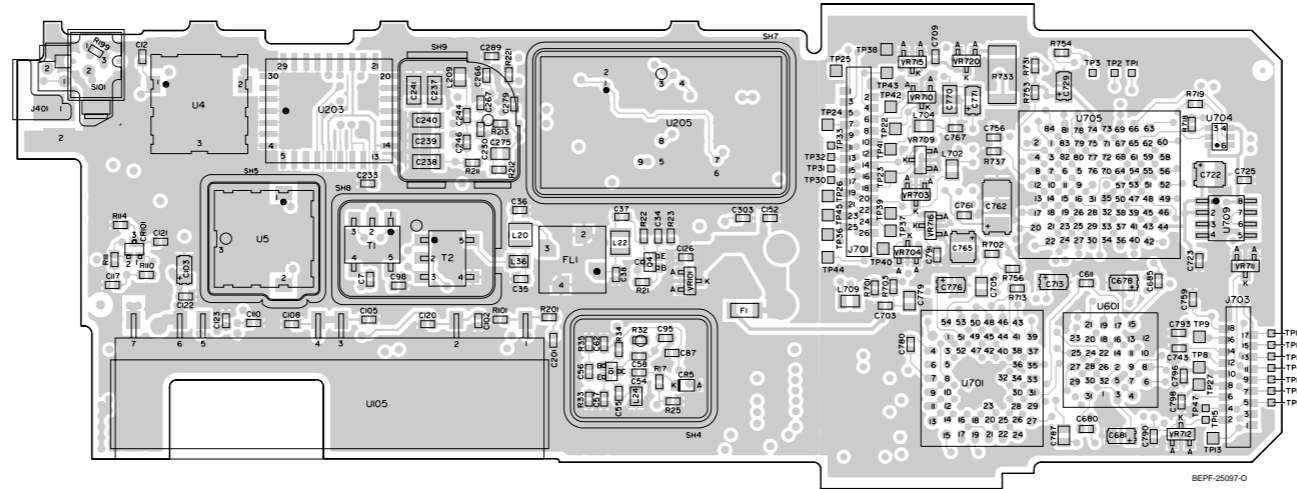


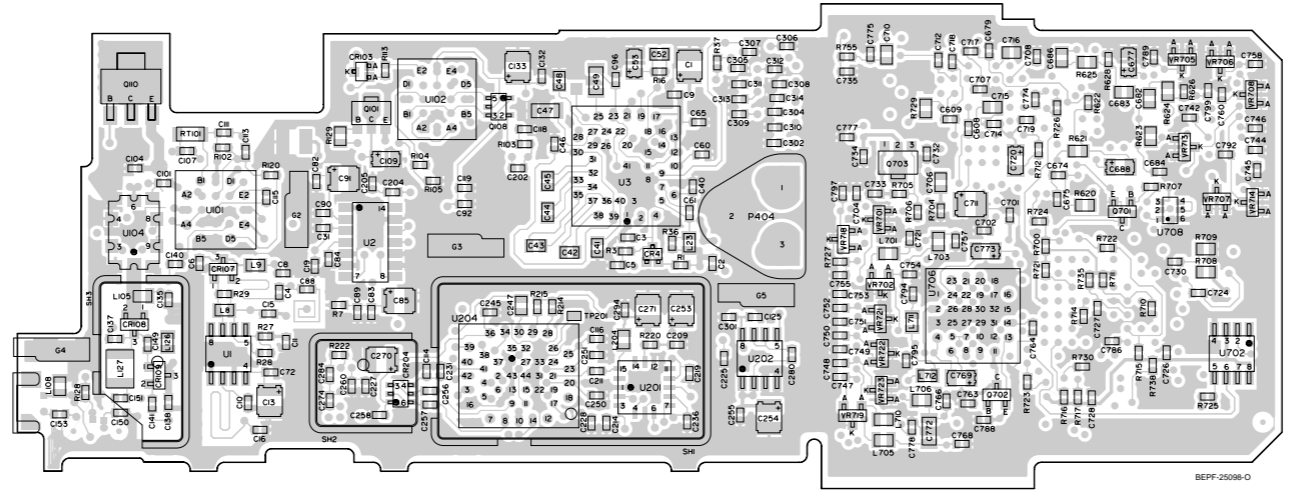
* INDICATES A COMPONENT THAT IS NOT PLACED

