



**UHF/VHF FM TRANSCEIVER
PX-777/328/338**

SERVICE MANUAL

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INTRODUCTION

SCOPE OF THIS MANUAL

This manual is intended for use by experienced technicians familiar with similar types of commercial grade communications equipment. It contains all required service information for the equipment and is current as of the publication data. Changes which may occur after publication are covered by either Service Bulletins or Manual Revisions. These are issued as required.

ORDERING REPLACEMENT PARTS

When ordering replacement parts or equipment information, the full part identification number should be included. This applies to all parts : components, kits, or chassis. If the part number is not known, include the chassis or kit number of which it is a part, and a sufficient description of the required component for proper identification.

PERSONNEL SAFETY

The following precautions are recommended for personnel safety:

DO NOT transmit until all RF connectors are verified secure and any open connectors are properly terminated.

SHUT OFF and DO NOT operate this equipment near electrical blasting caps or in an explosive atmosphere.

This equipment should be serviced by a qualified technician only.

SERVICE

This radio is designed for easy servicing. Refer to the schematic diagrams, printed circuit board views, and alignment procedures contained within.

GENERAL

Your Transceiver is an electronic product of exact design and should be treated with care .The suggestions below will help you to fulfill any warranty obligations and to enjoy this product for many years.

- Do not attempt to open the unit. Non-expert handling of the unit may damage it.
- When using regulated power supply, take notice of power voltage must be between 6V and 8V to avoid damaging the unit.
- Do not store the Radio under the sunshine or in hot areas.
High temperatures can shorten the life of electronic devices, and warp or melt certain plastics.
- Do not store the Radio in dusty, dirty areas
- Keep the Radio dry. Rainwater or damp will corrode electronic circuits.
- If it appears that the Radio diffuses peculiar smell or smoke, please shut off its power immediately and take off charger or battery in the Radio, then contact with PUXING agency.
- Do not transmit without antenna.

REALIGNMENT

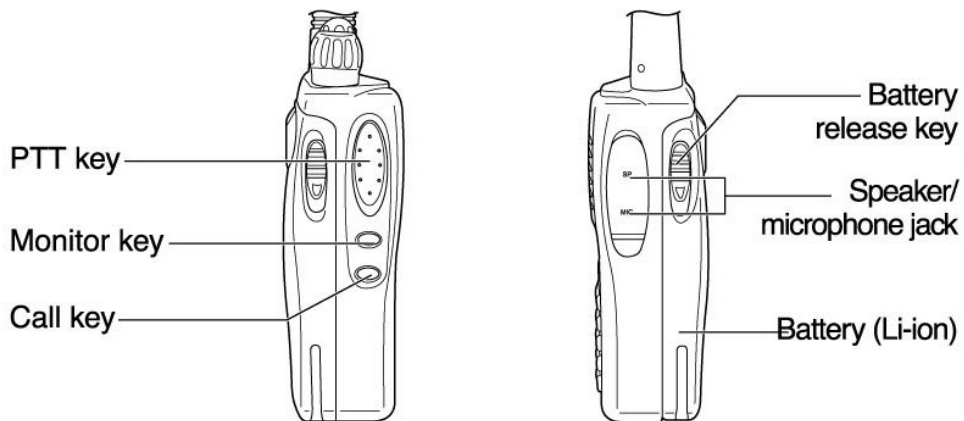
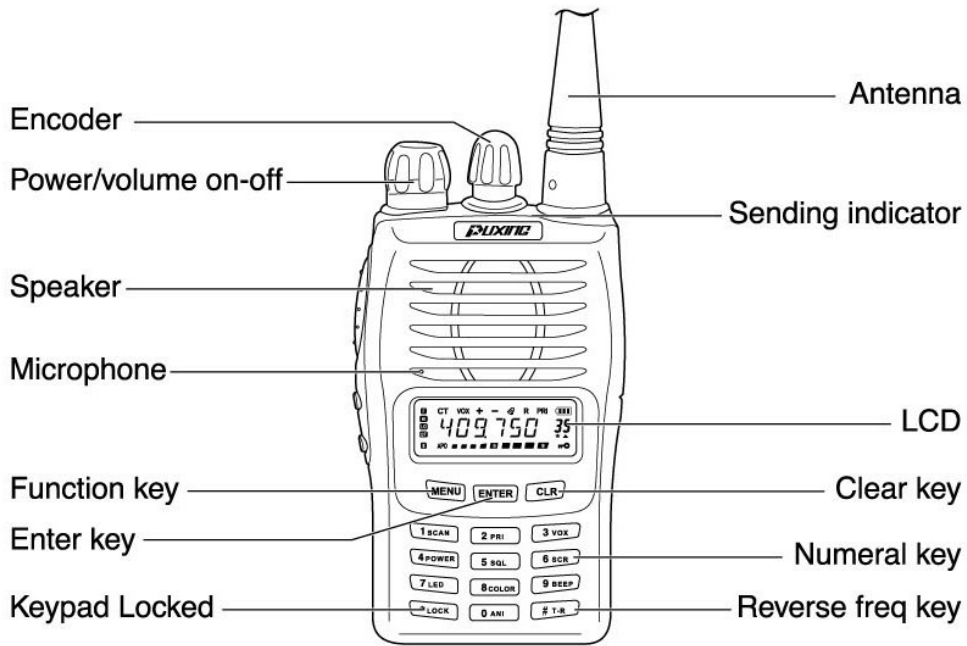
1. MODE:

USER MODE: For normal use, when turn on enter this mode.

PC MODE: used to read and program radio.

SELF-PROGRAMMING MODE: Hold down [MONI] and [menu] key accomplished by turning on the VOL/POWER switch until “SELF” displays.

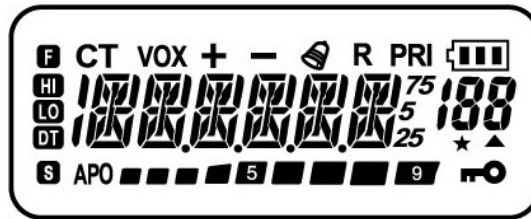
2.



2. LCD DISPLAY

Screen

You can see various icon show on the screen when power on. The following table can help you identification the icon meaning which display on LCD.



