

SAMSUNG

GPRS GSM TELEPHONE
SGH-S105

SERVICE *Manual*

GPRS GSM TELEPHONE

CONTENTS



1. Specification
2. Exploded Views and Parts List
3. Electrical Parts List
4. Block Diagrams
5. PCB Diagrams
6. Flow Chart of Troubleshooting and Circuit Diagrams

1. SGH-S105 Specification

1. GSM General Specification

	GSM900 Phase 1	EGSM 900 Phase 2	DCS1800 Phase 1	PCS1900
Freq. Band[MHz] Uplink/Downlink	890~915 935~960	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990
ARFCN range	1~124	0~124 & 975~1023	512~885	512~810
Tx/Rx spacing	45MHz	45MHz	95MHz	80MHz
Mod. Bit rate/ Bit Period	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us
Time Slot Period/Frame Period	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	0.3GMSK
MS Power	33dBm~13dBm	33dBm~5dBm	30dBm~0dBm	30dBm~0dBm
Power Class	5pcl ~ 15pcl	5pcl ~ 19pcl	0pcl ~ 15pcl	0pcl ~ 15pcl
Sensitivity	-102dBm	-102dBm	-100dBm	-100dBm
TDMA Mux	8	8	8	8
Cell	35Km	35Km	2Km	-

2. GSM TX power class

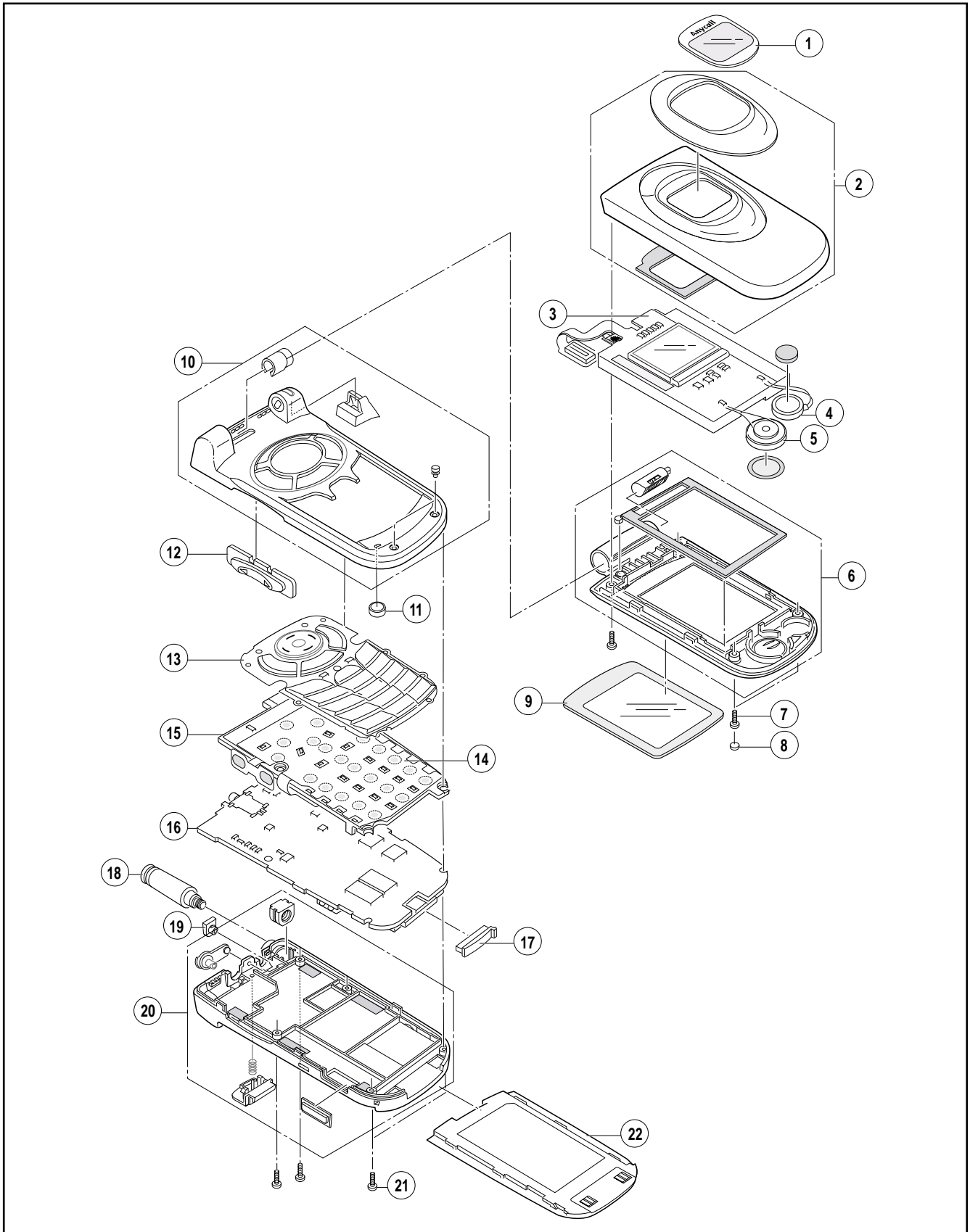
TX Power control level	GSM900
5	33 ±2 dBm
6	31 ±2 dBm
7	29 ±2 dBm
8	27 ±2 dBm
9	25 ±2 dBm
10	23 ±2 dBm
11	21 ±2 dBm
12	19 ±2 dBm
13	17 ±2 dBm
14	15 ±2 dBm
15	13 ±2 dBm
16	11 ±3 dBm
17	9 ±3dBm
18	7 ±3 dBm
19	5 ±3 dBm

TX Power control level	DCS1800
0	30 ±3 dBm
1	28 ±3 dBm
2	26 ±3 dBm
3	24 ±3 dBm
4	22 ±3 dBm
5	20 ±3 dBm
6	18 ±3 dBm
7	16 ±3 dBm
8	14 ±3 dBm
9	12 ±4 dBm
10	10 ±4 dBm
11	8 ±4dBm
12	6 ±4 dBm
13	4 ±4 dBm
14	2 ±5 dBm
15	0 ±5 dBm

TX Power control level	PCS1900
0	30 ±3 dBm
1	28 ±3 dBm
2	26 ±3 dBm
3	24 ±3 dBm
4	22 ±3 dBm
5	20 ±3 dBm
6	18 ±3 dBm
7	16 ±3 dBm
8	14 ±3 dBm
9	12 ±4 dBm
10	10 ±4 dBm
11	8 ±4dBm
12	6 ±4 dBm
13	4 ±4 dBm
14	2 ±5 dBm
15	0 ±5 dBm

2. SGH-S105 Exploded View and its Parts List

2-1. Cellular phone Exploded View



2. Cellular phone Parts list

Location NO.	Description	SEC CODE	Remark
1	DUAL WINDOW LCD	GH72-04715A	
2	FOLDER UPPER	GH75-02275A	
3	LCD	GH07-00179A	
4	MOTOR	3101-001295	
5	SPEAKER	3001-001297	
6	FOLDER LOWER	GH75-02079A	
7	SCREW	6001-001478	
8	SCREW CAP	GH74-02036A	
9	WINDOW LCD	GH72-04716A	
10	FRONT COVER	GH75-02076A	
11	MIC	GH59-00138A	
12	VOLUME KEY	GH75-02123A	
13	KEYPAD	GH75-02124A	
14	DOME SHEET	GH59-00425A	
15	SHIELD COVER	GH75-02203A	
16	MAIN PBA	GH92-01354A	
17	CONNECTOR COVER	GH73-01230A	
18	ANTENNA	GH42-00193A	
19	MOBILE CAP	GH73-01229A	
20	REAR COVER	GH75-02077A	
21	SCREW	6001-001479	
22	BATTERY	GH43-00558A	720mA
		GH43-00563A	900mA

3. SGH-S105 MAIN Electrical Parts List

Level	SEC Code	Design LOC	Descriptions
0	GH92-01302A	-	PBA MAIN-SGHS100;SGH-S100,XEF,FRAN, -, -, -, -, -, -
1	GH73-00801A	-	RMO-CONTACT RUBBER;SGH-A300,SI RUBBER,3X4XT0.8,BLK
1	GH74-03124A	-	MPR-PCB EMI SPONGE;SGH-S100,SHIELD SPONGE,7X3XT2,-
1	GH41-00303A	-	PCB-SGHS100;SGH-S100,FR-4,6L,-,1.00 T,100X158,-,3,-
1	GH71-00434A	ANT1	NPR-ANT CONTACT;SCH-X210,ST,T0.2,-,-
1	2203-000995	C1000,C1004,C1006	C-CERAMIC,CHIP;0.047nF,5%,50V,NP0,TP, 1005
1	2203-005482	C1003,C1020	C-CERAMIC,CHIP;100nF,10%,10V,X5R,TP, 1005,-
1	2203-000233	C1005,C1008,C1013	C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1 005
1	2203-005288	C1007,C1011,C1014	C-CERAMIC,CHIP;0.001nF,0.1pF,50V,NP0, TP,1005
1	2203-000812	C1009,C1010,C103	C-CERAMIC,CHIP;0.033nF,5%,50V,NP0,TP, 1005
1	2203-001598	C101,C105,C111,C112	C-CERAMIC,CHIP;2200nF,+80-20%,16V,Y5 V,TP,2012
1	2203-002687	C1012	C-CERAMIC,CHIP;1.2nF,10%,50V,X7R,TP, 1005
1	2203-005288	C1015,C1017,C1019	C-CERAMIC,CHIP;0.001nF,0.1pF,50V,NP0, TP,1005
1	2203-000233	C1016,C1024,C1027	C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1 005
1	2203-000359	C1018	C-CERAMIC,CHIP;0.15nF,5%,50V,NP0,TP, 1005
1	2203-000278	C1021,C803,C806	C-CERAMIC,CHIP;0.01nF,0.5pF,50V,NP0,T P,1005
1	2404-001100	C1022	C-TA,CHIP;33uF,20%,6.3V,GP,TP,3719,-
1	2404-001297	C1023,C1039	C-TA,CHIP;68uF,20%,10V,LR,TP,4028
1	2203-002677	C1025	C-CERAMIC,CHIP;0.75pF,0.1pF,50V,CH,TP, 1005,-
1	2203-000654	C1026,C401,C416	C-CERAMIC,CHIP;270pF,10%,50V,X7R,TP, 1005,-
1	2203-005383	C1038	C-CERAMIC,CHIP;7pF,0.1pF,50V,NPO,TP, 1005,-
1	2203-005061	C104,C108,C124,C201	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V, TP,1005
1	2203-000812	C106,C107,C923,R430	C-CERAMIC,CHIP;0.033nF,5%,50V,NP0,TP, 1005
1	2203-005483	C109	C-CERAMIC,CHIP;68nF,10%,10V,X5R,TP,1 005,-
1	2203-001598	C113,C114,C116,C120	C-CERAMIC,CHIP;2200nF,+80-20%,16V,Y5 V,TP,2012

Level	SEC Code	Design LOC	Descriptions
1	2404-001088	C115,C117	C-TA,CHIP;2.2uF,20%,6.3V,GP,TP,2012,-
1	2203-000233	C118,C213,C214,C219	C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1005
1	2203-000254	C119,C200,C504,C600	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,-
1	2203-001598	C123	C-CERAMIC,CHIP;2200nF,+80-20%,16V,Y5V,TP,2012
1	2404-001105	C125	C-TA,CHIP;10UF,20%,6.3V,GP,TP,2012
1	2404-001268	C126	C-TA,CHIP;10UF,20%,10V,-,TP,2.2X1.25X1.0
1	2203-005061	C202,C206,C302,C402	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005
1	2203-005065	C203,C204,C400,C414	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP,1608
1	2203-005509	C205	C-CERAMIC,CHIP;330nF,+80-20%,10V,Y5V,TP,1005
1	2203-000995	C211,C212,C425,C426	C-CERAMIC,CHIP;0.047nF,5%,50V,NP0,TP,1005
1	2203-000438	C215,C216,C217,C411	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-
1	2203-000233	C220,C221,C222,C223	C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1005
1	2203-000233	C224,C225,C407,C424	C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1005
1	2203-005055	C301	C-CERAMIC,CHIP;0.0056nF,0.25pF,50V,NP0,TP,1005
1	2203-001405	C403,C611,C903,C905	C-CERAMIC,CHIP;22nF,+80-20%,25V,Y5V,TP,1005
1	2404-001086	C404,C410	C-TA,CHIP;4.7uF,20%,6.3V,GP,TP,2012,-
1	2203-000885	C405	C-CERAMIC,CHIP;4.7nF,10%,25V,X7R,TP,1005,-
1	2203-005061	C408,C412,C417,C512	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005
1	2404-001151	C409	C-TA,CHIP;33UF,20%,6.3V,LZ,TP,3216
1	2203-000438	C413,C415,C801,C802	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-
1	2203-001239	C427	C-CERAMIC,CHIP;0.082nF,5%,50V,NP0,TP,1005
1	2007-007771	C428,R104,R105,R106	R-CHIP;0OHM,5%,1/16W,DA,TP,1005
1	2203-005061	C513,C516,C517,C518	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005
1	2203-005061	C519,C612,C711	C-CERAMIC,CHIP;100nF,+80-20%,16V,Y5V,TP,1005
1	2203-005496	C601,C602,C709	C-CERAMIC,CHIP;220nF,+80-20%,10V,Y5V,TP,1005
1	2203-000254	C603,C604,C605,C606	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,-