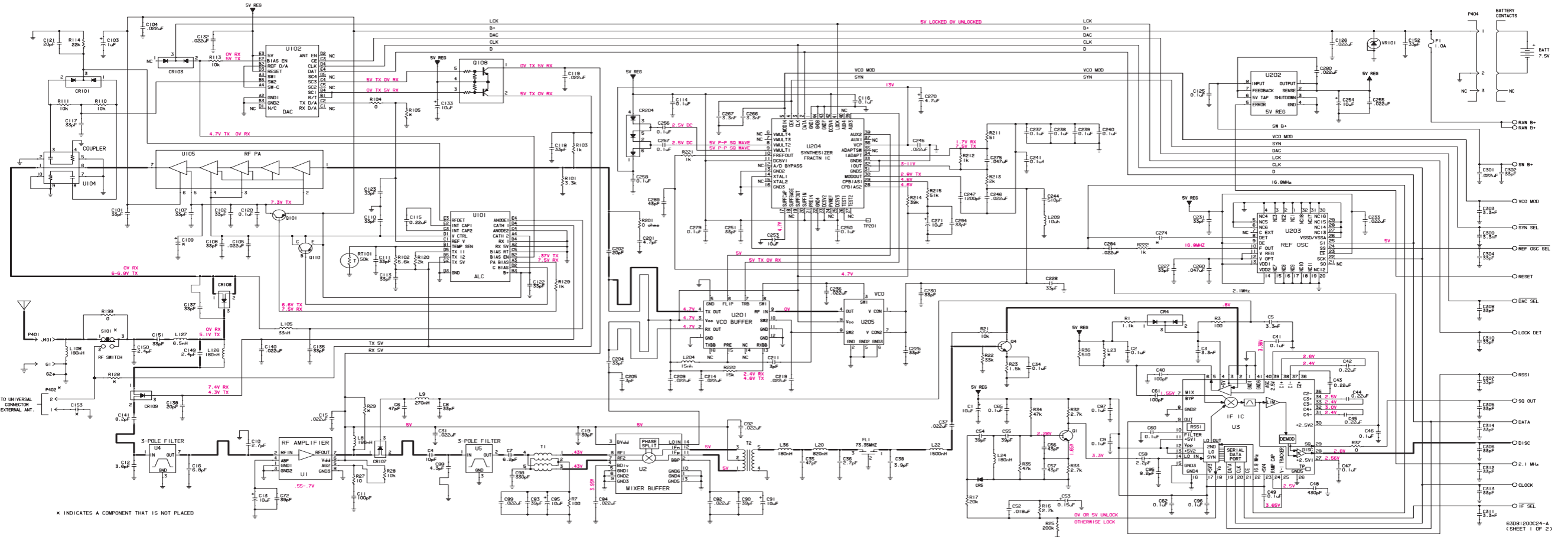
NUF6499D	
R1	1.1K
R3	100
R4	X
R5	X
Q2	X

VIEWED FROM SIDE 1