<input type="checkbox"/>		Battery power display
<input type="checkbox"/>	+	Dispersion to hyper-received frequency
<input type="checkbox"/>	-	Dispersion to under-received frequency
<input type="checkbox"/>	S	Frequency scanning indication
<input type="checkbox"/>		Keypad locked
<input type="checkbox"/>	DT	Display when DCS is turned on
<input type="checkbox"/>	CT	CTCSS turned on
<input type="checkbox"/>	VOX	VOX turned on
<input type="checkbox"/>		Bell Function
<input type="checkbox"/>	R	Display reverse frequency
<input type="checkbox"/>	PRI	Priority scan active
<input type="checkbox"/>		Received signal strength and power display
<input type="checkbox"/>		Show the working frequency
<input type="checkbox"/>	188	Function menu
<input type="checkbox"/>		Display when the channel is priority scan
<input type="checkbox"/>		Squelch open


3. SELF-PROGRAMMING MODE








For frequency,signal,feature write to the radio



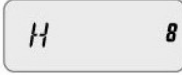
Self-Programming mode

You can set the radio by self-programming.


Operation

1. To enter self-programming mode, hold down (MONI) and **MENU** key accomplished by turning on the VOL/POWER switch until "SELF" displays. 
2. Press Enter key to start.
3. Press [ENTER] to store the data and continue to next function.

Items	Display (example)	Contents
Channels Items below are not available if without setting "Channels"		Channels from 1 to 118
Receiving frequency Items below are not available if without setting "Receiving frequency" It will return to "Channels" if "blank" was selected	 	Blank. (Press CLR) 67.0000MHz~549.9875MHz Press [CALL] key to select from 5k/10k/6.25k/12.5k/25k stepping
Receiving CTCSS/DCS (This item will be skip if without setting "channels")	   	OFF CTCSS (see CTCSS Frequency chart) 67.0Hz-250.3Hz {Notice: (1)} DCS (see DCS Normal/Inverted chart) 023-754 Normal {Notice: (2)} DCS (see DCS Normal/Inverted chart) 023-754 Inverted {Notice: (2)}

Transmitting frequency		Same as Receiving Frequency
Transmitting CTCSS/DCS (This item will be skip if without setting "transmitting frequency")		Same as Receiving CTCSS/DCS
Busy Channel Lockout		OFF: Close; 1: Carrier; 2: CTCSS/DCS
Add/Del priority channel scan		Del: Delete priority channel scan; Add: Add priority channel scan
Output Power		H: High power; L: Low power

Notice

- Set Receiving/transmitting codes
Press  key to select from OFF/CTCSS/DCS



- Press  to set DCS Normal/Inverted

TROUBLESHOOTING GUIDE

PROBLEM	SOLUTION
No Power	<ul style="list-style-type: none"> The battery pack may be dead.Recharge or replace the battery pack. The battery pack may not be installed correctly. Remove the battery pack and install it again.
Battery power dies shortly after charging	<ul style="list-style-type: none"> The battery pack life is finished.Replace the battery pack with a new one.
Cannot talk to or hear other members in your group	<ul style="list-style-type: none"> Make sure you are using the same frequency and CTCSS/DCS tone as the other members in your group. Other group members may be too far away. Make sure you are within range of the other radios.
Other voices (besides group members) are present on the channel.	<ul style="list-style-type: none"> Change the CTCSS/DCS tone.Be sure to change the tone on all radios in your group.

TECHNICAL SPECIFICATION

General

Frequency Range	136 — 174MHz , 350 — 390MHz , 400 — 470MHz, 245Mhz
Working Temperate	-20°C — +50°C
Operating Voltage	DC 7.2V
Operate Mode	Simplex or Semi-duplex
Channel spacing	25Khz/12.5Khz
Dimension	100mm×55mm×32mm (Not included Antenna)
Weight	220g (Including battery)
Antenna impedance	50 Ω

Transmitter	
Frequency Stability	±2.5PPM
Output Power	5W/4W ±0.5W
Max Frequency Deviation	≅5KHz
Audio Distortion	≅3%
Modulation Character	+3dB—-3dB
Adjacent Channel Power	≥65dB
Spurious Radiation	≤7.5UW
Occupied Bandwidth	≤16KHz

Receiver	
RF Sensitivity	<0.2UV
Audio Distortion	≅3%
Audio Response	+2dB—-10dB
Adjacent Channel Selectivity	≥60dB
Intermodulation Rejection	≥60dB
Spurious Response	≥60dB
Blocking	≥80dB

SPECIFICATION

1. UHF 400-470Mhz,350-390Mhz
VHF 136-174Mhz, 245-245.9875Mhz.
2. ANI code
3. Scrambler
4. VHF 5W/ UHF 4W output power
5. 118 Groups of memory channels
6. Built-in 50 Groups of CTCSS and 104 Groups of DCS
7. Wide(25kHz) and Narrow(12.5kHz) available
8. Come with 1200mAh Li-ion battery
9. Input Freq. By using keypad
10. VOX built-in
11. Scan function
12. Three color LCD backlight display
13. Emergency Alarm
14. Programmable by PC
15. Bell ring when receiving signal
16. Priority Scan Function
17. Adjust power Hi/Lo
18. Switching between Channel/Freq.
19. Adjust squelch level(0-9)
20. Transmitting timer
21. Keypad lock
22. Reverse Freq Function
23. Channel step 5k,10k,6.25k,12.5k,25k

CIRCUIT DESCRIPTION

FREQUENCY CONFIGURATION

The frequency configuration is shown in Figure 1

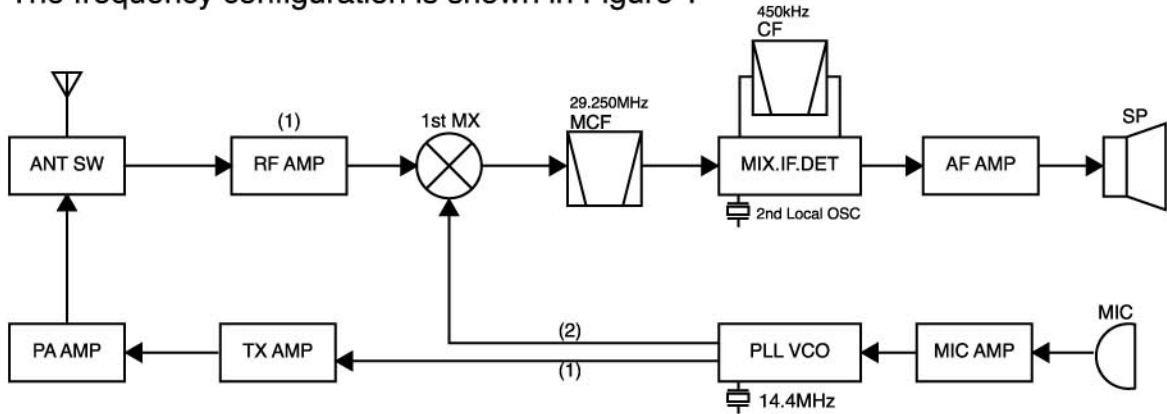


Fig.1

RECEIVER SYSTEM

RF amplifier

The signal from the antenna is passed through a low-pass filter and the transmission/reception selector circuit D211, D212 input to the RF amplifier. The input signal is amplified by T231. The unwanted frequency band of the signal is then eliminated by a band-pass filter.