Level	SEC Code	Design LOC	Descriptions
1	2203-000254	C607,C608,C609,C610	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,-
1	2203-000254	C613,C712,C713,C714	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,-
1	2203-000233	C614,C900,C901,C902	C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1005
1	2203-000628	C615,C616	C-CERAMIC,CHIP;0.022nF,5%,50V,NP0,TP,1005
1	2203-000679	C617	C-CERAMIC,CHIP;0.027nF,5%,50V,NP0,TP,1005
1	2203-001153	C707	C-CERAMIC,CHIP;0.068nF,5%,50V,NP0,TP,1005
1	2203-000585	C708	C-CERAMIC,CHIP;220pF,10%,50V,X7R,TP,1005,-
1	2203-005065	C710	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP,1608
1	2203-000254	C715,C716,C717,C718	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,-
1	2203-000254	C719,C800,C805,C807	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,-
1	2203-000438	C804	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-
1	2203-000254	C808,C809	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,-
1	2203-001405	C906,C908,C910,C914	C-CERAMIC,CHIP;22nF,+80-20%,25V,Y5V,TP,1005
1	2203-000233	C911,C916,C918,C919	C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1005
1	2203-001405	C915,C917,C921	C-CERAMIC,CHIP;22nF,+80-20%,25V,Y5V,TP,1005
1	2203-000233	C920,C924,C925	C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1005
1	2203-000995	C922	C-CERAMIC,CHIP;0.047nF,5%,50V,NP0,TP,1005
1	3709-001187	CN100	CONNECTOR - CARD EDGE;6P,2.54MM,SMD-A,-
1	3705-001248	CN1001	CONNECTOR - COAXIAL;-,-,50MOHM,50OHM,0.3DB
1	3711-004289	CN200	CONNECTOR - HEADER;BOX,30P,2R,0.5MM,SMD-S,AUF
1	3711-004623	CN201	CONNECTOR - HEADER;BOX,20P,2R,0.5mm,SMD-S,AUF
1	3710-001545	CN302	CONNECTOR - SOCKET;24P,1R,0.5MM,SMD-A,AUF
1	3722-001842	CN401	JACK - PHONE;4P,2.3PI,AU,BLK,-
1	1405-001082	D202,D203,D204,ZD300	VARISTOR;5.6V,20A,1x0.5x0.6mm,TP
1	0406-001152	D301	DIODE - TVS;SD05,6/-/-/,350W,SOD-323

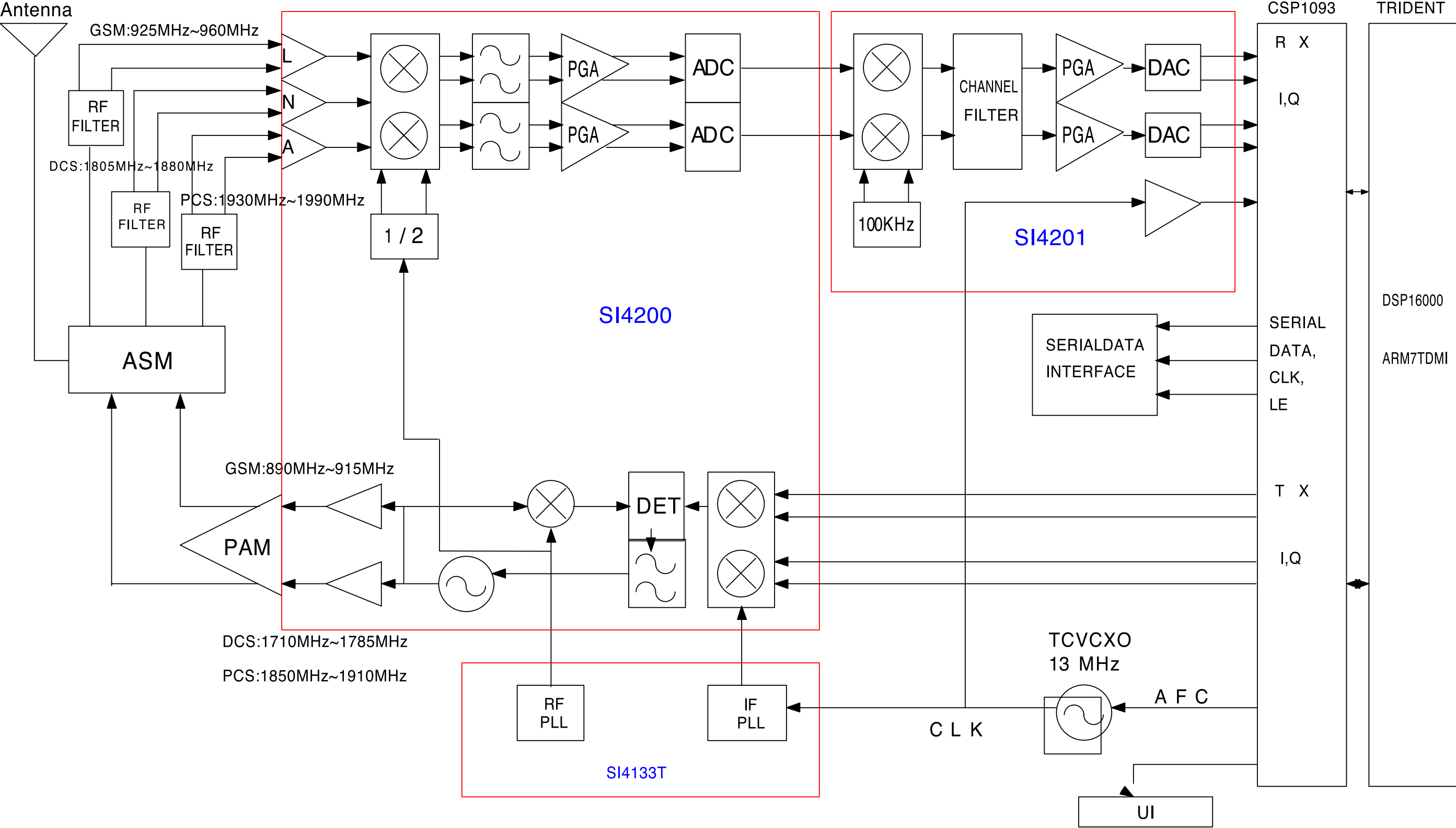
Level	SEC Code	Design LOC	Descriptions
1	4709-001279	F1000	COUPLER-DIRECTION;897.5+- 17.5MHZ, 18+- 1DB,26DB,1.6X
1	4709-001278	F1001	COUPLER-DIRECTION;1850+- 140MHZ, 19.7+- 1.4DB,25DB,1.
1	2909-001180	F1002	FILTER-DUPLEXER;942.5MHZ, 897.5MHZ,0.2/0.5DB,TP, -, -
1	2904-001390	F1004	FILTER-SAW;942.5MHZ, -, 1.0DB,TP,2.3DB, -
1	2904-001410	F1005	FILTER-SAW;1.96GHZ, -, 1930-1990MHZ/2.4DB, TP,1930-19
1	2904-001403	F1006	FILTER-SAW;1.8425GHZ, -, 1805-1880MHZ/2.0DB,TP,1805-
1	2901-001193	F200,F201,F202,F203	FILTER-EMI SMD;25V,0.1A, -, 35pF, 3.2x1.6x0.75MM,TP
1	2901-001193	F204	FILTER-EMI SMD;25V,0.1A, -, 35pF, 3.2x1.6x0.75MM,TP
1	2703-001257	L1000	INDUCTOR-SMD;3.9nH,0.3nH,1.6x0.8x0.8mm
1	2703-001512	L1001	INDUCTOR-SMD;27nH,5%,1.8x1.12x1.02mm
1	2703-002165	L1002	INDUCTOR-SMD;7.5nH,5%,1.6x1.12x1.02mm
1	2703-001751	L1004,L900	INDUCTOR-SMD;3.9nH,0.3nH,1.0x0.5x0.5mm
1	2703-001747	L1005	INDUCTOR-SMD;4.7nH,0.3nH,1.0x0.5x0.5mm
1	2703-002471	L1006	INDUCTOR-SMD;6.2NH,5%,1608
1	3301-001105	L801	CORE-FERRITE;AB,1.6x0.8x0.8mm, -, -
1	0604-001146	LED200	PHOTO-IRDA; -, 875NM,500MW,30DEG,TP
1	4302-001119	M101	BATTERY-LI(2ND);3V,0.1MAH, -, -, 3.1V, -
1	2801-004116	OSC601	CRYSTAL-UNIT;0.032768MHZ,20PPM,28-A BK,12.5FF,65KOH
1	2809-001260	OSC801	OSCILLATOR-VCTCXO;13MHZ,3PPM,10KOHM//10PF, TP,3V, -
1	0504-000168	Q100	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,TP
1	0502-001201	Q101	TR-POWER;ZXT13P20DE6,PNP,1100MW,SO T-23-6, TP,300-90
1	0501-000225	Q400	TR-SMALL SIGNAL;2SC4617,NPN,200mW,EM3,TP,120-5
1	0504-000167	Q700,Q701,Q702	TR-DIGITAL;RN1102,NPN,100MW,10K/10K,SSM,TP
1	2007-001319	R100	R-CHIP;1.2Kohm,5%,1/16W,DA,TP,1005
1	2007-007311	R1000	R-CHIP;22Kohm,1%,1/16W,DA,TP,1005
1	2007-007142	R1001,R111,R611	R-CHIP;10Kohm,1%,1/16W,DA,TP,1005
1	2007-007309	R1002	R-CHIP;12Kohm,1%,1/16W,DA,TP,1005

Level	SEC Code	Design LOC	Descriptions
1	2007-000138	R1003,R1004,R1008	R-CHIP;100ohm,5%,1/16W,DA,TP,1005
1	2007-001301	R1005,R1006	R-CHIP;68ohm,5%,1/16W,DA,TP,1005
1	2007-000138	R1009	R-CHIP;100ohm,5%,1/16W,DA,TP,1005
1	2007-000172	R101,R200,R400,R506	R-CHIP;10ohm,5%,1/16W,DA,TP,1005
1	2007-001288	R1010,R1014	R-CHIP;18ohm,5%,1/16W,DA,TP,1005
1	2007-007008	R1011,R1012,R1015	R-CHIP;300OHM,5%,1/16W,DA,TP,1005
1	2007-000174	R1013,R1017	R-CHIP;47ohm,5%,1/16W,DA,TP,1005
1	2007-007008	R1016	R-CHIP;300OHM,5%,1/16W,DA,TP,1005
1	2007-007698	R1018	R-CHIP;5.1Kohm,1%,1/16W,DA,TP,1005
1	2007-000167	R102	R-CHIP;390Kohm,5%,1/16W,DA,TP,1005
1	2007-007200	R103,R709,R710	R-CHIP;2.4OHM,5%,1/16W,DA,TP,1005
1	2007-000758	R110,R804	R-CHIP;330Kohm,5%,1/16W,DA,TP,1005
1	2007-007139	R112	R-CHIP;47Kohm,1%,1/16W,DA,TP,1005
1	2007-001323	R113	R-CHIP;3Kohm,5%,1/16W,DA,TP,1005
1	2007-000140	R303,R307,R308,R309	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005
1	2007-000157	R305,R306,R608,R609	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005
1	2007-000140	R310,R423	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005
1	2007-007771	R312,R429,R700,R711	R-CHIP;0OHM,5%,1/16W,DA,TP,1005
1	2007-003001	R401	R-CHIP;12OHM,5%,1/16W,DA,TP,1005
1	2007-000159	R403,R406,R408,R421	R-CHIP;56Kohm,5%,1/16W,DA,TP,1005
1	2007-000775	R404,R407,R412	R-CHIP;33Kohm,5%,1/16W,DA,TP,1005
1	2007-000148	R405,R420,R424	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005
1	2007-000141	R409,R414	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005
1	2007-001119	R410	R-CHIP;680ohm,5%,1/16W,DA,TP,1005
1	2007-001325	R413	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005
1	2007-000162	R415,R600,R701,R713	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005
1	2007-001333	R422	R-CHIP;18Kohm,5%,1/16W,DA,TP,1005
1	2007-000172	R606,R715,R800,R805	R-CHIP;10ohm,5%,1/16W,DA,TP,1005
1	2007-000170	R610	R-CHIP;1Mohm,5%,1/16W,DA,TP,1005
1	2007-007308	R612,R613	R-CHIP;33Kohm,1%,1/16W,DA,TP,1005
1	2007-002796	R712	R-CHIP;510ohm,5%,1/16W,DA,TP,1005
1	2007-000162	R714	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005
1	2007-002797	R801,R802	R-CHIP;560ohm,5%,1/16W,DA,TP,1005
1	2007-007771	R803,R901	R-CHIP;0OHM,5%,1/16W,DA,TP,1005
1	1203-002568	U100	IC- VOLTAGE REGULATOR;PSC2006,MLCC,
1	1209-001379	U1000	IC- ETC, LINEAR;HD155173ANPEL, -, 16P, -
1	1201-001864	U1001	IC- POWER AMP;08123, -, 8P, 13.75X8MM,
1	3711-004621	U1002	CONNECTOR - HEADER;BOX,14P,2R,0.5mm, SMD - S,AUF
1	1203-002127	U101	IC- BATTERY;1734,SOT-23,6P,150MIL,PLA STIC,4.7/5.3V,
1	0506-001052	U102	TR- ARRAY;UMH9N,NPN,2,150MW,SC-88,T P,68-