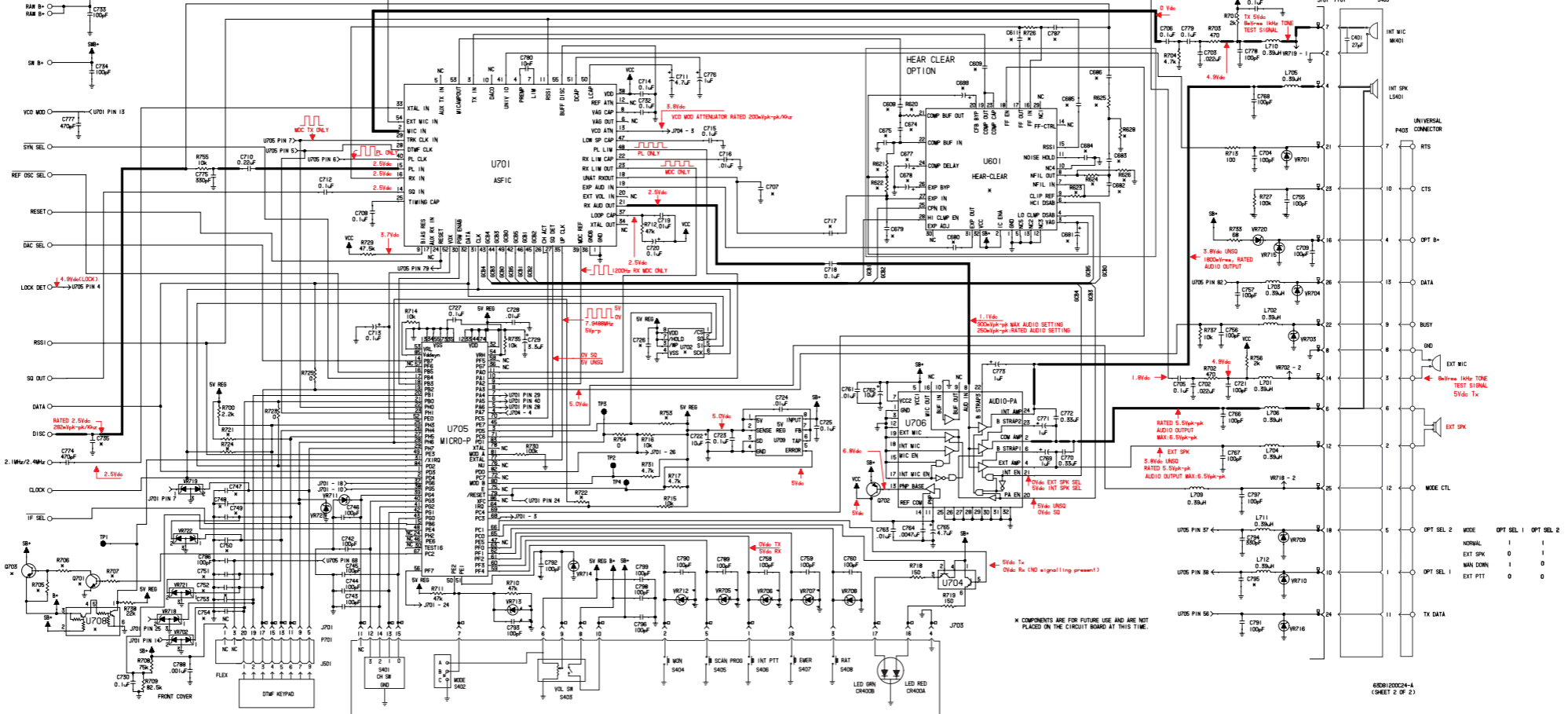


VIEWED FROM SIDE 2





TO RF PORTION
(SHEET 1)