First-stage mixer

The input signal is mixed with the first local oscillator signal from the PLL circuit by the first-stage mixer T251, producing a first IF signal. The unwanted frequency band of the first IF signal is eliminated by a crystal filters.

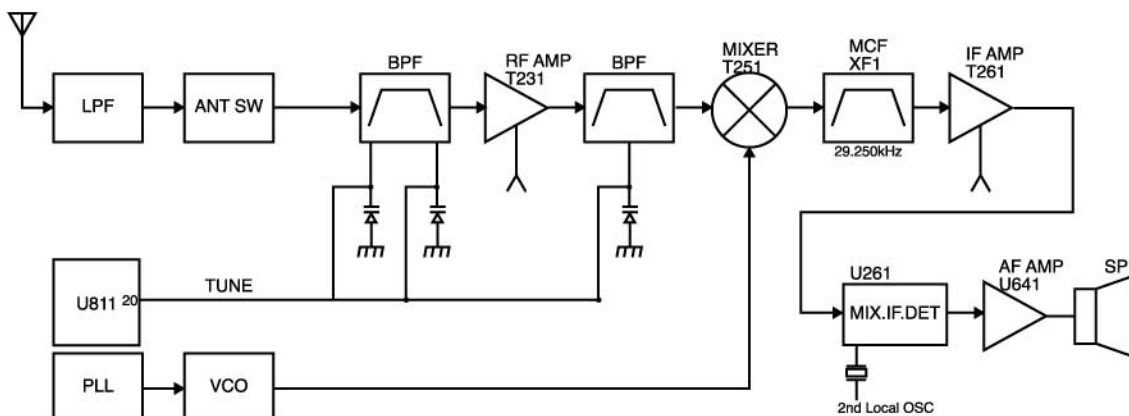


Fig.2

IF amplifier

The first IF signal is amplified by T261 and enters U261 (FM signal processing IC), where it is mixed with the second local oscillator signal and so converted into the second IF signal. The unwanted frequency band of the second IF signal is eliminated by ceramic filter FL261. The resulting signal is then amplified and detected.

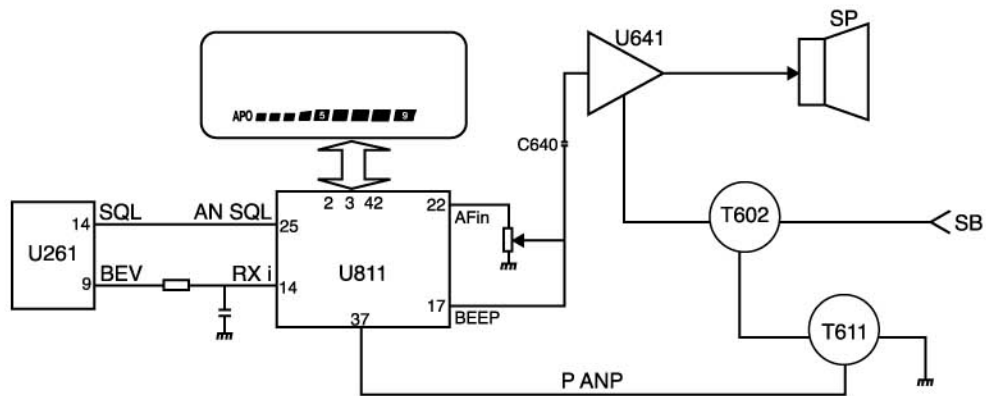


Fig.3

AF amplifier

The audio signal output by the FM detector are corrected by the high-pass filter and de-emphasize circuit. The audio signal is then passed through an AF variable resistor and amplified by power amplifier U641 to obtain the desired output.

Squelch and mute circuits

The output detected by U261 is input to MCU (pin 25), the voltage input to the microprocessor is digitized, and the microprocessor controls the MUTE., RXI, RXO, thus controlling the audio signal. The microprocessor controls this system from level 1-9, it can be programmable by software or keypad.

S meter

The S-meter signal is output from U261 as a direct voltage corresponding to the input signal, converted to a voltage by R278, then input to the microprocessor. The DC voltage is digitized to control the LCD S-meter display.

TRANSMITTING SYSTEM

Microphone amplifier

The audio band of the signal from the microphone is corrected by pre-emphasis circuit. The signal is amplified and limited by U411B(1/2). Distortion components exceeding the audio band of the resulting signal are then eliminated by a splatter filter consisting of U411A(2/2). Then input to Pin 15 of the microprocessor, VOX input to Pin 22 of the microprocessor.

Modulation circuit

The signal from the microphone amplifier passes through the modulation adjustment variable resistor VR378, is applied to VCO varicap diode D333, and modulated by variable reactance.

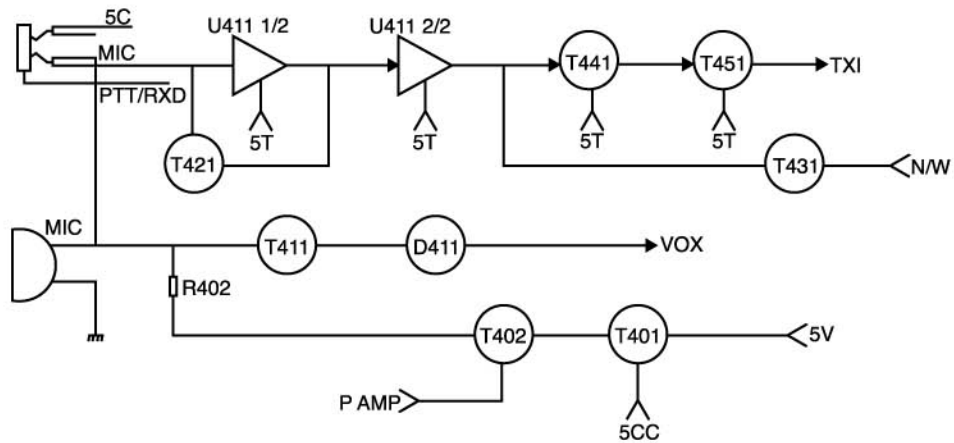


Fig.4

Drive and Final Circuit

The desired signal is produced by the VCO, and amplified by T111. It is then amplified by T121. The amplified signal is input to a two-stage FET amplifier, and increases the power to about 5W/4W.

Transmission/reception selector circuit

The transmission output is passed through the transmission/reception selector circuit and low-pass filter to the antenna. The transmission/reception selector circuit, which consists of D156, D211 and D212, is turned on during transmission and off during reception to switch the signal.