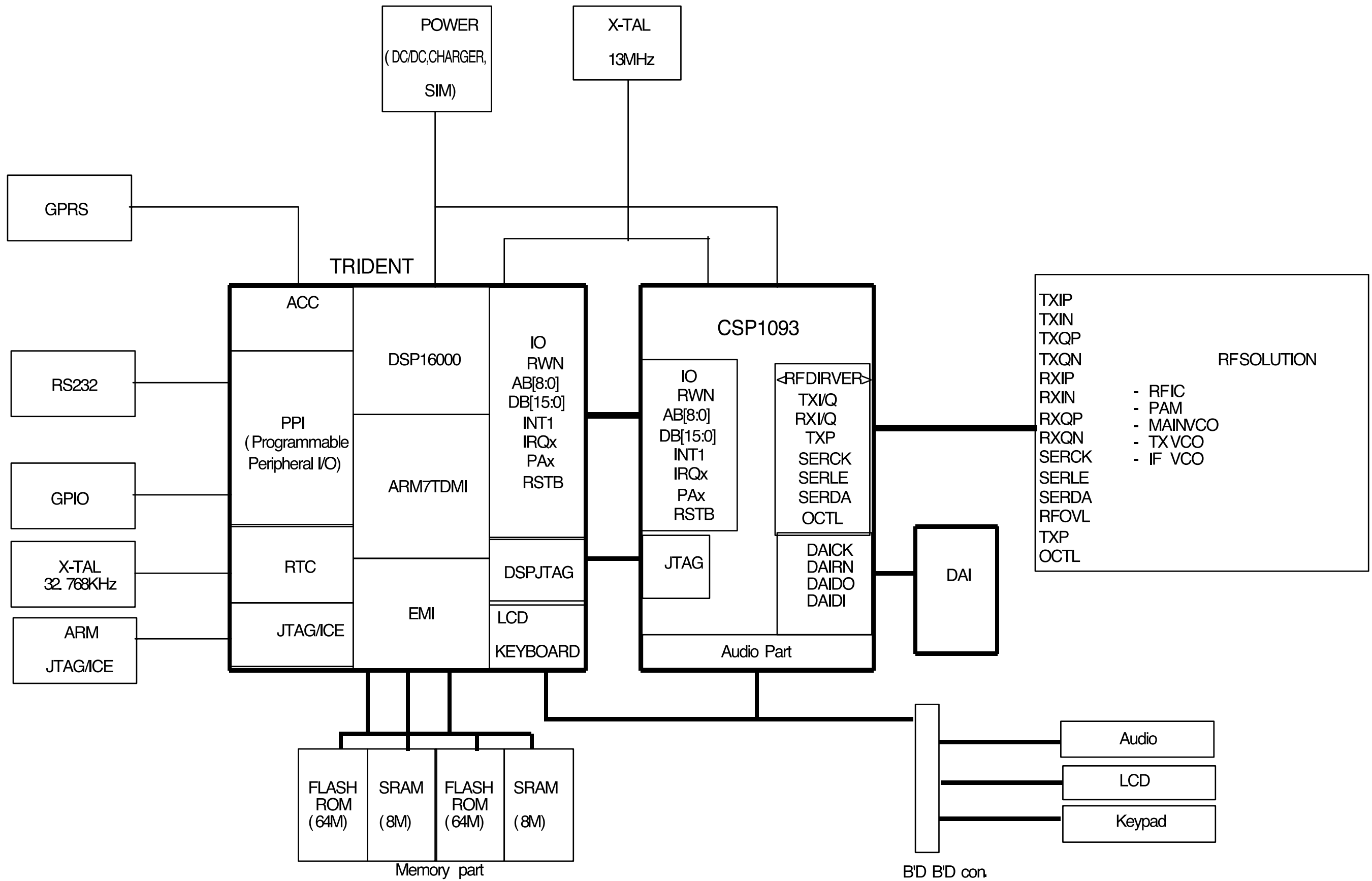
Level	SEC Code	Design LOC	Descriptions
1	1001-001152	U400	IC- ANALOG MULTIPLEX;MAX4624EU-T,- ,
1	1204-001811	U401	IC- MELODY;YMU759-QE2,QFN,32P,- ,PLAS TIC,6V,- , -20TO+
1	1109-001226	U501,U502	IC- ETC. MEMORY;28F6408W30,4MX16/512KX16BIT, CSP,80P
1	GH09-00020A	U601	IC MICOM -SGHS100;TR09WQTEB17IN2B-DT, SGH-S100,- , - , -
1	1209-001219	U602	IC- SENSOR;LM60C,SOT - 23,3P, 115MIL,PLA STIC
1	1204-001984	U700	IC- SIGNAL PROCESSOR;CSP1093CR1 - RT10- DB,FSBG A,108P,
1	0504-001042	U701,U702,U703	TR- DIGITAL;BCR10PN,NPN/PNP,250mW,10 K/10K,
1	0801-002345	U801	IC- CMOS LOGIC;7S04,INVERTER, SOT - 353, 5P,49MIL, SINGL
1	1205-002185	U900	IC- INTERFACE;SI4201 - BM,MLP,20P,4X4M M,- ,3V,- , -20TO+
1	1205-002184	U901	IC- TRANSCEIVER;SI4200 - BM,MLP,32P,5X5 MM,- ,3V,- , -20T
1	1209-001434	U902	IC- PLL/SYNTHESISER;SI4133T - BM,MLP,28 P,5X5MM,- ,3V,-
1	1405-001082	ZD302,ZD303,ZD309	VARISTOR;5.6V,20A,1x0.5x0.6mm,TP
1	0406-001084	ZD305,ZD311	DIODE - TVS;SMF05,6/- /-V,200W,-
1	1405-001082	ZD310,ZD401,ZD402	VARISTOR;5.6V,20A,1x0.5x0.6mm,TP
1	1405-001082	ZD404,ZD405	VARISTOR;5.6V,20A,1x0.5x0.6mm,TP