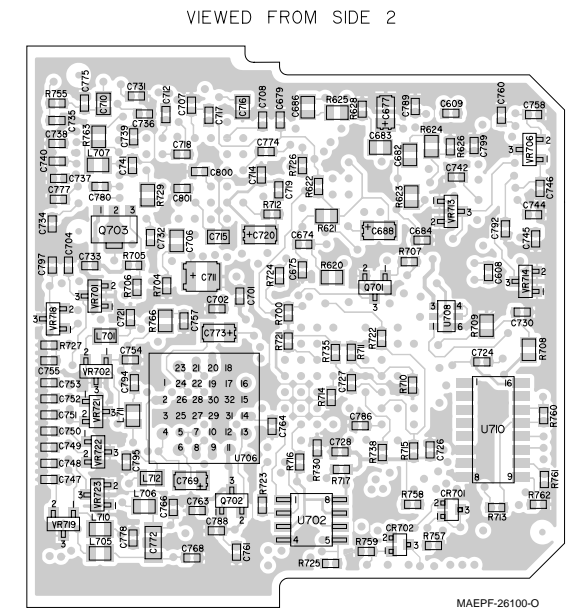
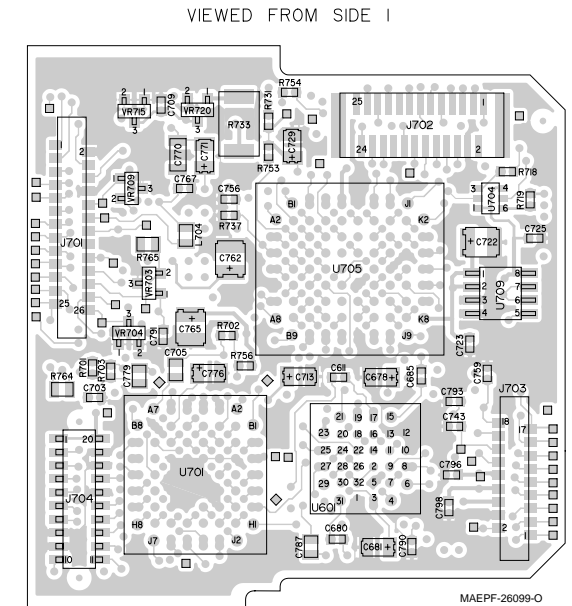
Electrical Parts List, Controller:
NCN6129C And NCN6138A (all HT 1000 Models)
NCN6140A/B (VHF HT 1000 Models)
NCN6141A/B (UHF HT 1000 Models)
NCN6140C (all HT 1000 Models)
NCN6145A/B (800MHz HT 1000 Models)
NTN7089C And NCN6146A (JT 1000 Models)