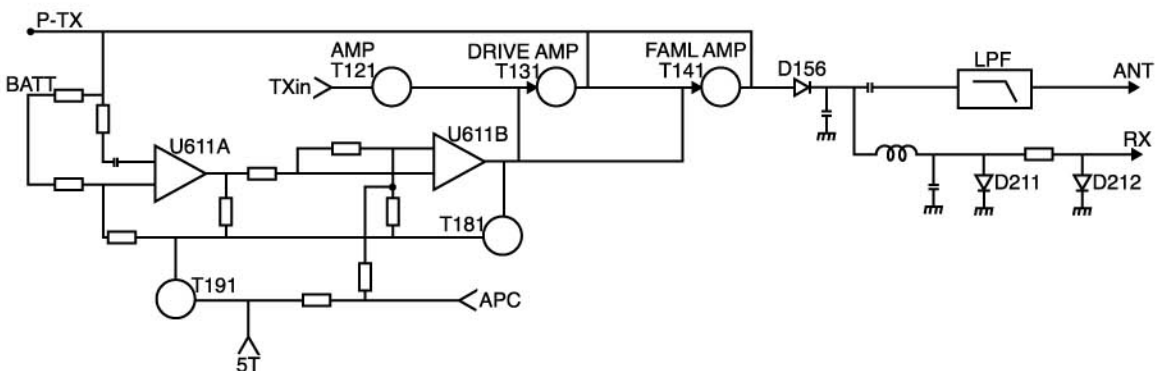


Fig.5

APC and transmission output selector circuits

The automatic power control (APC) circuit is used to obtain a stable transmission current. This circuit detects the drain current in the final stage of the power module and controls the transmission output. For U161, two voltages are applied: one is the reference voltage for transmission output adjustment, another is the detection voltage generated across R171, R173 in proportion to the drain voltage in the final stage. The voltage, proportional to the difference between the reference voltage and the detection voltage, is obtained at the output of U161. This voltage is reversed by T181 to provide the APC voltage. This APC voltage controls the power control pin of the power module and stabilizes the transmission output.

PLL CIRCUIT

PLL

The output from the 14.4MHz reference oscillator is divided by U377 to produce a 5 kHz or 6.25Khz reference frequency. The comparison frequency is obtained by amplifying the VCO output by T331 and dividing it by the U311. 5, 10, 12.5, 20, and 25Khz PLL synthesizer is implemented by phase-comparing the reference frequency and comparison frequency obtained when CR311 is divided. The pulse output from Pin 5 of U311 according to the difference between the reference frequency and the comparison frequency is passed through the charge pump. And is removed the ripple by a low-pass filter to produce the lock voltage.

VCO

The desired frequency is directly produced by the Colpitts oscillator configured around FET, T331, and 351. The lock voltage is applied to D331, D332, D351 and D352 to change the oscillator frequency.

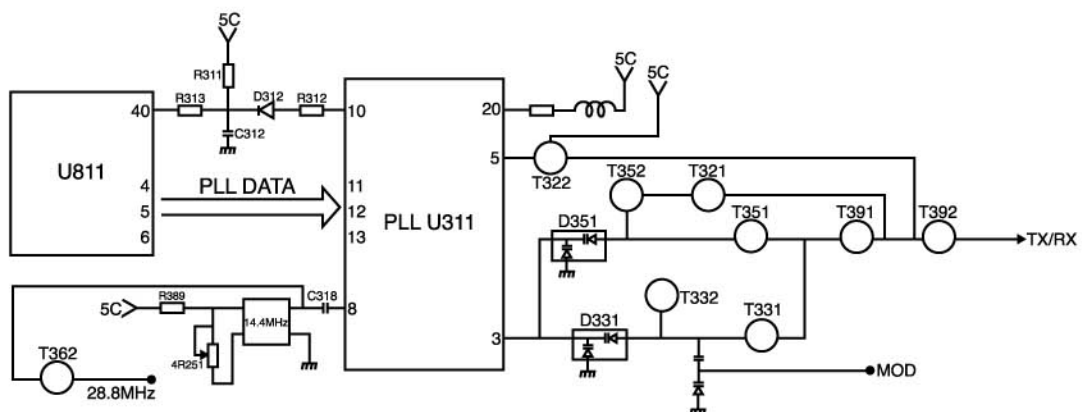


Fig.6

Unlock detection circuit

When the PLL is in the unlock state, the pulse that is output to the LD pin (pin 10) of PLL is waveform shaped by R312,D312,C312 and R313. The LD pin is then made high. The voltage at the LD pin is monitored by the microprocessor to control the transmission or reception selection timing.

DIGITAL CONTROL CIRCUIT

Keys and rotary encoder circuit

The signal from keys and rotary encoder input to microprocessor directly

Reset and backup circuits

When the SB is turned on, a high-level pulse is output from the reset circuit consisting of T881,C883, and R883 to reset microprocessor U881(Pin 32). If SB is turned off, U517 detects a 5V voltage drop, and outputs a low signal. When the microprocessor port goes low, it outputs data to U821 and enters backup mode.