4. SGH-S105 Block Diagrams

1. RF Solution Block Diagram

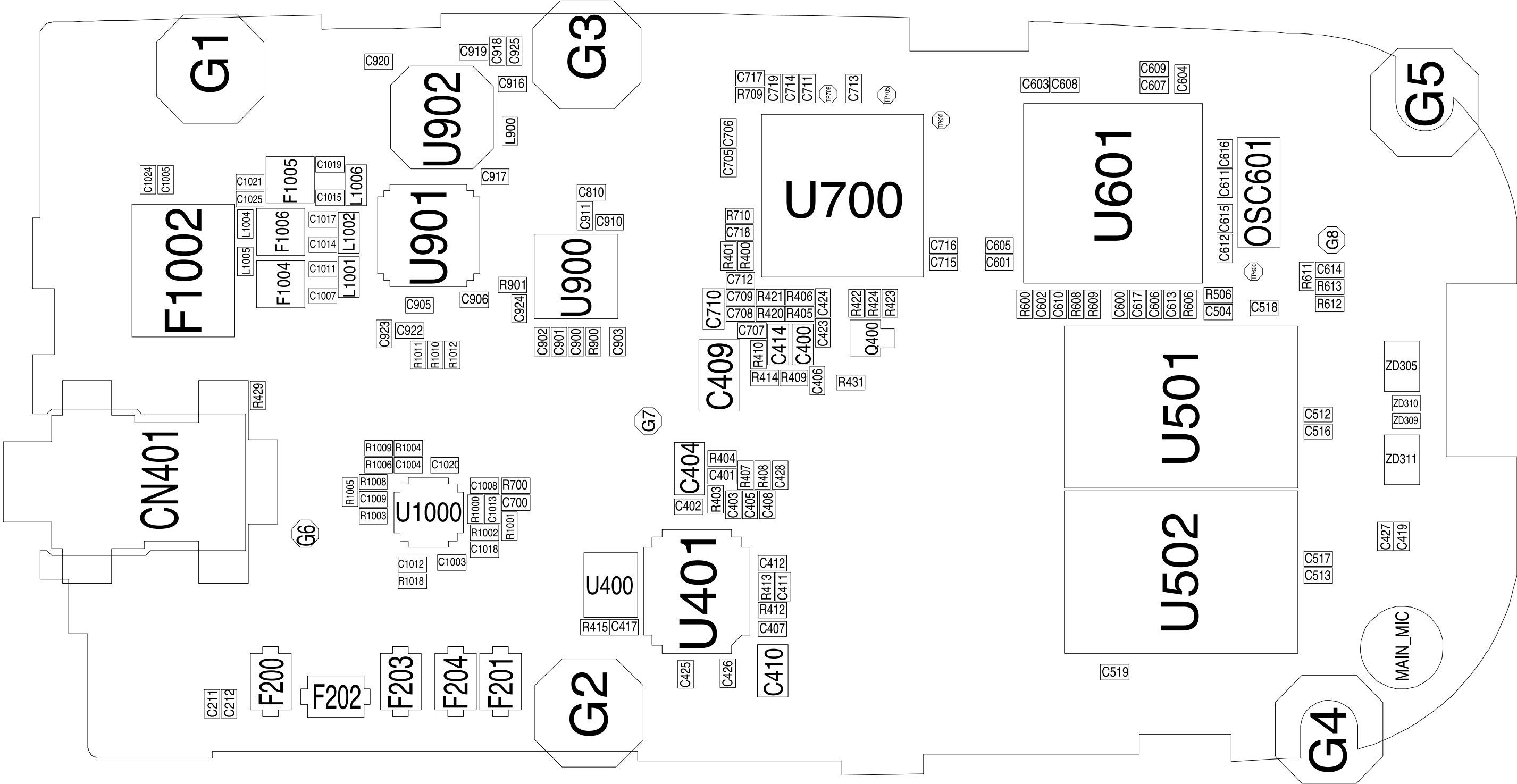


2. Base Band Solution Block Diagram



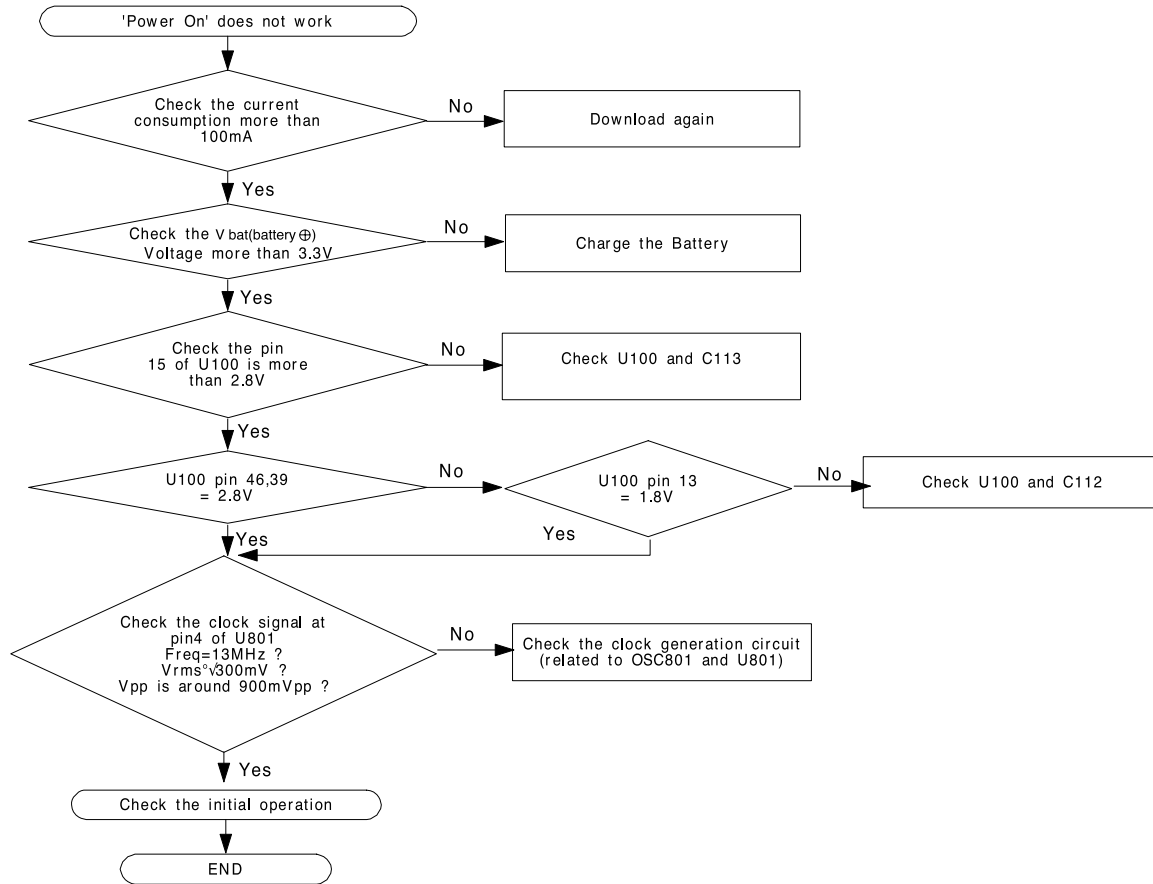
5. SGH-S105 PCB Diagrams

1. Main PCB Top Diagram

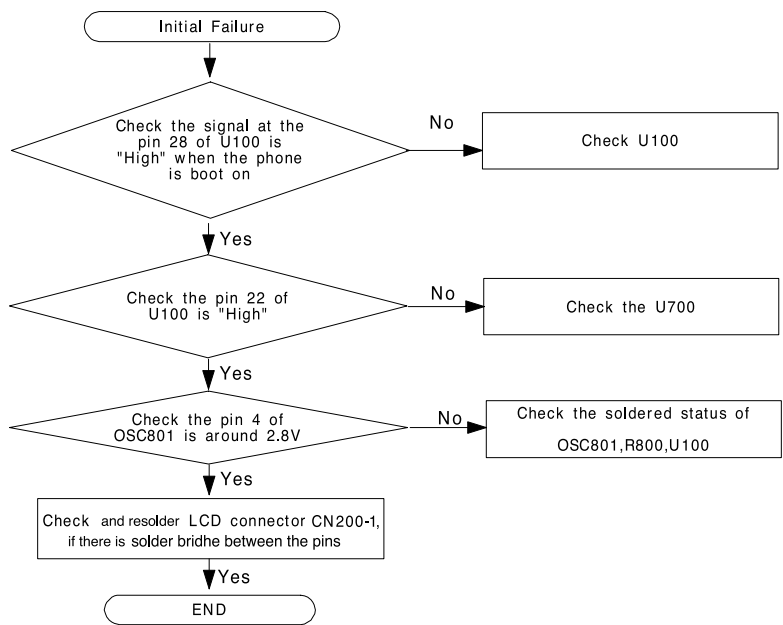


6.SGH-S105 Flow Chart of Troubleshooting and Circuit Diagrams

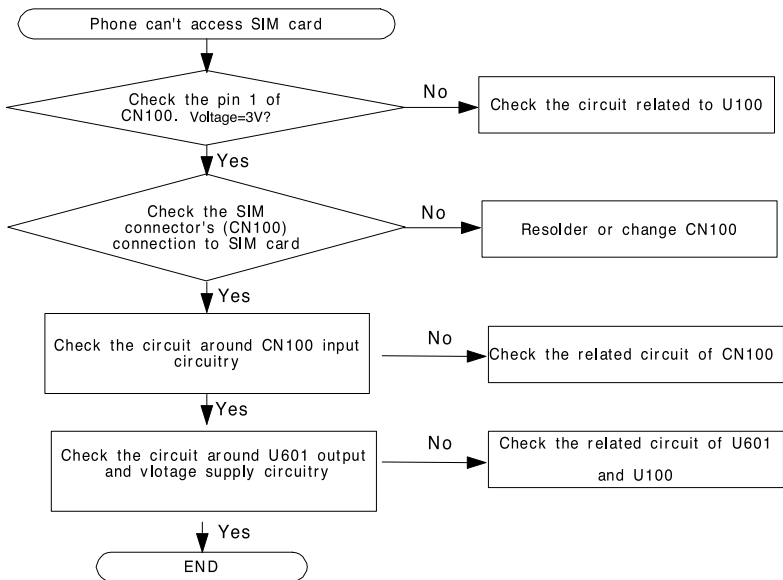
1. Power ON



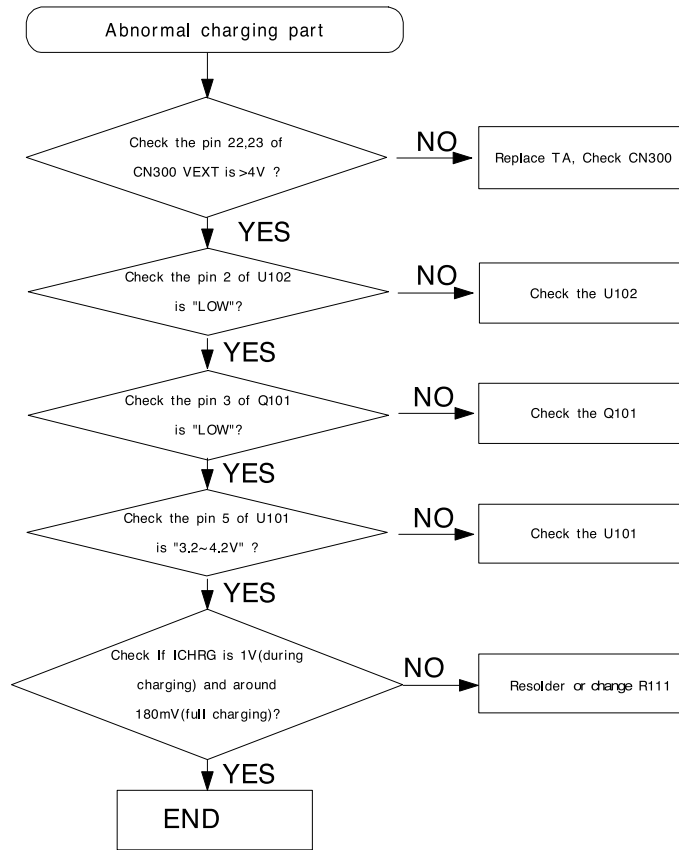
2. Initial