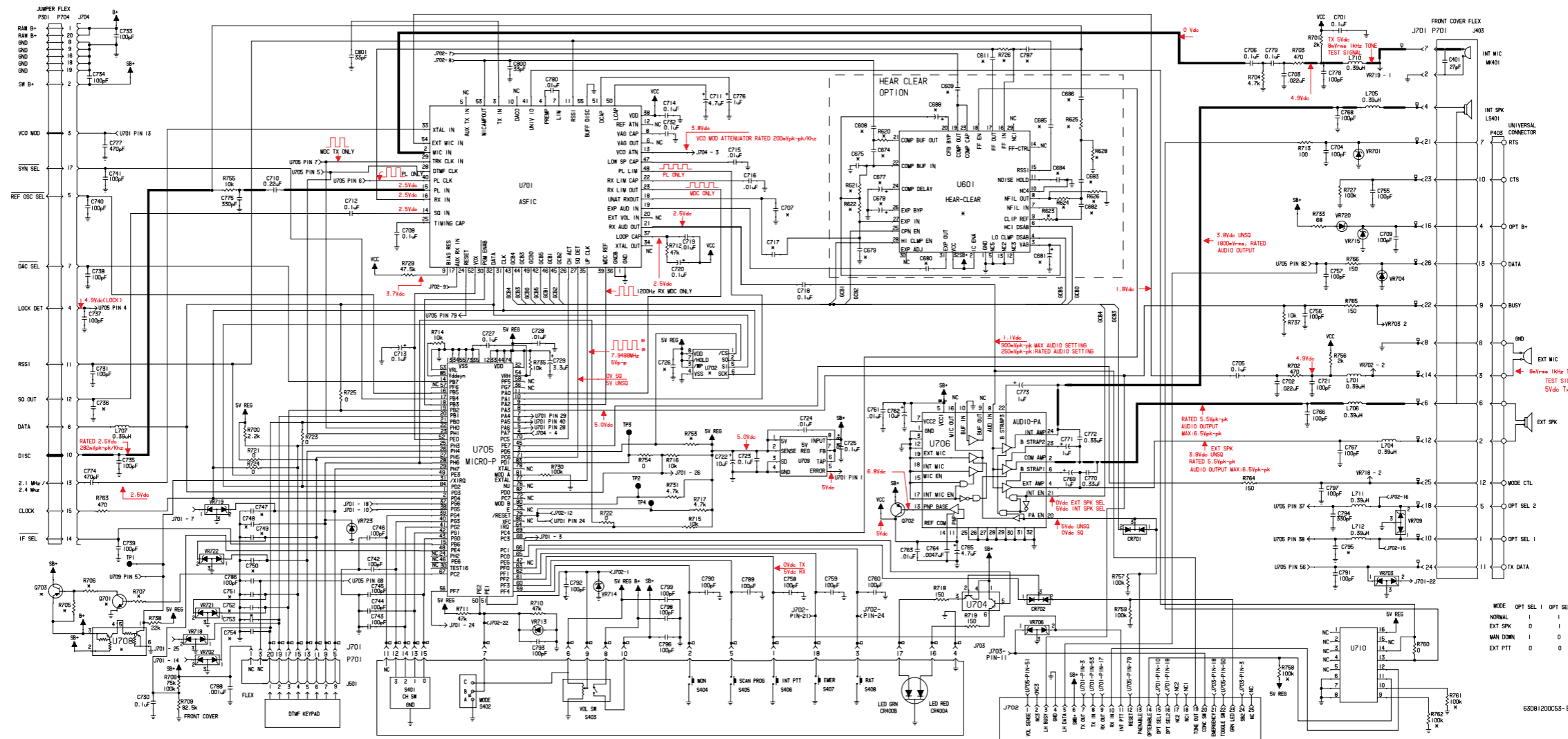
REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		CAPACITOR, Fixed: pF ±5%; 50V unless stated
C608, 609, 611	-----	Not Placed
C674, 675	-----	Not Placed
C677 thru 686	-----	Not Placed
C688	-----	Not Placed
C701	2113743K15	0.1µF
C702, 703	2113743E07	.022µF
C704	2113740F51	100
C705, 706	2113743A19	0.1µF
C707	-----	Not Placed
C708	2113743K15	0.1µF
C709	2113740F51	100
C710	2113743A23	0.22µF
C711	2311049J11	4.7µF; 16V
C712	2113743K15	0.1µF
C713	2311049A01	0.1µF; 35V
C714	2113743K15	0.1µF
C715,716	2113743A45	.01µF
C717	-----	Not Placed
C718	2113743K15	0.1µF
C719	2113741F49	.01µF
C720	2311049A01	0.1µF; 35V
C721	2113740F51	100
C722	2311049J23	10µF; 6V
C723	2113743K15	0.1µF
C724	2113741F49	.01µF
C725	2113743K15	0.1µF
C726	-----	Not Placed
C727	2113743K15	0.1µF
C728	2113741F49	.01µF
C729	2311049A42	3.3µF; 6V
C730	2113743K15	0.1µF
C731	2113740F51	100
C732	2113743K15	0.1µF
C733, 734, 735	2113740F51	100
C736	-----	Not Placed
C737 thru 746	2113740F51	100
C747 thru 754	-----	Not Placed
C755 thru 760	2113740F51	100
C761	2113741F49	.01µF
C762	2311049A57	10µF; 16V
C763	2113741F49	.01µF
C764	2113741F41	.0047µF
C765	2311049J11	4.7µF; 16V
C766, 767, 768	2113740F51	100
C769	2311049A07	1µF; 16V
C770	2113743B23	0.33µF
C771	2311049A07	1µF; 16V
C772	2113743B23	0.33µF
C773	2311049A07	1µF; 16V
C774	2113741F17	470
C775	2113741F13	330
C776	2311049A08	1µF; 35V
C777	2113741F17	470
C778	2113740F51	100
C779	2113743A19	0.1µF
C780	2113741F49	.01µF