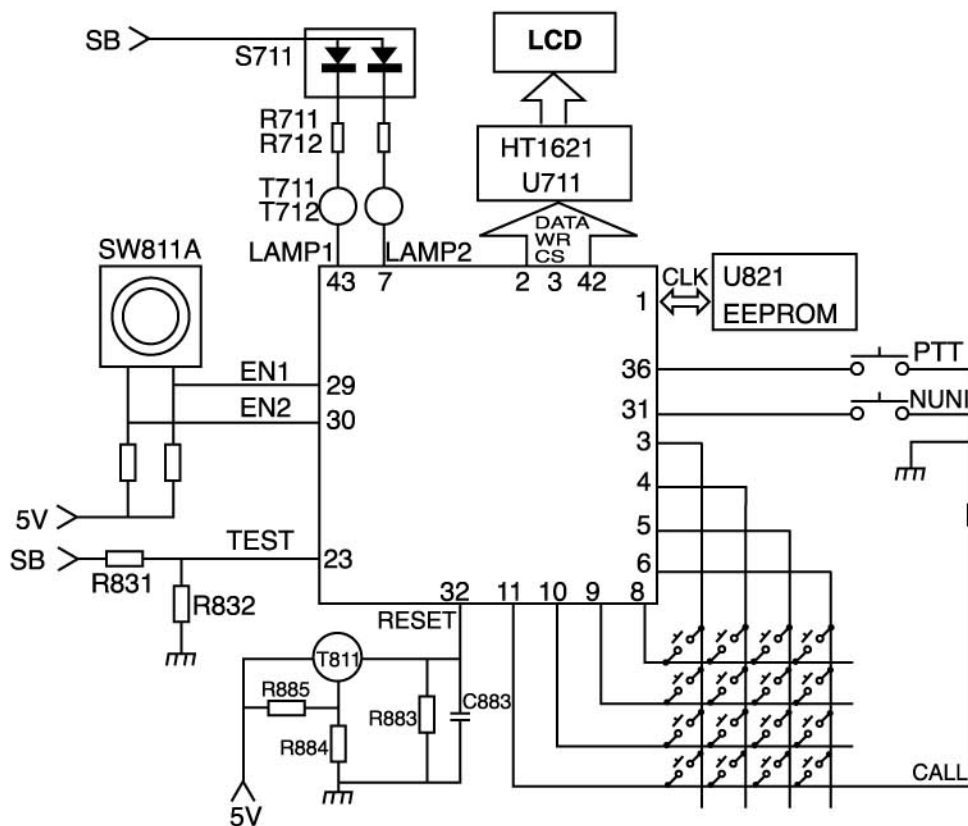


Fig.7

Battery voltage detector circuit

The supply voltage(SB) is divided and input to the analog port(Pin23) of the microprocessor. The voltage input to the microprocessor during transmission is digitized to drive the LCD battery display.

Lamp&LCD circuit

The LCD is turned on or off by directly flowing current to the microprocessor ports.

Battery save circuit

The squelch is switched in during receive. The power circuit enters battery save mode if no key has been pressed for five seconds. This circuit is controlled by microprocessor.

CTCSS/DCS circuit

The sub-tone signal is produced by the serial data from Pin17(CTCSS) or Pin44(DCS) of microprocessor. When the sub-tone is transmitted, the CTCSS /DCS is output from the microprocessor and modulated, after through LPF. The audio signal detected output to the decoder of microprocessor. The DEV pin is made low when the tone frequency coincides. The microprocessor determines the DEV pin state.

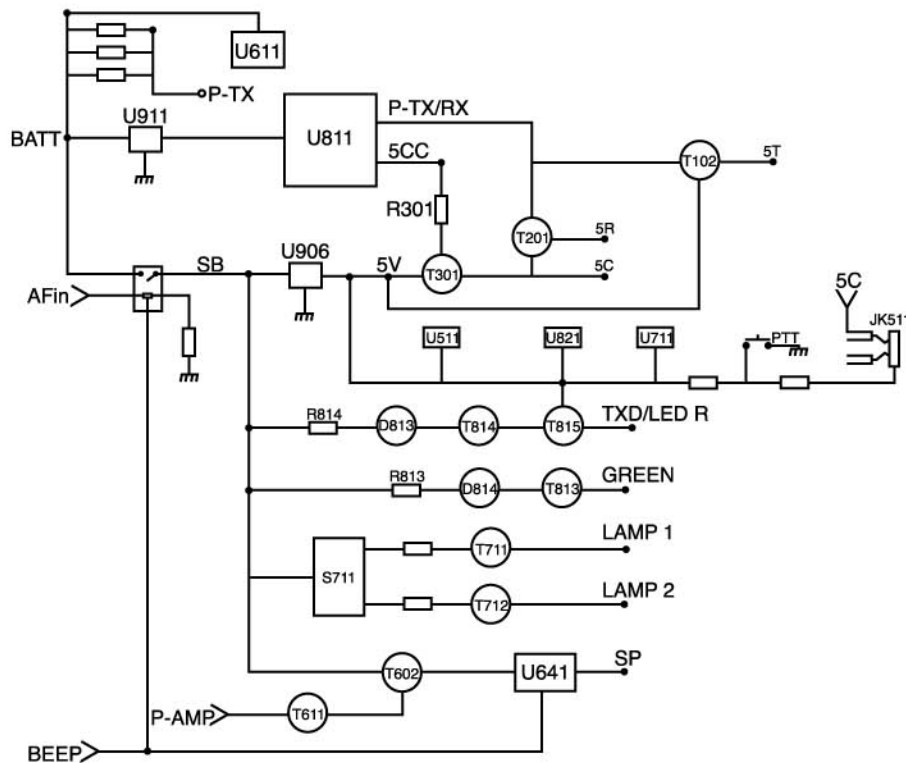
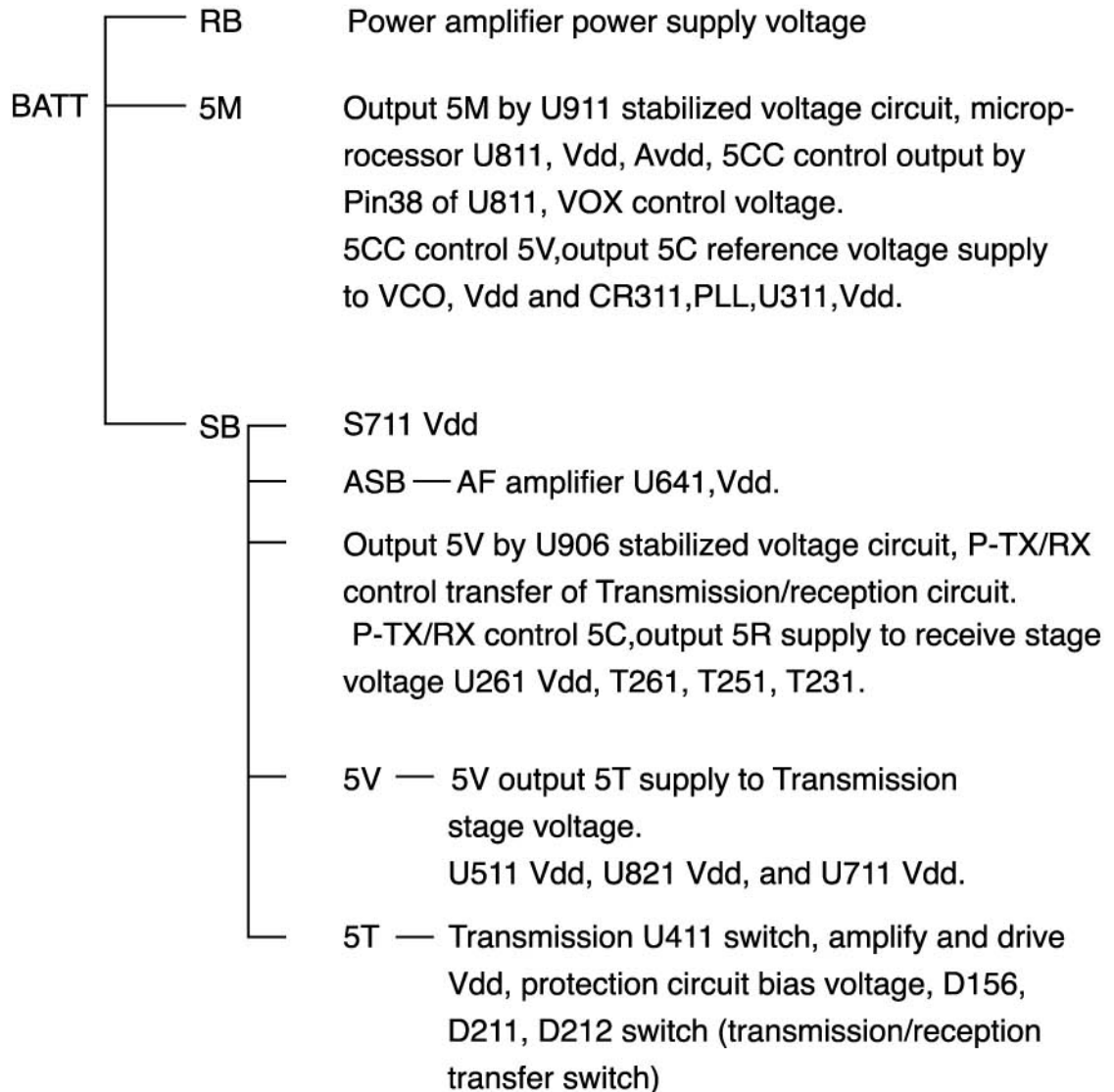