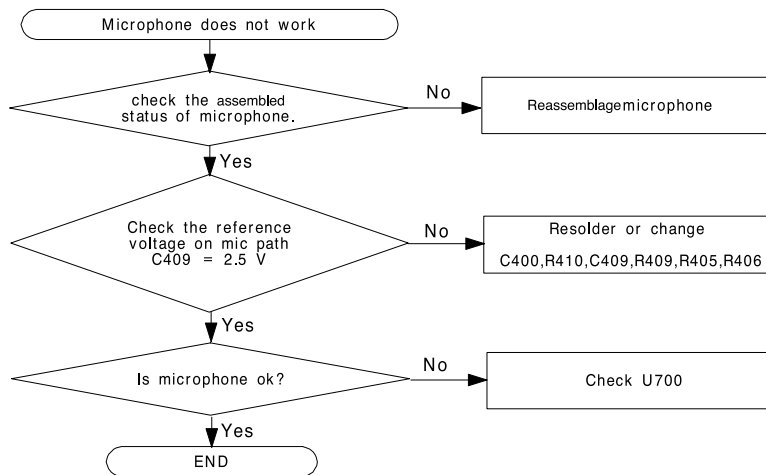
3. Sim Part



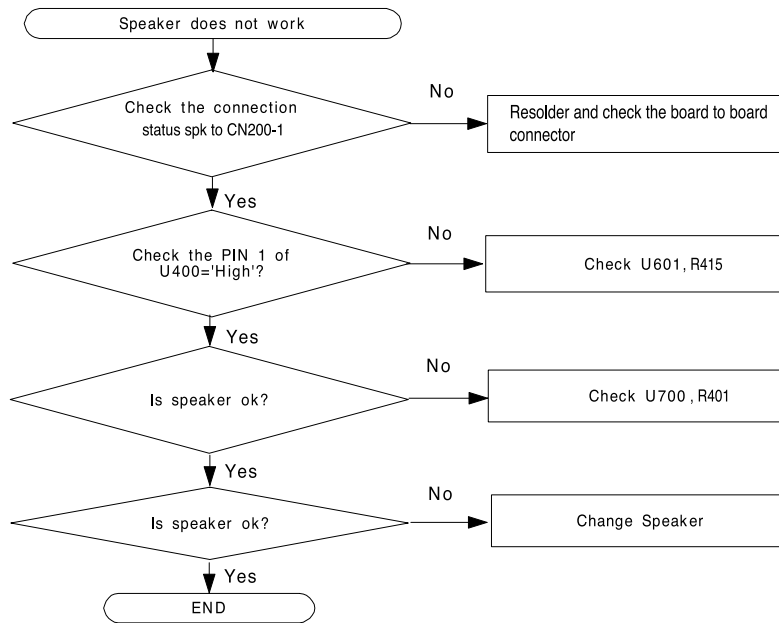
4. Charging Part



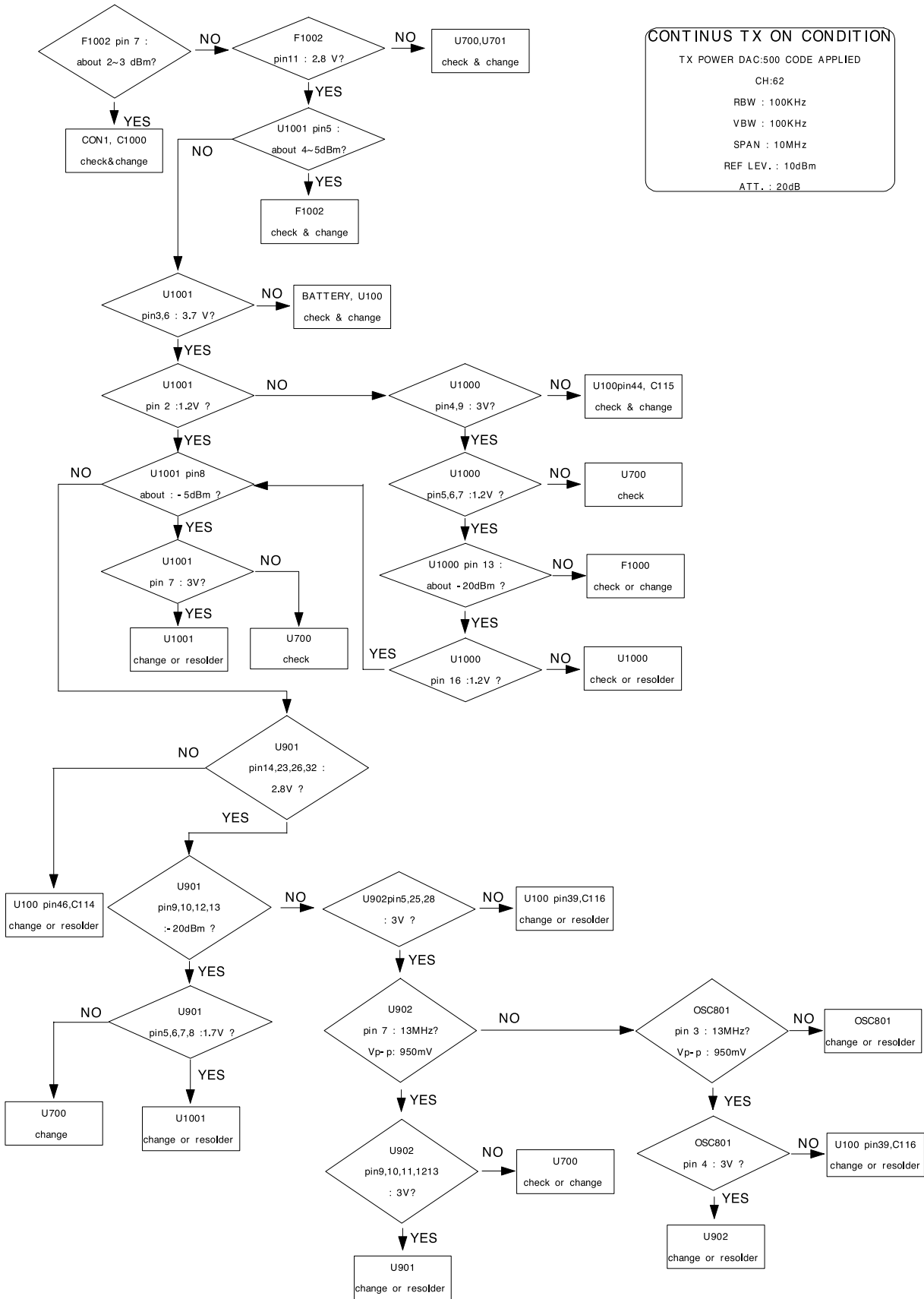
5. Microphone Part



6. Speaker Part

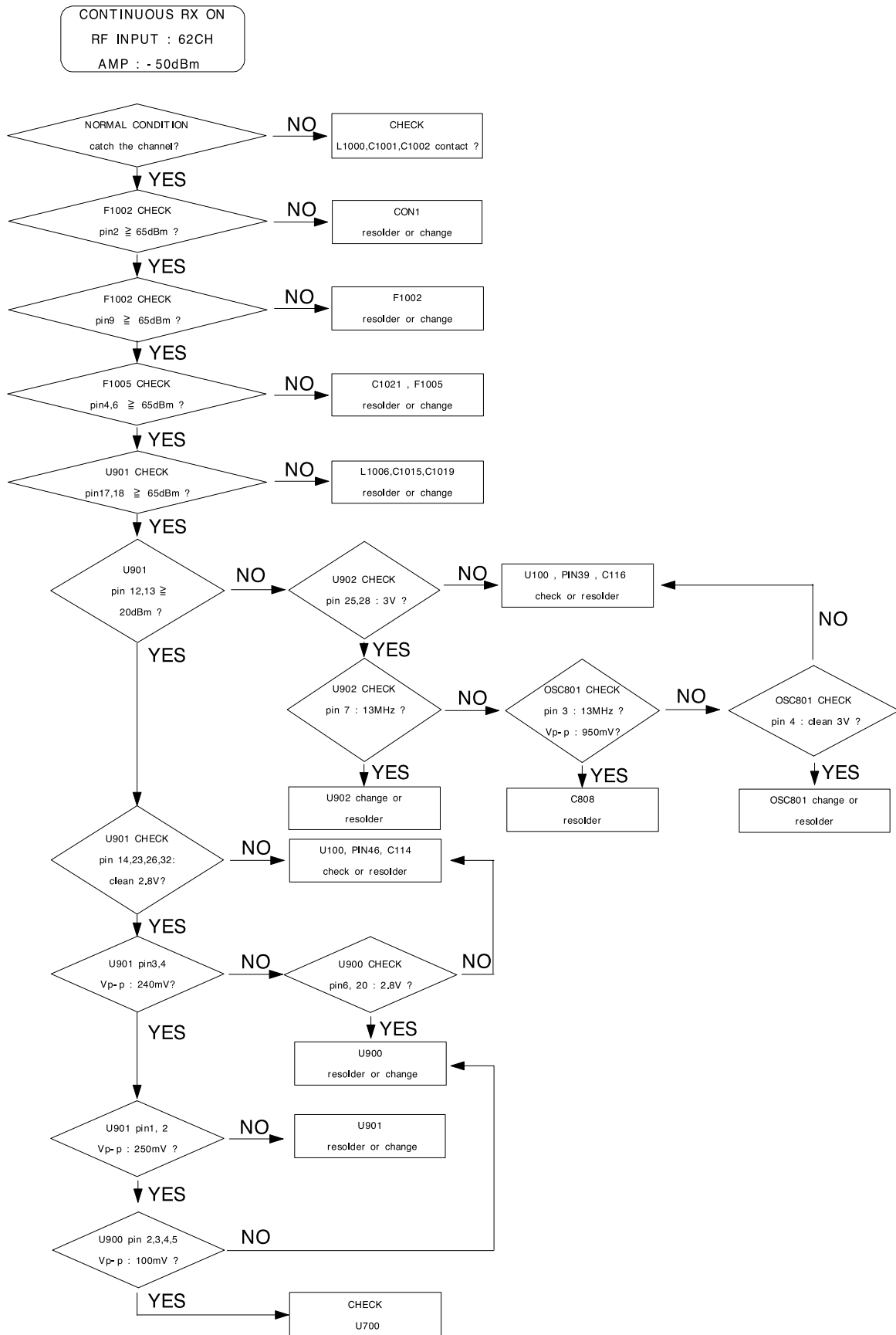


7. PCS Transmitter

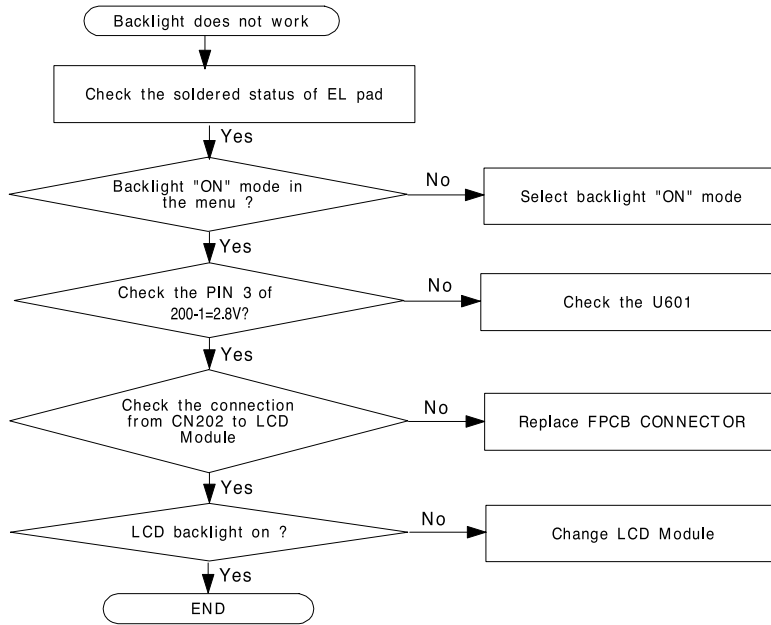


CONTINUS TX ON CONDITION
 TX POWER DAC:500 CODE APPLIED
 CH:62
 RBW : 100KHz
 VBW : 100KHz
 SPAN : 10MHz
 REF LEV. : 10dBm
 ATT. : 20dB

