINTED CIRCUIT BOARD, COMPONENT SIDE**

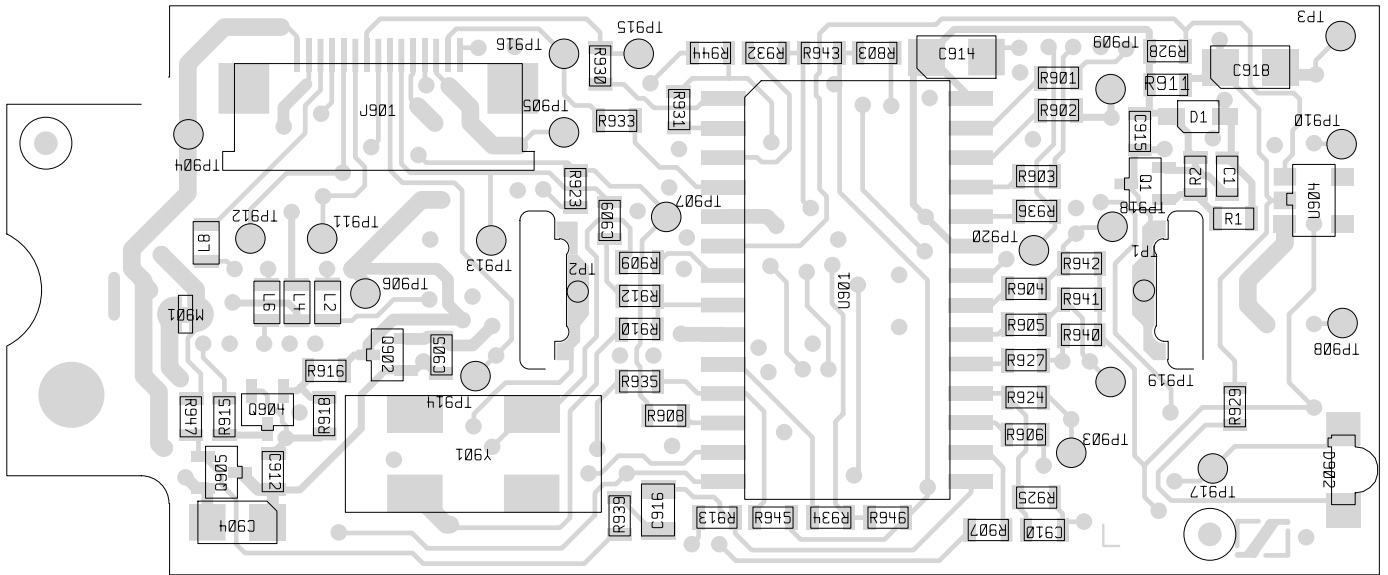


**SKM 100, SKM 300, SKM 500  
 NF-MODUL, GEDRUCKTE SCHALTUNG, LÖTSEITE  
 AF MODULE, PRINTED CIRCUIT BOARD, SOLDER SIDE**

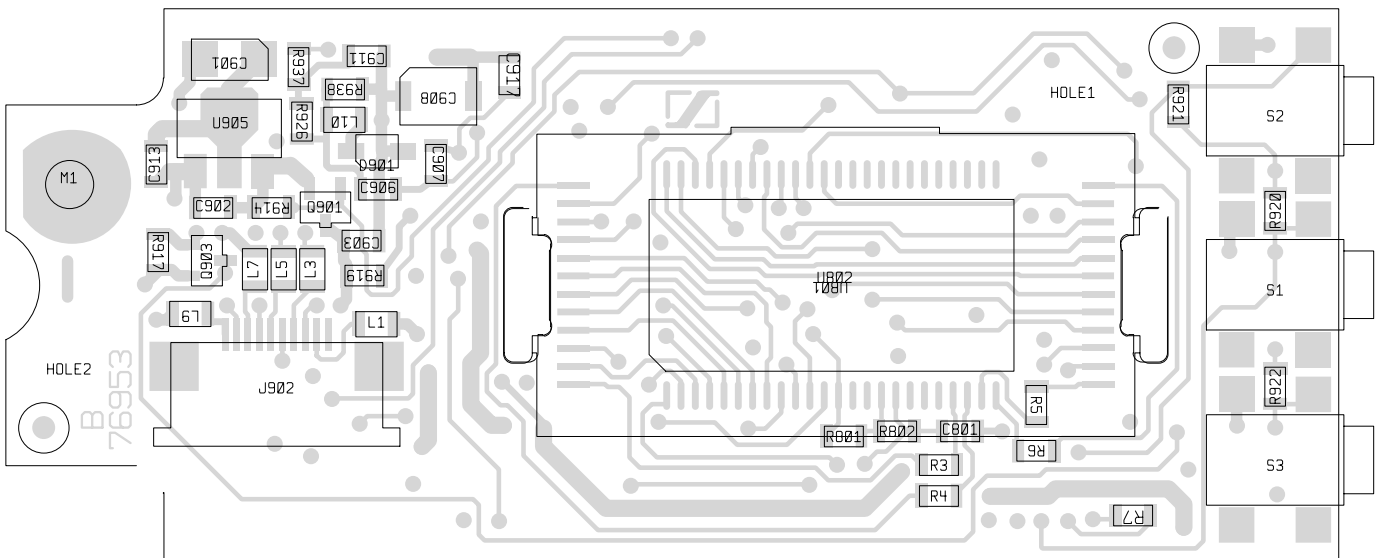


**SKM 100, SKM 300, SKM 500  
PROZESSORPLATINE, STROMLAUFPLAN  
PROCESSOR BOARD, CIRCUIT DIAGRAM**

Processorplatine Hand-/Plugsender  
processor board  
skm\_proz



**SKM 100, SKM 300, SKM 500**  
**PROZESSORPLATINE, GEDRUCKTE SCHALTUNG, LÖTSEITE**  
**PROCESSOR BOARD, PRINTED CIRCUIT BOARD, SOLDER SIDE**



**SKM 100, SKM 300, SKM 500**  
**PROZESSORPLATINE, GEDRUCKTE SCHALTUNG, BESTÜCKUNGSSEITE**  
**PROCESSOR BOARD, PRINTED CIRCUIT BOARD, COMPONENT SIDE**