Fig.8

POWER SELECTOR CIRCUIT

The power circuit configuration is shown in Figure 8. The power circuit branches are as follows:



CPU PIN FUNCTION**PX-777**

ITEM	DESCRIPTION	I/O	FUNCTION
1	CLK ROM	I/O	CLOCK AND EEPROM
2	D0	O	Key scan output
3	D1	O	Key scan output
4	D2	O	PLL clock port/Key scan output
5	D3	O	PLL data port/Key scan output
6	PLL CS	O	PLL CS port
7	LAMP2	O	Lcd/backlight control output
8	K1	I	Key scan input
9	K2	I	Key scan input
10	K3	I	Key scan input
11	K4	I	Key scan input
12	AVDD		MPU+5MV
13	RX0	O	IF output control port
14	RX1	I	IF input control port
15	TX1	I	MIC input control port
16	TX0	O	MIC output control port
17	BEEP/QT	O	BEEP output /CCTCS tone signal output
18	ACC		MPU power filter
19	AVSS		Connect to VSS
20	APC/TUNE	O	Automatic power &frequency automatic gain output
21	AT X	O	Transmitter data output select control
22	AR X	I	Receiver data input/audio amplifier adjustment input
23	BATT Test	O	Battery check /Reset
24	VOX	I	VOX input
25	AN SQL	I	Squelch signal input port
26	OSCin	I	Internal oscillator input
27	OSCut	O	Internal oscillator output
28	VSS		GND
29	EN1	I	Encoder data input
30	EN2	I	Encoder data input
31	MONI	I	Monitor key input
32	Reset	I	CPU reset port
33	Vdd		+5V power supply
34	5TC	O	TX power supply control output
35	LED G	O	LED green
36	TXD/LED R	O	RX232 output/ LED red
37	AFC	O	Audio amplifier control input
38	5CC	O	Power supply control output
39	P-AMP	O	Audio amplifier power supply control output
40	N/W/LD	O	Unlock detection
41	PTT/RX D	I	PTT key input/RX232 input
42	HT1621 CS	I	LCD CS port
43	LAMP1	O	Backlight control output
44	DQT	O	DTC audio signal output

PX777 part list(136-174MHz)

Footprint	Comment	Quantity	Designators						备注
电容类									
C0402	0.5P	2	C332	C349					
C0402	1P	1	C231						
C0402	1.5P	1	C346						
C0402	100P	12	C423	C456	C315	C317_2	C313_2	C175	
			C535	C536	C537	C538	C315_2	C314_2	
C0402	102P	33	C416	C415	CAP	CAP	C593	CAP	
			C387_1	C318_1	C316_2	C312_2	C326_1	C227	
			C121	C132	C135	C133	C142	C144	
			C156	C223	C222	C322	C612	CAP	
			R808	C386_1	C146	C145	C176	C122	
			C123	C455	C515				
C0402	103P	32	C413	C269	C254		C610	C451	
			C623	CAP	C633	C529	C528	C613	
			C450	C665_1	C105	C581	C520	C701	
			C174	C181	C244	C247	C321	C351	
			C668	C454	C621	CAP	C594	C301	
			C514	C392	C391				
C0402	104P	37	CAP	CAP	C257	C268	C266	C267	
			C411	C453	C202	C203	C561	C271	
			C663_1		C388_1	C319_1	C250	CAP	
			C103	C101	C573	C571	C511	C521	
			C182	C208	C316	CAP	C354	C662	
			CAP	C302	C418	C102	C147	C661	
			C201	C131					
C0402	105P	4	C517	C611	C609		C664		
C0402	10P	9	C263	C255	C361	C363	C362	C213	
			C348	C330	C331				
C0402	120P	1	C259						
C0402	12P	3	C224	C241	C359				
C0402	15P	1	C113						
C0402	18P	3	18NH	C523	C246				
C0402	1P	2	C327		C329				
C0402	220P	7	C264	C265	C394	C513	C512	C592	
			C591						
C0402	222P	1	C272						
C0402	223P	2	C421	C417					
C0402	224P	1	C256						
C0402	22P	1	C353						
C0402	273P	3	C414	C556	C555				
C0402	27P	1	C134						
C0402	332P	2	C426	C432					
C0402	333P	1	C516						