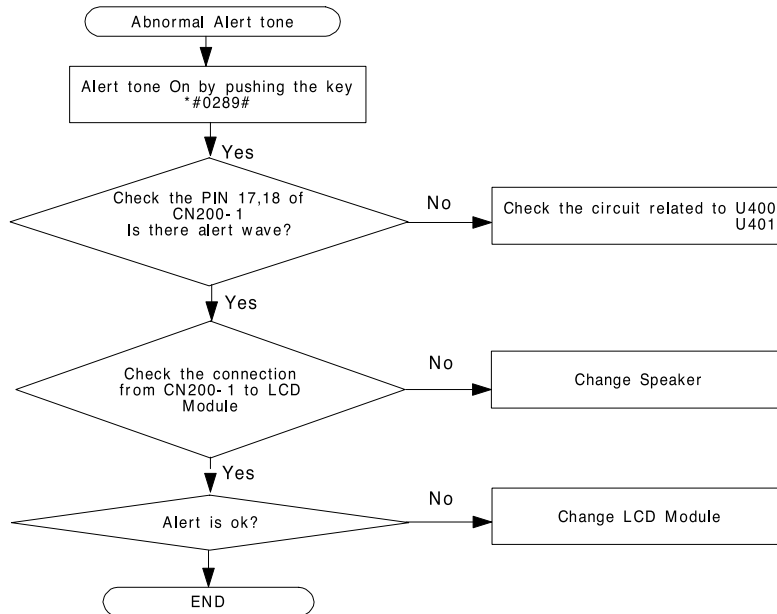
8. PCS Receiver



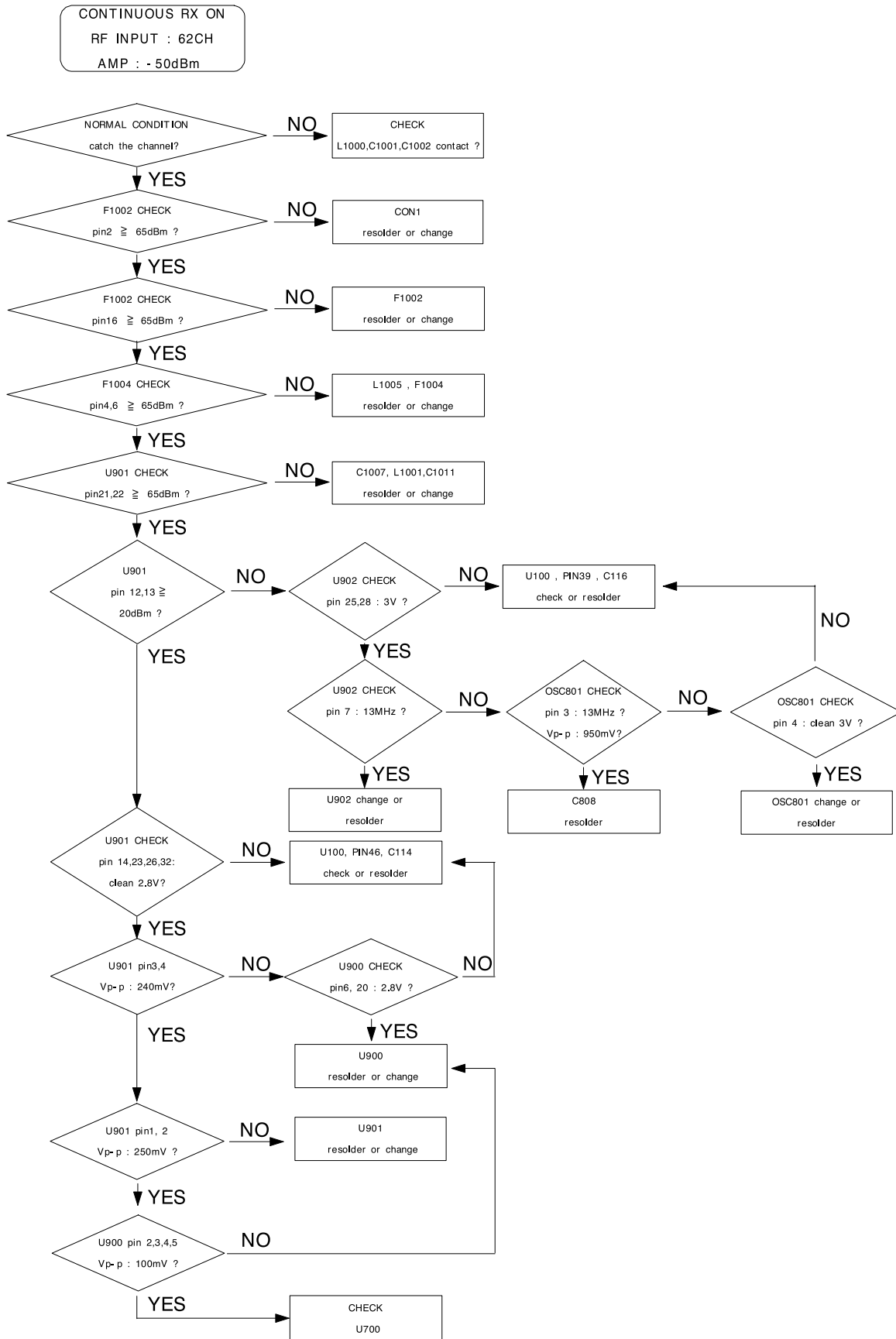
9. Back Light



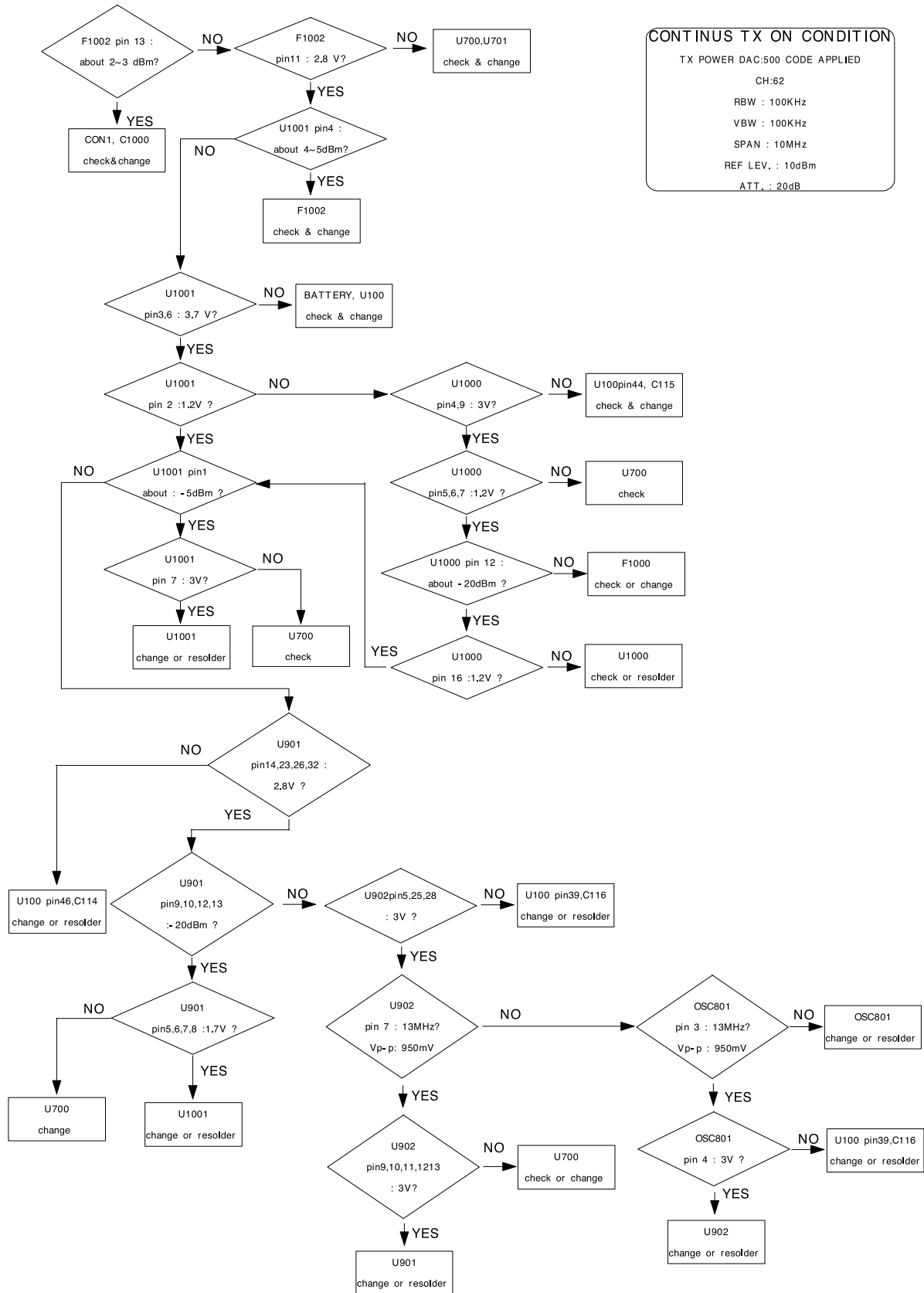
10. Alert Tone



11. GSM Receiver

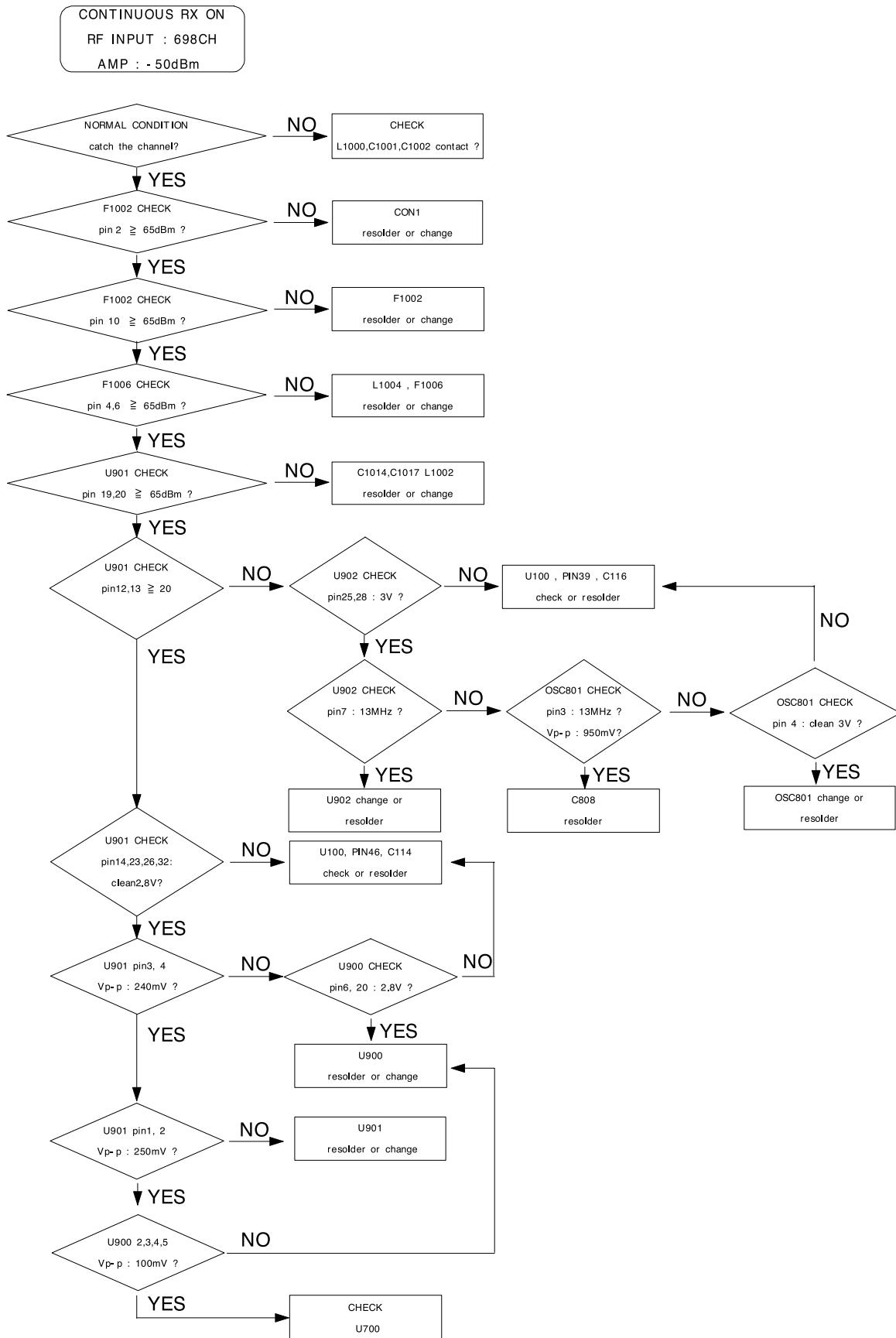


12. GSM Transmitter

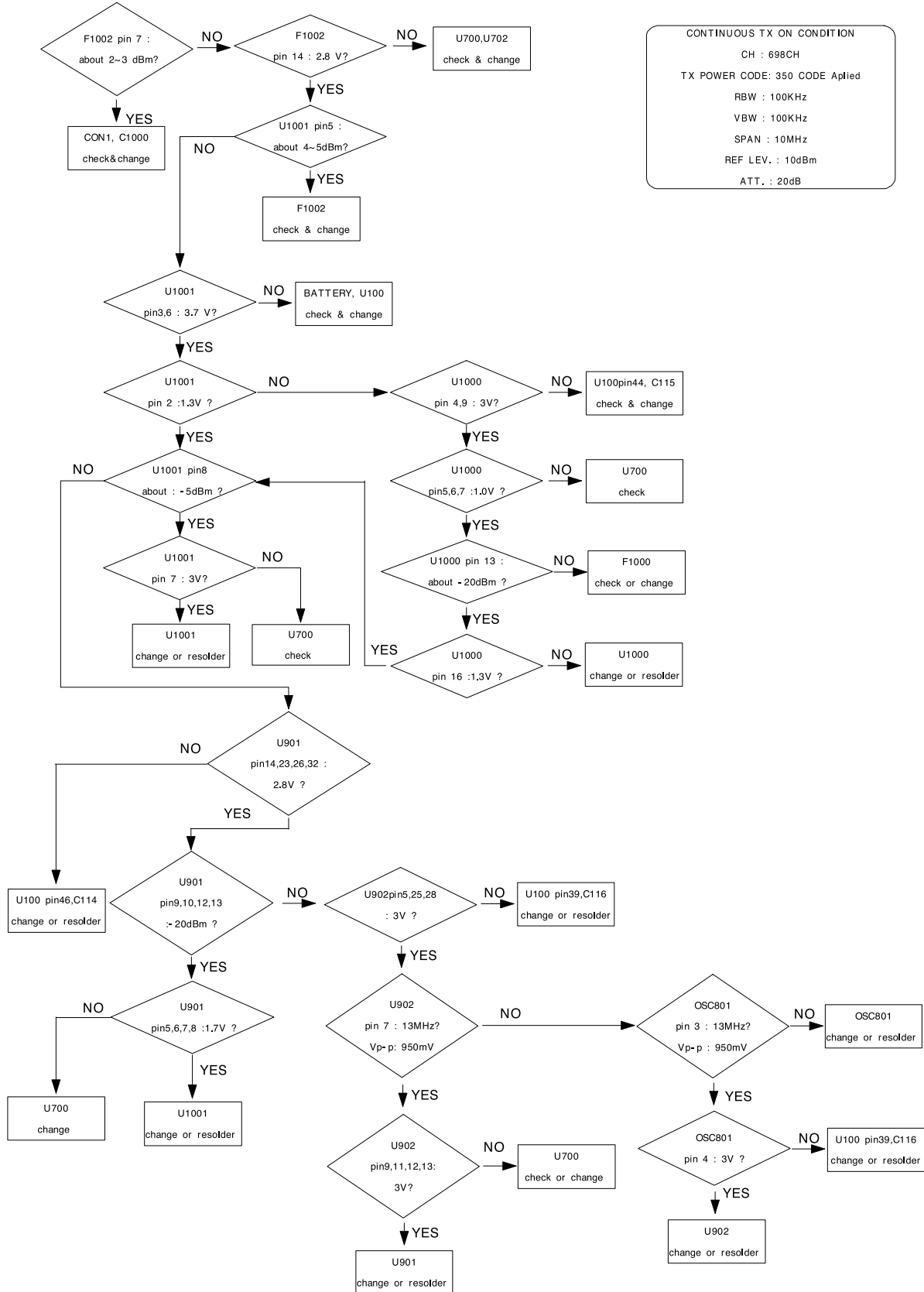


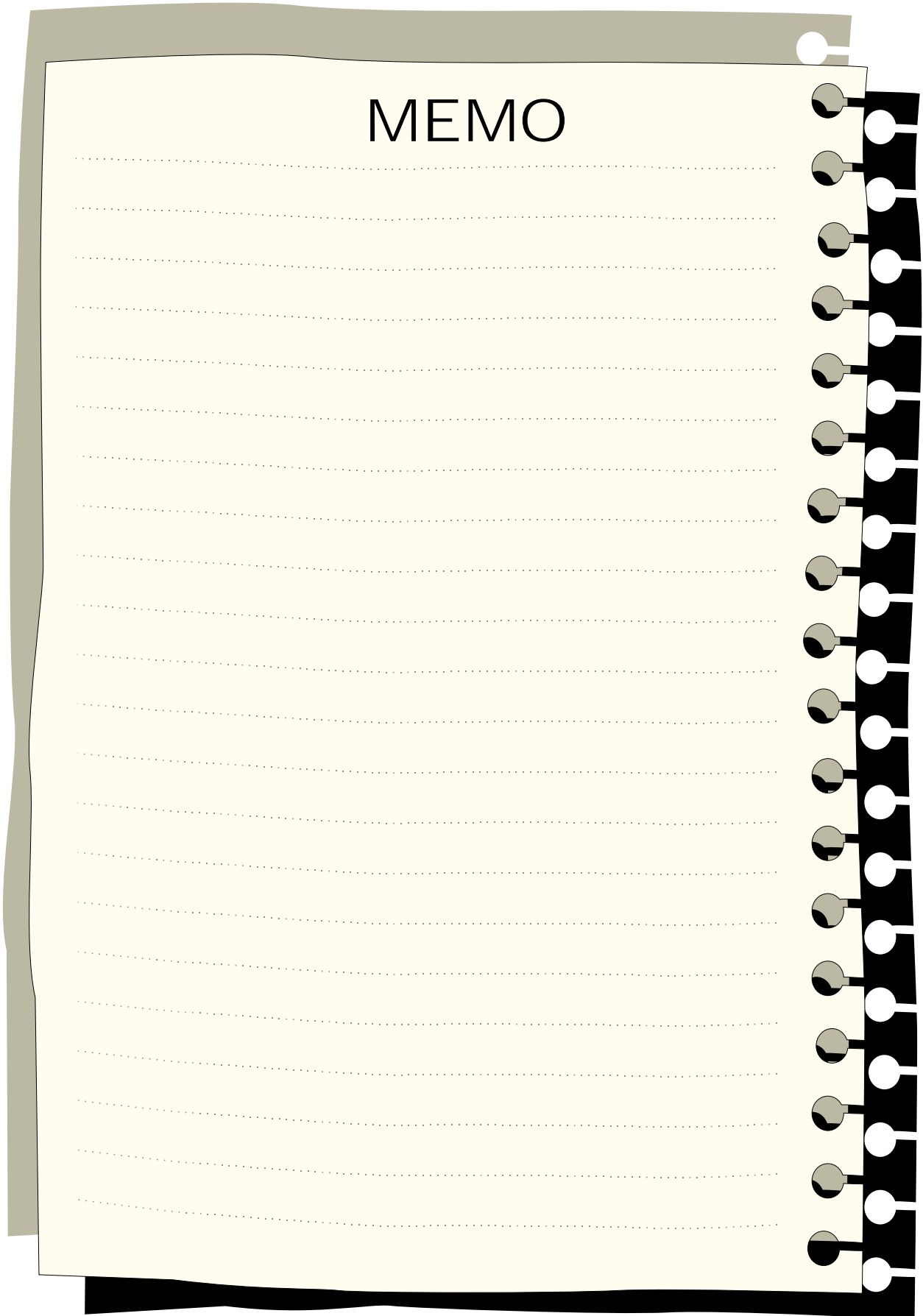
CONTINUS TX ON CONDITION
 TX POWER DAC:500 CODE APPLIED
 CH:62
 RBW : 100KHz
 VBW : 100KHz
 SPAN : 10MHz
 REF LEV. : 10dBm
 ATT. : 20dB