C786	2113740F51	100
C787	-----	Not Placed
C788	2113741F25	.001µF
C789 thru 793	2113740F51	100
C794	2113741F13	330
C795	-----	Not Placed
C796 thru 799	2113740F51	100
C800, 801	2113740F39	33
CR701, 702	4805218N57	DIODE, Dual
		JACK:
J701	0905257V04	Connector, 26-pin; to P701
J702	0913915A11	Connector, 25-pin (HT 1000)
	-----	Not Placed (JT 1000)
J703	0905257V03	Connector, 18-pin; to P703
J704	0905461X02	Connector, 20-contact; to P704
		COIL, RF:
L701	2462587Q42	0.39µH
L704 thru 707	2462587Q42	0.39µH
L710, 711, 712	2462587Q42	0.39µH
		TRANSISTOR:
Q701	-----	Not Placed
Q702	4802245J04	PNP
Q703	-----	Not Placed
		RESISTOR, Fixed: Ω ± 5%.0625W unless stated
R620 thru 626	-----	Not Placed
R628	-----	Not Placed
R700	0660257A57	2.2k
R701	0662057A56	2k
R702, 703	0662057A41	470
R704	0662057A65	4.7k
R705, 706, 707	-----	Not Placed
R708	0662057G07	75k ± 1%; 0.1W (HT 1000)
	0662057G13	100k ± 1%; 0.1W (JT 1000)
	0662057G08	82.5k ± 1%; 0.1W
R709	0662057A89	47k
R710, 711, 712	0662057A25	100
R713	0662057A73	10k
R714, 715, 716	0662057A65	4.7k
R717	0662057A29	150
R718, 719	-----	Not Placed (HT 1000)
R721 thru 725	0662057B47	0 (JT 1000)
	-----	Not Placed
R726	0662057A97	100k
R727	0662057R92	47.5k ± 1%; 0.1W
R729	0662057A97	100k
R730	0662057A65	4.7k
R731	0683962T45	68
R733	0662057A73	10k
R735, 737	0662057A81	22k
R738	-----	Not Placed
R753	0662057B47	0
R754	0662057A73	10k
R755	0662057A56	2k
R756	0662057A97	100k
R757	0662057A97	100k (HT 1000)
R758	-----	Not Placed (JT 1000)
R759	0662057A97	100k
R760	0660257B47	0

R761, 762	0662057A97	100k (HT 1000)
	-----	Not Placed (JT 1000)
R763	0662076A41	470
R764, 765, 766	0662057C55	150
		MODULE:
U601	-----	Not Placed
U701	5105835U45	Audio Signalling Filter
U702	-----	Not Placed
U704	4805921T07	NPN
U705	5105835U71	Microcomputer (NCN6129C, NCN6138A)
	5105835U85	Microcomputer (NCN6140A, NCN6141A, NCN6145A)
	5186296A06	Microcomputer (NCN6140B, NCN6141B, NCN6145B)
	5105835U96	Microcomputer (NCN6146A)
	5105835U22	Microcomputer (NTN7089C)
	5186296A11	Microcomputer (NCN6140C)
U706	5105835U49	Audio PA
U708	-----	Not Placed
U709	5105469E65	5V Regulator
U710	5113806A20	Multiplexer (HT 1000)
	-----	Not Placed (JT 1000)
		DIODE, Zener:
VR701	4813830A15	5.6V
VR702, 703	4805117Y01	Dual, 6.2V
VR704	4813830A15	5.6V
VR706	4805117Y01	Dual, 6.2V
VR709	4805117Y01	Dual, 6.2V
VR713, 714	4813830A15	5.6V
VR715	4813830A28	15V
VR718, 719	4805117Y01	Dual, 6.2V
VR720	4813830A28	15V
VR721, 722	4805117Y01	Dual, 6.2V
VR723	4813830A15	5.6V

- Notes:**
- For optimum performance, order replacement diodes, transistors, and circuit modules by Motorola part number only.
 - When ordering crystals, specify carrier frequency, crystal frequency, crystal type number, and Motorola part number.
 - "Not Placed" means that components are for future use, and are not placed on the circuit board at this time.