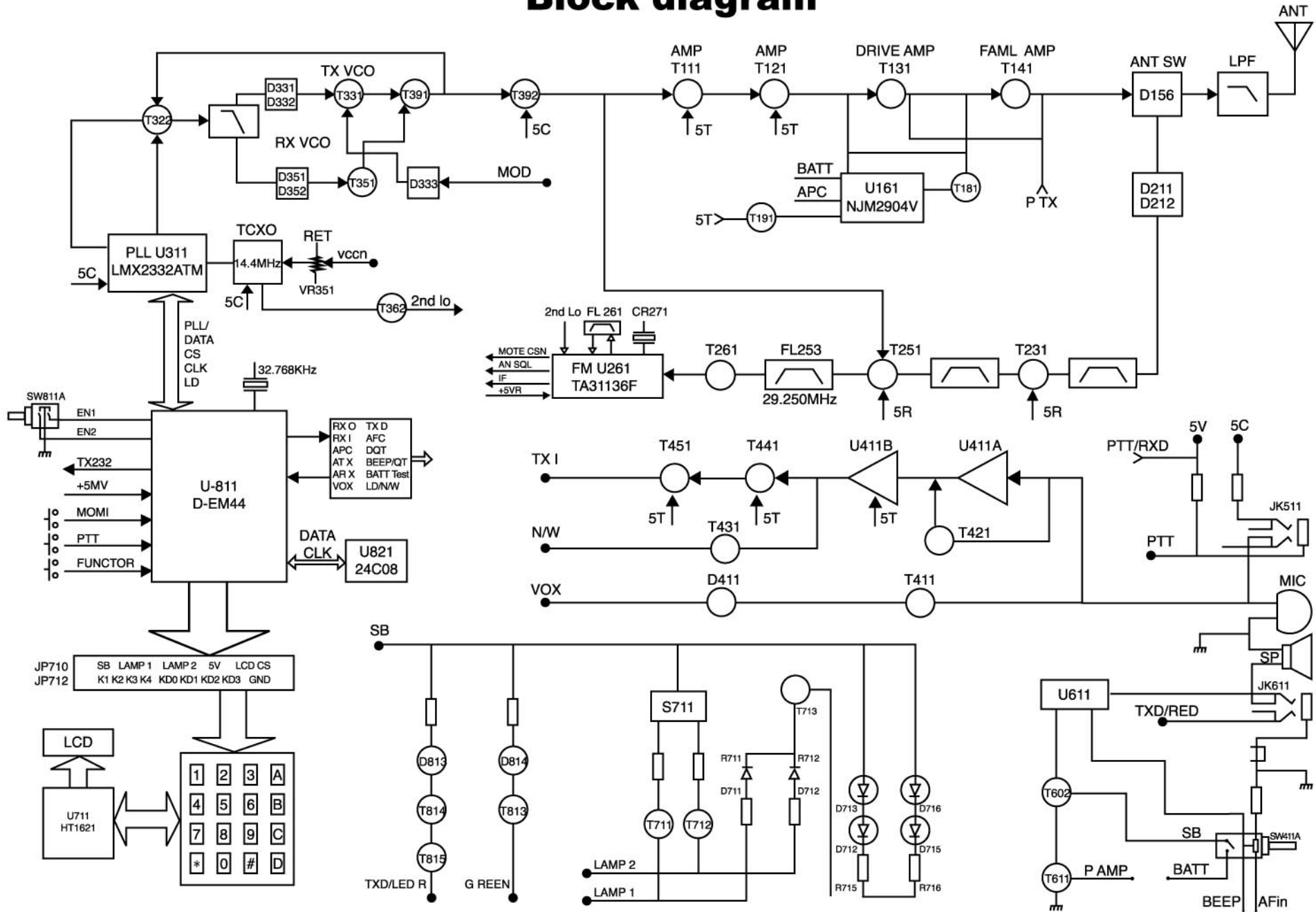
C0402	33P	2	C126	C343						
C0402	3P	2	C226	C232						
C0402	470P	35	C262	C258	C546	C666	C311	C221		
			C112	C111	C127	C125	C141	C233		
			C177	C317	C243	C314	C355	C312		
			C356	C358	C313	C204	CAP	C310		
			C412	C622	C632	C531	C534	C533		
			C180	C260	C532	C173	C667			
C0402	473P	3	C424	C431	C458					
C0402	47P	2	C393	C324						
C0402	5P	2	C215		C347					
C0402	680P	2	C428	C433						
C0402	683P	1	C543							
C0402	6P	1	C352							
C0402	82P	1	C395							
C0402	8P	3	C211	C229	C235					
0603电容										
C0603	10P	5	C163	C167	C165	C169	C154			
C0603	15P	3	C153	C161	C164					
C0603	20P	1	C152							
C0603	22P	3	C168	C166	R818					
C0603	470P	1	C162							
C0603	56P	1	C155							
C0603	6P	2	C325	C344						
C0603	104P	1	L333							
太阳电诱										
C0805	0.1uF	4	E367_1	E364	E411	C541				
C0805	1uF	4	E454	E319_1	C104	C143				
C0805	2.2uF	4	E435	E413	E363_1	E474				
C0805	4.7uF	6	E412	E242	E326_1	E180	E311	E273		
R0402电阻										
R0402	0R	10	L121	R457	R663	R364_1	R363_2			
			R235	R134	R362	C251	R662			
R0402	1.8K	1	R365_1							
R0402	100K	9	R413	R301	R524	R113	R131	R363		
			R321	R314	R352					
R0402	100R	11	R594	R595	R269	R547	R529	R528		
				R391	R351	R459	R809	R223		
R0402	10K	14	R258	R429	R434	R453	R201			
			R543	R184		R333	R203	R111		
			R561	R101	R361_2	R820				
R0402	10R	4	R458	R127	R125	R354				
R0402	150K	10	R541	R582	R392	R172	R175	R174		
			R173	R170	R171	R583				
R0402	150R	2	R456	R362_2						
R0402	15K	4	R519	R522	15K	R478				

R0402	180K	2	R265	R263					
R0402	18K	2	R414	R187					
R0402	1K	14	R573	R591	R593	R251	R254	R411	
			R666		R312_2	R313	R667	R668	
			R417	R596	R393				
R0402	1K5	2	R421	R124					
R0402	1M	2	R664_1	R183					
R0402	1M8	2	R428	R433					
R0402	2.2K	1		R261					
R0402	2.7K	1	R259						
R0402	220K	4	R252		R551	R181	R512		
R0402	220R	6	R389_1	R331	R348	R312	R571	R244	
R0402	20K	3	R544	R472	R436				
R0402	22K	4	R552	R415	R313_2	R515			
R0402	22R	2	R112	R315					
R0402	270k	1	R665						
R0402	270R	3	R156	R155	R358				
R0402	27K	3	R556	R141	R555				
R0402	2K2	8	R255	R452	R451	R455	R202	R302	
			R103	R516					
R0402	3.3K	3	R367_1	R366_1	R264				
R0402	30K	2	R422	R177					
R0402	330R	3	R128	R811	R126				
R0402	33K	6	R426	R427	R431	R432	R423		
			33K						
R0402	39K	1	R554						
R0402	3K3	4	R435	R355	R359	R357			
R0402	3K9	1	R123						
R0402	470R	1	R572						
R0402	470K	1	R553						
R0402	47K	15		R518	R592	R525	R527	R526	
			R322	R581	R132	R142	R186	R182	
			R597	R222		R221	R387		
R0402	47R	4	R326_1	R133	R143	R247			
R0402	4K7	12	R272	R273		R574	R575	R576	
			R243	R311	R538	R262	R271	L342	
			L323						
R0402	560R	3	R412	R368_1			R110		
R0402	56K	2	R311_2	R517					
R0402	5K6	2	R661	R356					
R0402	680K	1	R416						
R0402	680R	1	R114						
R0402	68K	2	R542	R185					
R0402	6K8	1	R424						
R0402	82K	2		R521	R523				
R0603	0R	3	L591	L133	L331				
R1206电阻									