13. DCS Receiver

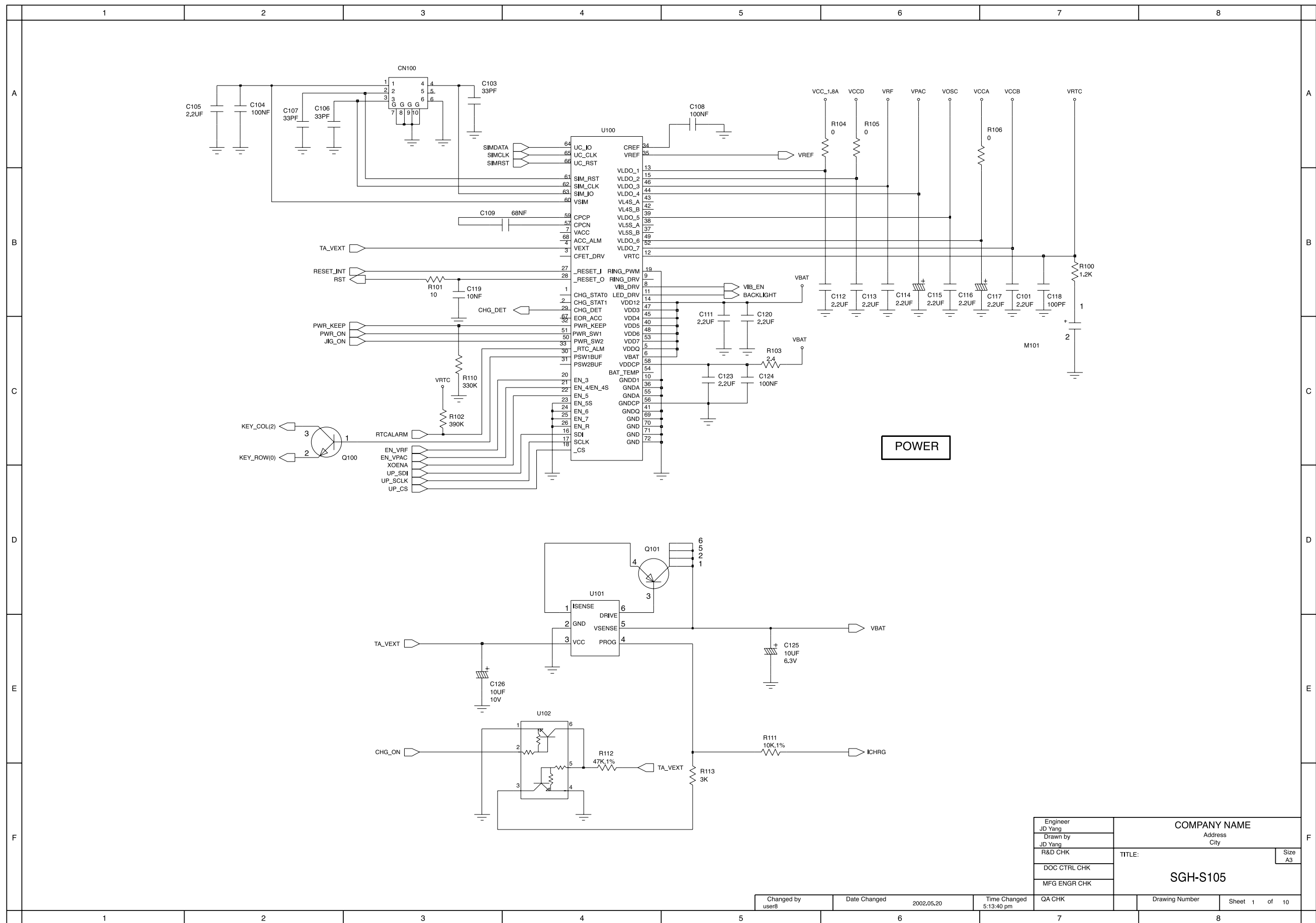


14. DCS Transmitter





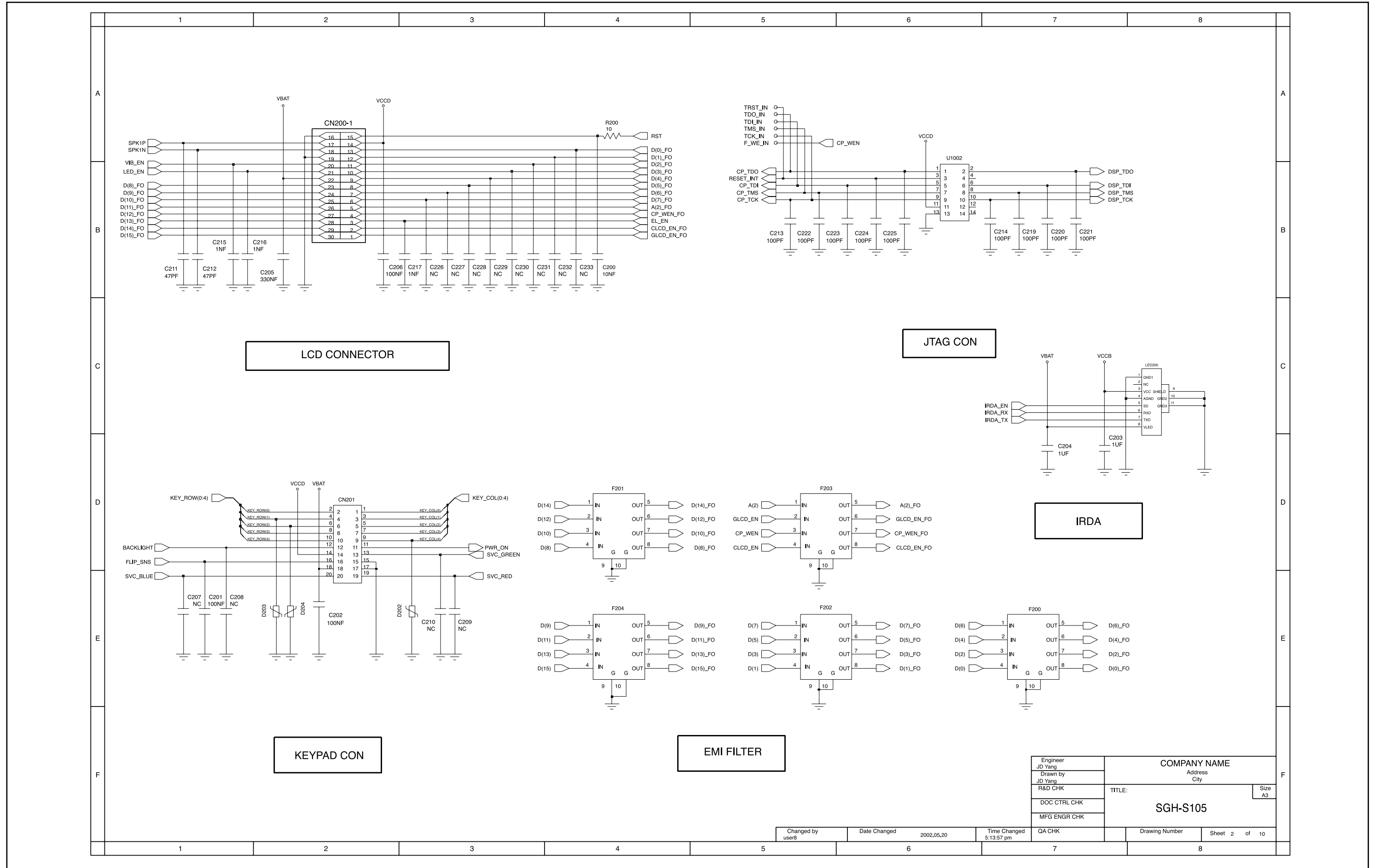
15. Power Circuit Diagram



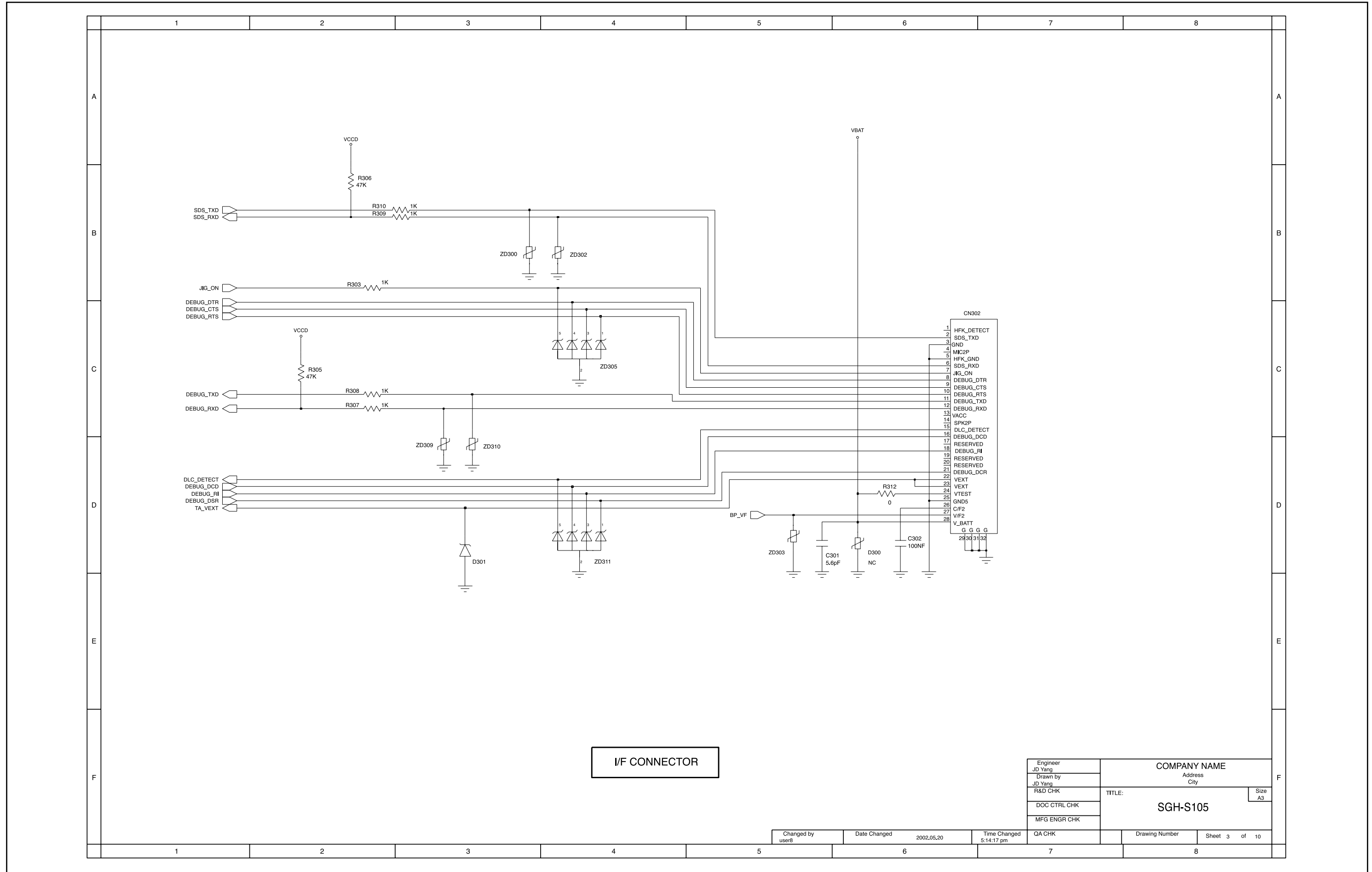
Engineer JD Yang	COMPANY NAME	
Drawn by JD Yang	Address City	
R&D CHK	TITLE:	Size A3
DOC CTRL CHK	SGH-S105	
MFG ENGR CHK		
QA CHK	Drawing Number	Sheet 1 of 10

Changed by user8	Date Changed 2002.05.20	Time Changed 5:13:40 pm
---------------------	----------------------------	----------------------------

16. LCD & KEYPAD & EMI FILTER & JTAG & IRDA Connector Circuit Diagram



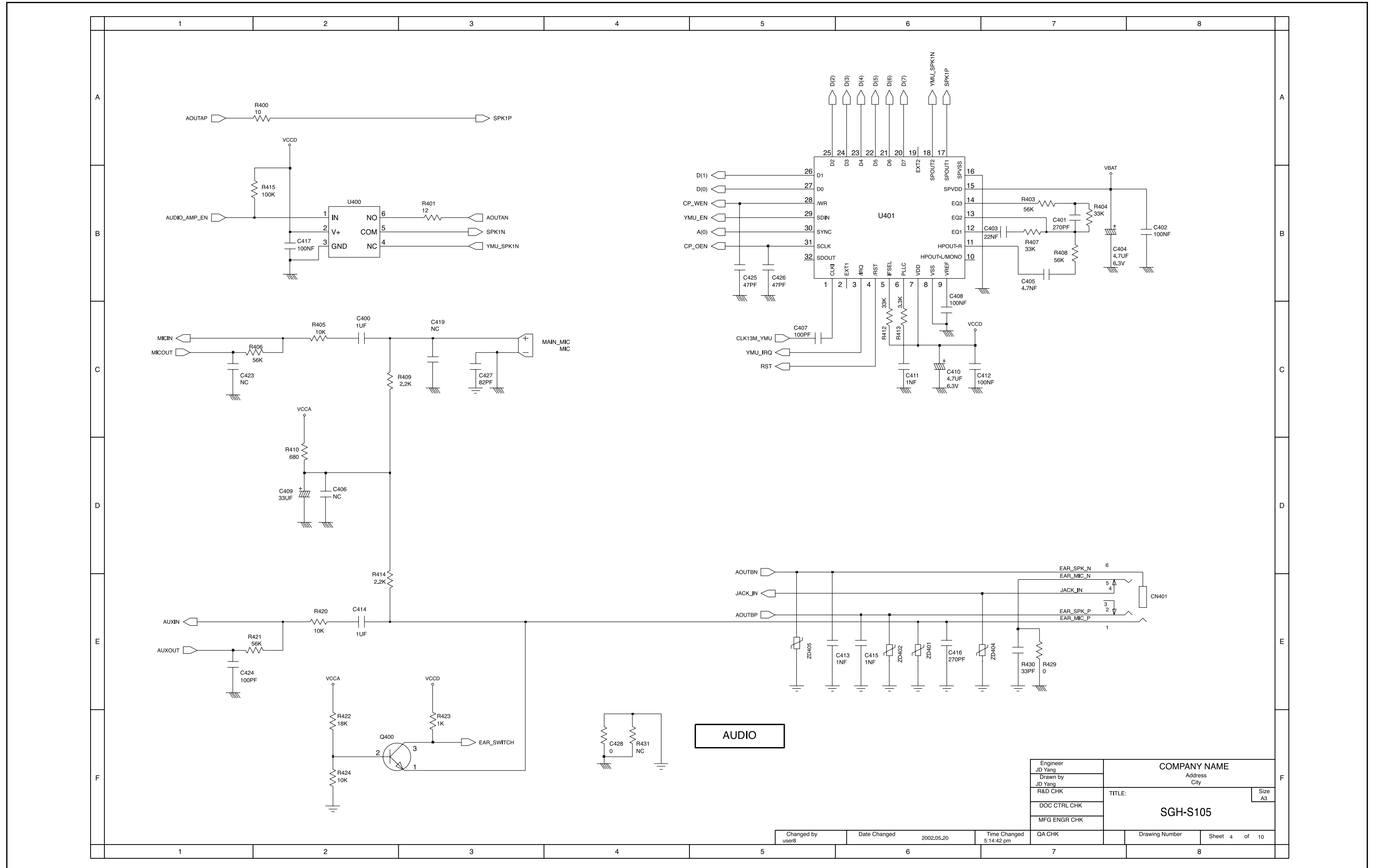
17. I/F Connector Circuit Diagram



Engineer JD Yang	COMPANY NAME	
Drawn by JD Yang	Address City	
R&D CHK	TITLE:	Size A3
DOC CTRL CHK	SGH-S105	
MFG ENGR CHK		
QA CHK	Drawing Number	Sheet 3 of 10

Changed by user8	Date Changed 2002.05.20	Time Changed 5:14:17 pm
---------------------	----------------------------	----------------------------

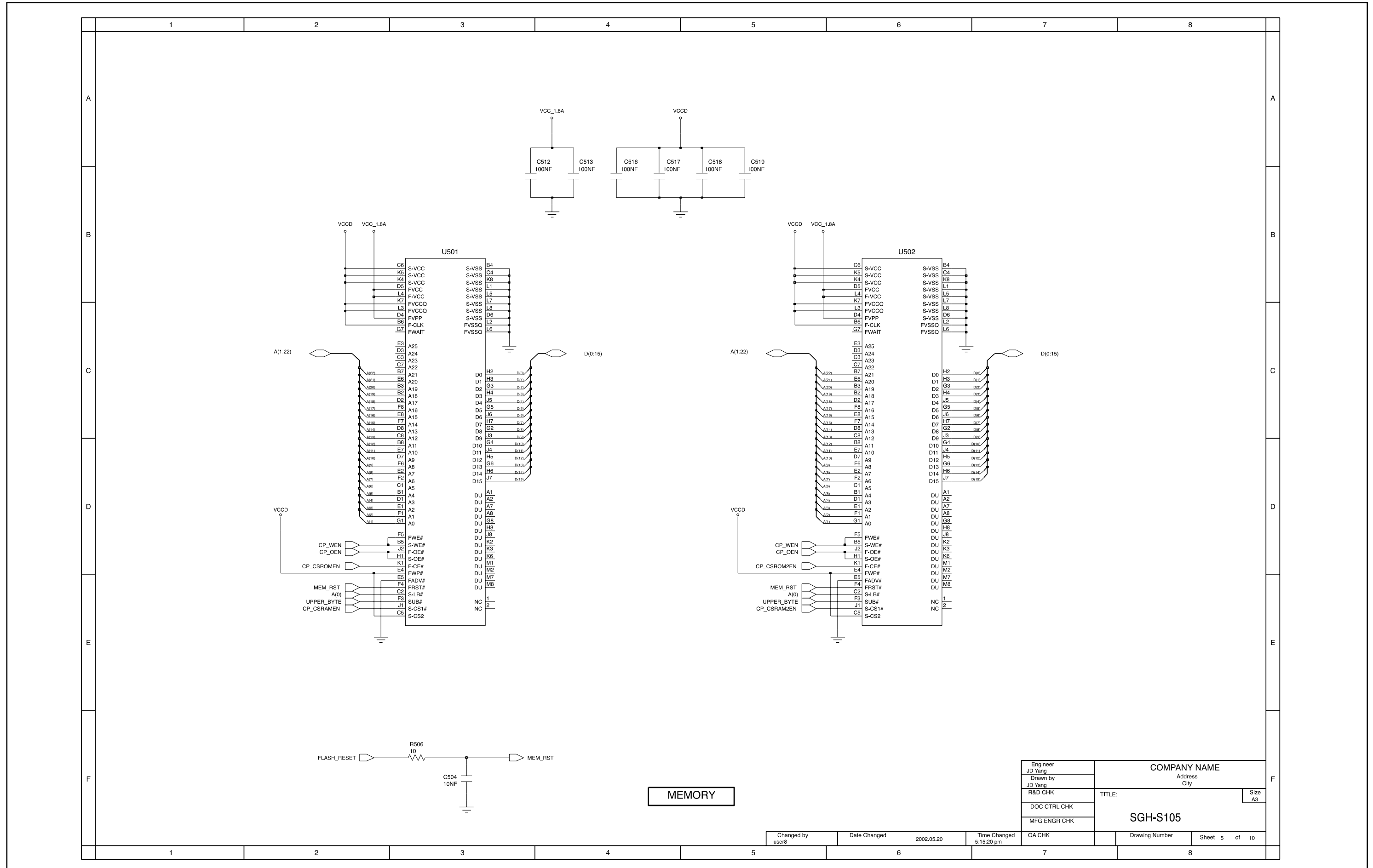
18. Audio Circuit Diagram



Engineer JD Yang	COMPANY NAME	
Drawn by JD Yang	Address City	
R&D CHK	TITLE:	Size A3
DOC CTRL CHK	SGH-S105	
MFG ENGR CHK	Drawing Number	Sheet 4 of 10
QA CHK		

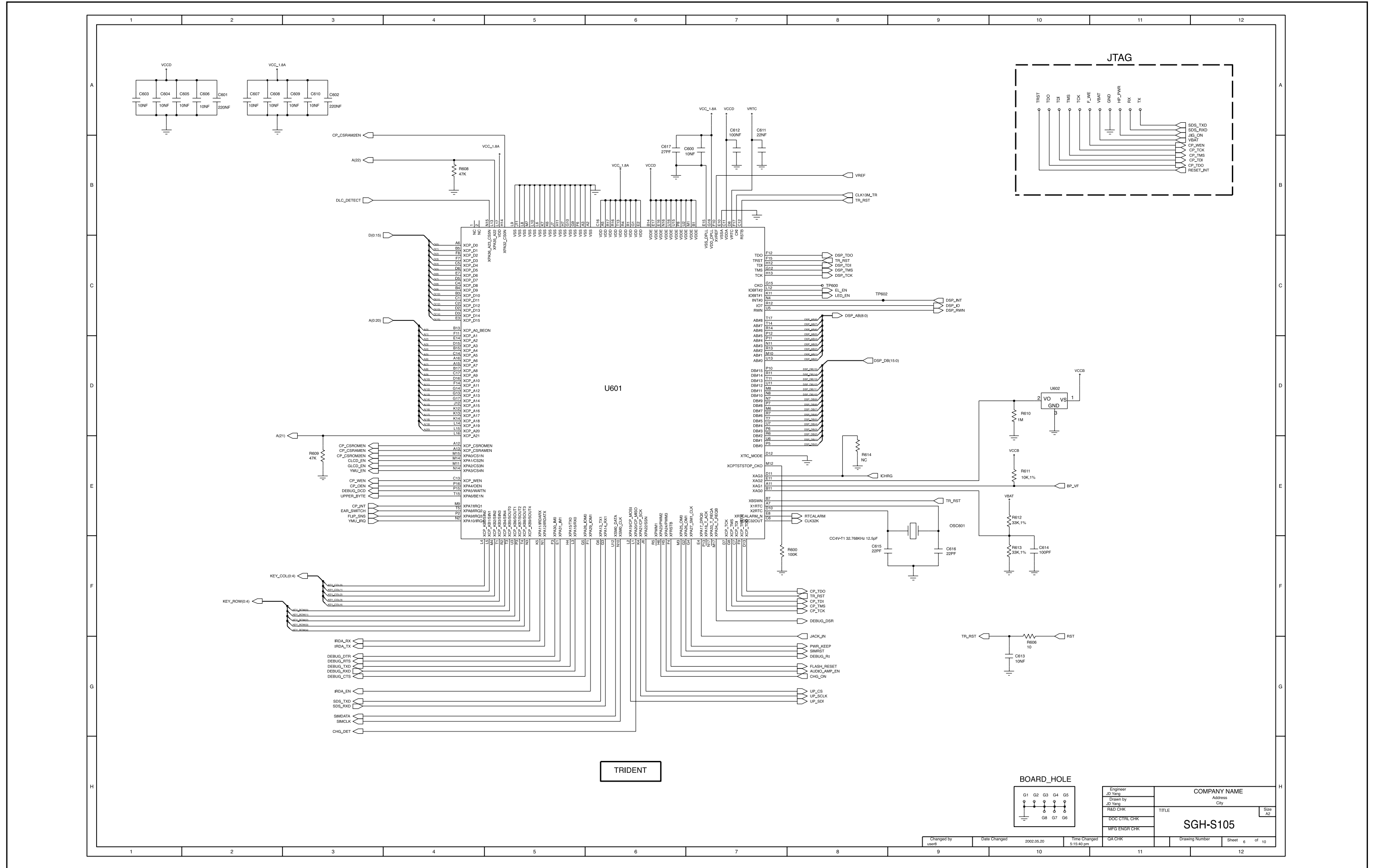
Changed by user8	Date Changed 2002.05.20	Time Changed 5:14:42 pm
---------------------	----------------------------	----------------------------