NCN6129C, NCN6138A, NCN6140A/B/C, NCN6141A/B, NCN6145A/B, NCN6146A, AND NTN7089C CONTROLLER BOARDS' SCHEMATIC DIAGRAM

Electrical Parts List, Controllers
NCN6147A, NCN6150A, NTN7091D, NTN7620E

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
C700 thru 708	2113741F17	CAPACITOR, Fixed: pF±5%; 50V unless stated
C709	2113743A23	0.22µF
C710	2311049J11	4.7µF
C711	2311049A07	1µF
C712, 713	2113743A19	0.1µF
C714, 715	2113743K15	0.1µF
C716, 717	2113741F49	10nF
C718	2113743K15	0.1µF
C719	2311049A01	0.1µF
C720	2113741F49	10nF
C721	2113743K15	0.1µF
C722	2311049A09	2.2µF
C723	2113743A23	0.22µF
C724	2113740F44	51
C725	2311049A07	1µF
C726	2113743F12	0.33µF
C727	2311049A07	1µF
C728	2113743F12	0.33µF
C729	2311049A07	1µF
C730	2113741F41	4700
C731	2113743K15	0.1µF
C732	2311049A57	10µF
C733	2113743K15	0.1µF
C734	2311049J23	10µF
C735 thru 738	2113741F17	470
C739	2113740F39	33
C740, 741, 742	2113741F17	470
C743	2113741A49	15nF
C744	2113741F49	10nF
C745	2113740F39	33
C746 thru 757	2113741F17	470
C758	2113743K15	0.1µF
C759, 760, 761	2113741F17	470
C762	2113743K15	0.1µF
C763	2113740F36	24
C764	2113740F44	51
C765	2113743K15	0.1µF
C766	2311049A42	3.3µF
C767	2113743K15	0.1µF
C768	2113741F13	330
C769	2113741F17	470
C770	2311049J23	10µF
C771	2113743K15	0.1µF
C772	2311049A42	3.3µF
C773	-----	Not Placed
C774, 775	2113741F17	470
C776	2113743K15	0.1µF
C777	2311049A07	1µF
C778	2113743K15	0.1µF
C779	-----	Not Placed
C780 thru 786	2113741F17	470
C787	2113740F39	33
C788, 789, 790	2113741F17	470
C791	2113741F20	620
C792	2113741F13	330
C793	2113743A19	0.1µF
C794	2113743K15	0.1µF
C795, 796	2311049A56	4.7µF
C797	2113740F51	100
C798	2311041F49	10nF
C799	2113740F39	33
C804	2113741F41	4700
C808	2113741F17	470
C810, 811	2113740F46	62

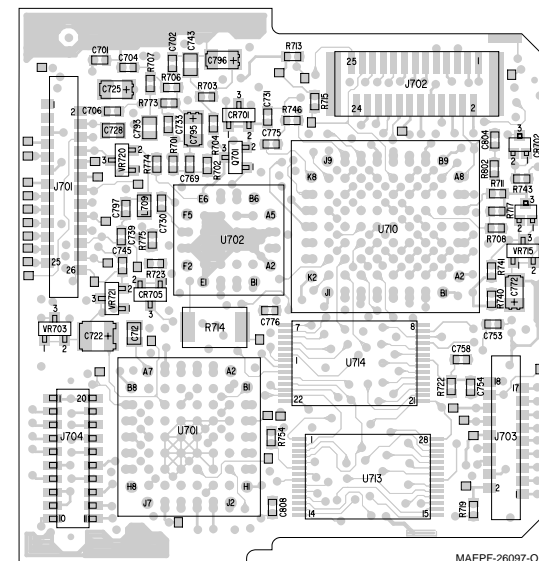
CR701	4880236E05	DIODE:
CR702, 703, 704	4805218N57	Schottky
CR705	4813833C02	Dual
CR706	4805218N57	Dual
J701	0905257V04	JACK:
J702	0913915A11	Connector, 26-pin; to P701 on Front Cover Display Flex
J703	0905257V03	Connector, 25-pin (NCN6150A and NTN7620E)
J704	0905461X02	Connector, 18-pin; to P703 on Controls Flex
L704	2462587Q40	Connector, 20 contacts; to P704 Strip Connector
L705	0660076A41	COIL, RF:
L709	2462587Q40	270nH
Q701	4805128M40	470Ω resistor (NCN6147A and NTN7091D)
Q703	4880048M01	270nH (NCN6150A and NTN7620E)
R700	0662057A65	270nH
R701	0662057A56	470Ω resistor (NCN6147A and NTN7091D)
R702	0662057A81	270nH (NCN6150A and NTN7620E)
R703	0662057A56	270nH
R704	0662057A41	TRANSISTOR:
R705	0662057R92	PNP
R706	0662057A56	NPN
R707	0662057A41	RESISTOR, Fixed: Ω±5%; .0625W unless stated
R708	0662057A56	4.7k
R709	0662057A41	2k
R710	0662057A89	22k
R711	0662057A97	100k
R712	0662057A56	2k
R713	0662057A81	22k
R714	0683962T45	68
R715	0662057A97	100k
R716, 717	0662057A81	22k
R718	0662057A97	100k
R719	0662057B02	150k
R720, 721, 722	0662057A89	47k
R723	0662057A49	1k
R724	0662057A89	48k
R725	0662057G07	75k
R726	0662057G08	82.5k
R727	0662057A81	22k
R728, 729	0662057A89	47k
R730, 731	0662057C55	150
R732	0662057A73	10k
R736	0662057A81	22k
R738	0662057A81	22k
R739	0662057A73	10k
R740, 741	0662057A81	22k
R743	0662057A73	10k
R746	0662057A97	100k
R747	0662057B02	150k
R749	0662057A73	10k
R750	0662057A97	100k
R753	-----	Not Placed

R754	0662057B47	0
R755	-----	Not Placed
R757	0662057A81	22k
R758	0662057A97	100k
R759	0662057A81	22k
R760	0662057B47	0
R761	0662057A73	10k
R762	0662057B47	0
R763	-----	Not Placed
R768	0662057A81	22k (NCN6147A and NTN7091D)
R769	-----	Not Placed (NCN6147A and NTN7091D)
R771	0662057A81	22k (NCN6150A and NTN7620E)
R773, 774	0662057B47	0
R775	0662057A41	470
R776	-----	Not Placed
R802, 803	0662057A56	2k
R805	0662057A41	470
R806, 807	0662057A29	150
U701	5105835U45	MODULE:
U702	5105835U49	Audio Signalling Filter
U703	4805921T09	Audio PA
U704	4805921T07	Dual Transistor
U705	5105835U47	Transistor, NPN
U708	5105469E65	Microcomputer
U709	5105750U28	5V Regulator
U710	5105835U80	Mux
U711	5185765B30	SLIC V (NTN7091D and NTN7620E)
U712	5113806A20	SLIC V (NCN6147A and NCN6150A)
U713	4805718V01	Multiplexer
U714	5105625U98	Transistor
U715	5185963A21	EEPROM
U716	5105625U84	SCRAM
U717	-----	256 x 8 FLASH
VR701, 702	4813830A23	Not Placed (NCN6147A and NTN7091D)
VR703	4813830A18	256 x 8 FLASH (NCN6150A and NTN7620E)
VR706	4813830A15	5.6V
VR709	4813830A15	5.6V
VR712	4813830A33	20V
VR713	4813830A23	10V
VR714	4813830A18	6.8V
VR715	4813830A14	5.1V
VR717	4813830A27	14V
VR720 thru 723	4805117Y01	6.2V

Notes:

- For optimum performance, order replacement diodes, transistors, and circuit modules by Motorola part number only.
- When ordering crystals, specify carrier frequency, crystal frequency, crystal type number, and Motorola part number.
- “Not Placed” means that components are for future use, and are not placed on the circuit board at this time.

VIEWED FROM SIDE 1



VIEWED FROM SIDE 2