19. Memory & Buzzer Circuit Diagram



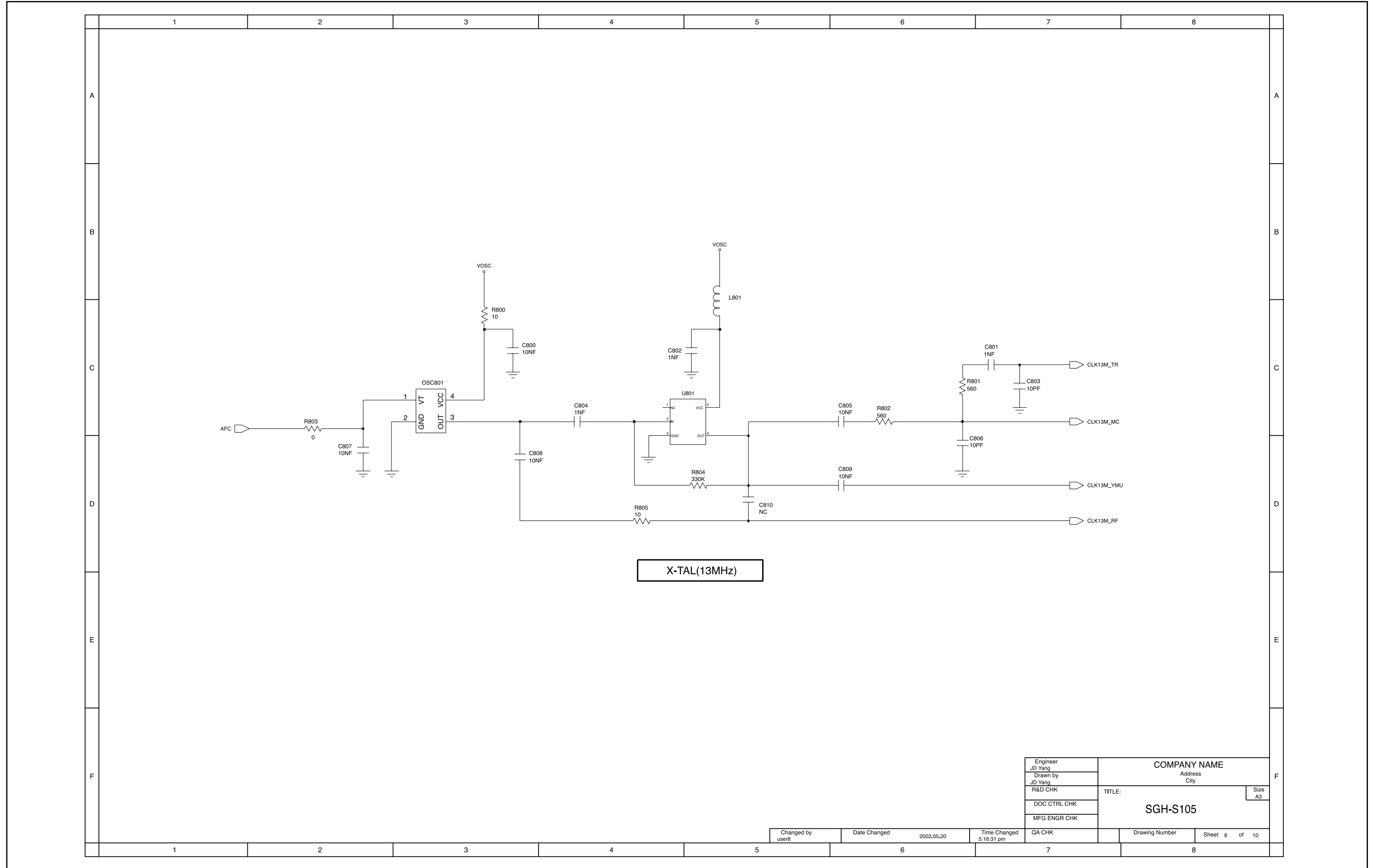
Engineer JD Yang	COMPANY NAME	
Drawn by JD Yang	Address City	
R&D CHK	TITLE:	Size A3
DOC CTRL CHK	SGH-S105	
MFG ENGR CHK	QA CHK	Drawing Number
2002.05.20		Sheet 5 of 10

20. Trident Circuit Diagram



Engineer JD Yang	COMPANY NAME Address City
Drawn by JD Yang	TITLE SGH-S105
RWD CHK	Size A2
DOC CTRL CHK	
MFG ENGR CHK	
QA CHK	Drawing Number
Changed by use8	Date Changed 2002.05.20
	Time Changed 5:15:40 pm
	Sheet 6 of 10

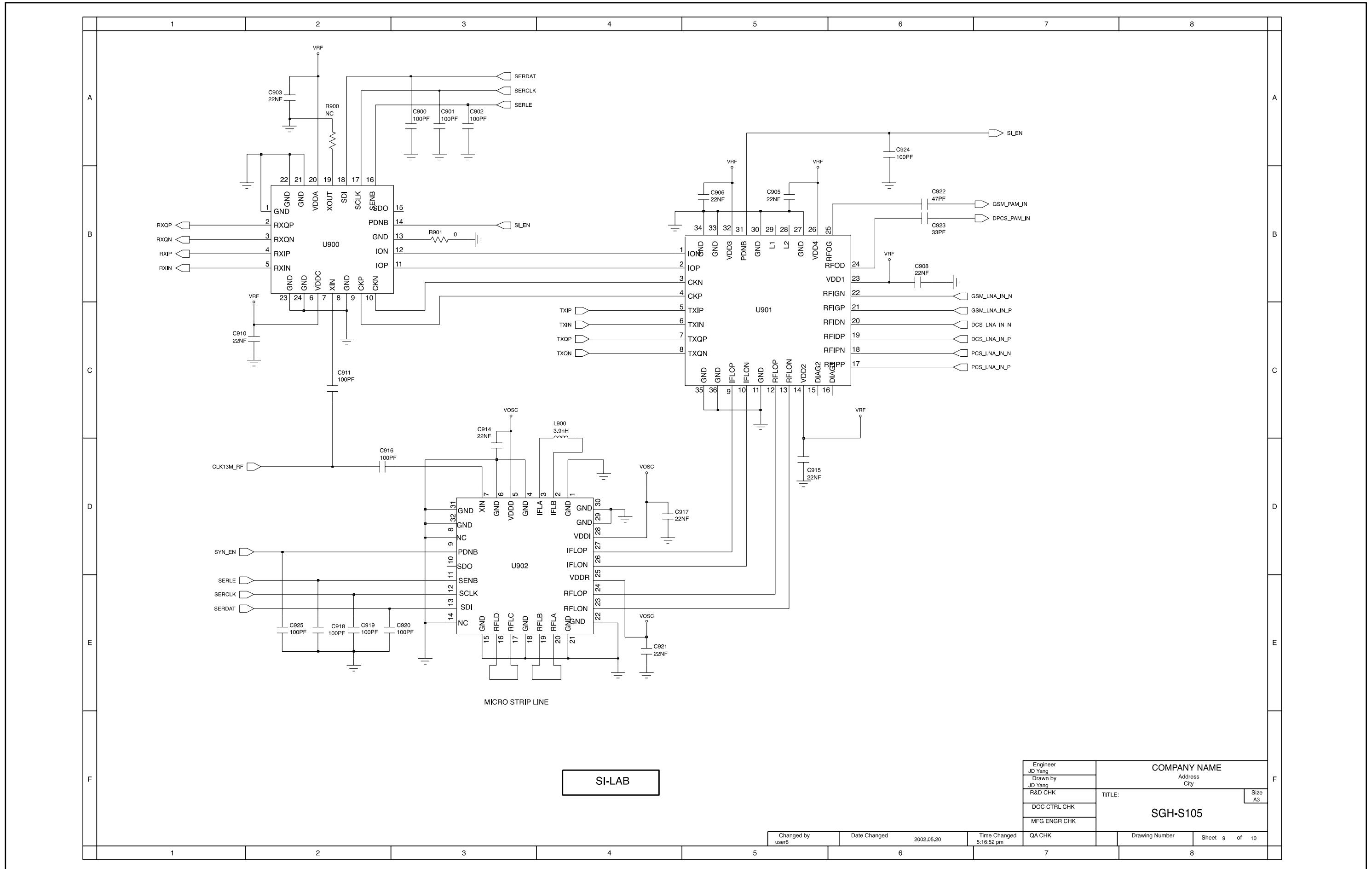
22. X-TAL(13 MHz) & SIM Circuit Diagram



Engineer JD Yang	COMPANY NAME	
Drawn by JD Yang	Address City	
R&D CHK	TITLE:	Size A3
DOC CTRL CHK	SGH-S105	
MFG ENGR CHK		
QA CHK	Drawing Number	Sheet 8 of 10

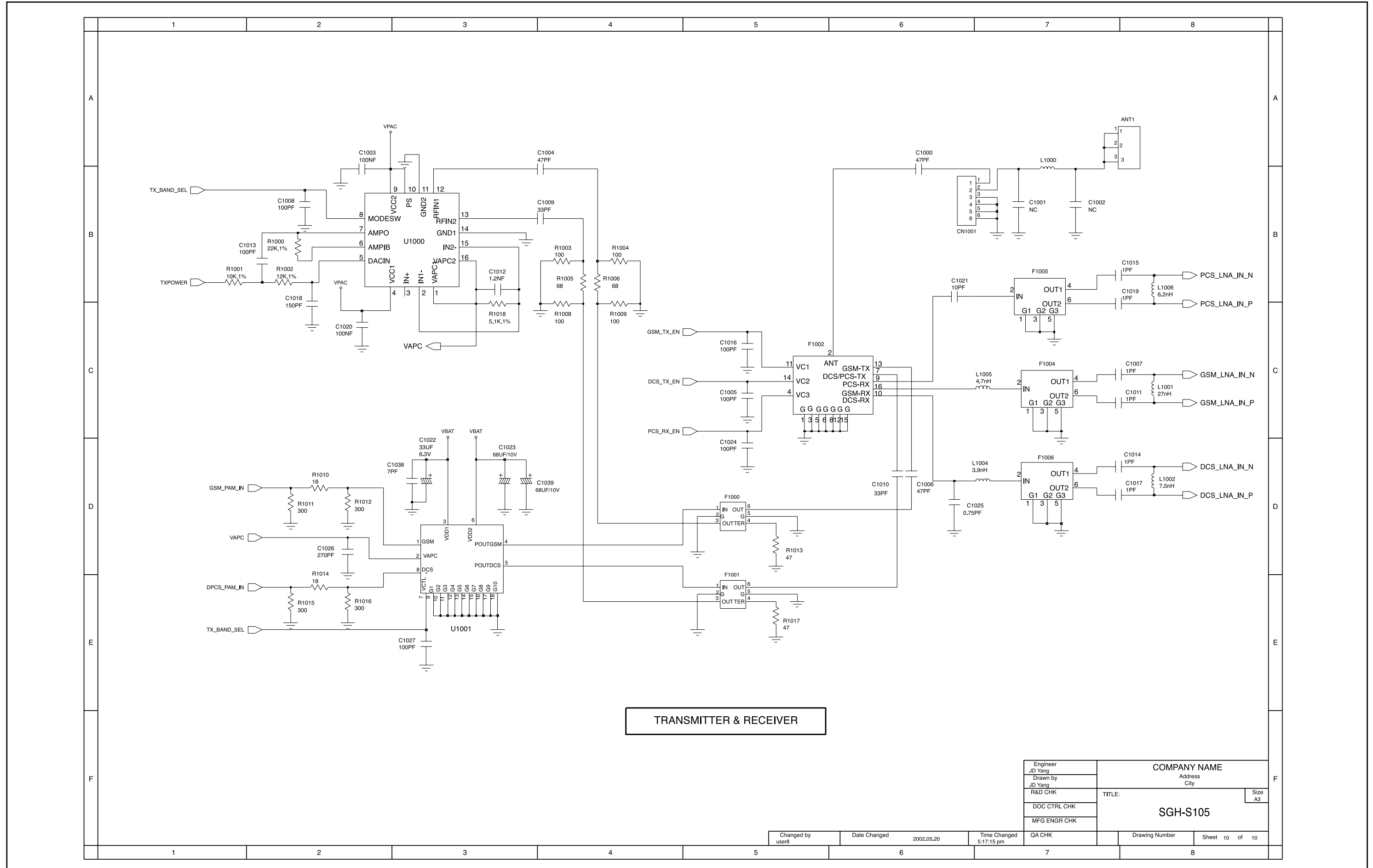
Changed by user8	Date Changed 2002.05.20	Time Changed 5:16:31 pm
---------------------	----------------------------	----------------------------

23. Bright3 Circuit Diagram



Engineer JD Yang	COMPANY NAME	
Drawn by JD Yang	Address City	
R&D CHK	TITLE:	Size A3
DOC CTRL CHK	SGH-S105	
MFG ENGR CHK	QA CHK	Drawing Number
Changed by user8	Date Changed 2002.05.20	Time Changed 5:16:52 pm
		Sheet 9 of 10

24. Transmitter & Receiver Circuit Diagram



TRANSMITTER & RECEIVER

Engineer JD Yang	COMPANY NAME	
Drawn by JD Yang	Address City	
R&D CHK	TITLE:	Size A3
DOC CTRL CHK	SGH-S105	
MFG ENGR CHK	Drawing Number	Sheet 10 of 10

Changed by user8	Date Changed 2002.05.20	Time Changed 5:17:15 pm	QA CHK
---------------------	----------------------------	----------------------------	--------



ELECTRONICS

Samsung Electronics Co.,Ltd. October. 2002
Printed in Korea.

Code No.: GH68-03259A
BASIC.