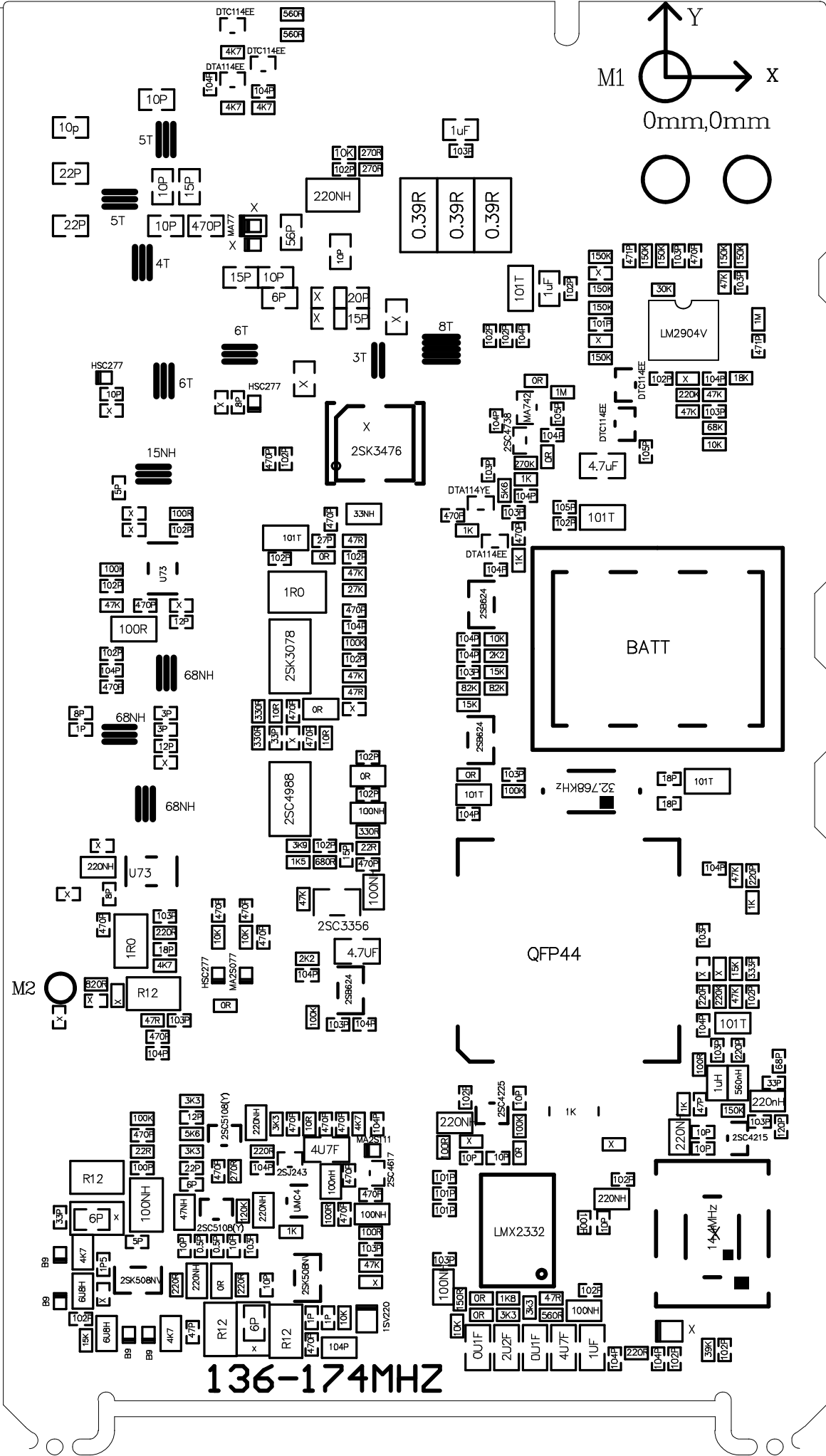
R1206	0.39	3	R104	R105	R106				
L0603电感									
L0603	100NH	9	L411	L511	L111	L122	100NH	C697	高频叠层
			L326_1	L313	L315				
L0603	101T	1	L521						瓷珠
L0603	1UH	1	L391						
L0603	220NH	5	R807	L354	L351	L348	L242		高频叠层
L0603	33NH	1	L143						高频叠层
L0603	47nH	1	L352						高频叠层
L0603	560UH	1	L392						
L0603	6.8UH	2	L321	L341					
L0805	101T	5	L611	L640	L131	L141		L227	瓷珠
									瓷珠
L1008	R12	4	L325	L343	L248		L316		绕线
L0805	R22	1	L155						丰华绕线
L1310	1uH	1	L168						太诱绕线
L2520	1R0	2	L246	L132					太诱绕线
L0805	68NH	3	L225	L229	L241				高频叠层
L0805	R15	1	L215						绕线
二极管类									
D_ESC	B9	4	D322	D321	D342	D341			
D_ESC	HSC277	4	D212	D235	D211	D111			
D_SMA	1SR154-400	1	D611						
D_USC	1SV220	1	D323						
D_USC	MA77	1	D155						
D0603	GREEN	1	D571						
D0603	RED	1	D573						
D-ESC	PMSD4148	2	D312_1	D311					
D-USC	3V	1	R806						
D-USM-MA742	MA742	1	D661_1						
集成类									
SOP8	24C16	1	U561						
SOP8	LM4558	1	U411						
SOT24	3SK241	2	T241	T221					
SOT89	2SC4988	1	T121						
SRP8	10K	1	PR511						
SRP8	1K	2	PR752	PR311_1					
SOP10-P-22	TA7368F	1	U451						
SSOP16-225	TA31136	1	U261						
SSOP8	LM2904V	1	U170						
-SSOP20-22	LMX2332	1	U311_1						
三极管类									
T_ESM	2SC4617	3	T311	T421	T431				
T_ESM	2SJ243	1	T312						
T_ESM	2SK1824	1	T541						
T_ESM	DTA114EE	2	T261	T573					
T_ESM	DTC114EE	3	T451	T571	T572				

T_SOT89	2SK3078	1	T131						
T_SOT89	5V	2	U631	U621					
T_TSM	2SK508NV	2	T331	T341					
T_USM	2SC4215	2	T251	T393					2SC4226
T_USM	2SC4226-R25	3	T361	T352	T351				2SC4226
T_USM	DTC114EE	2	T181	T171					
T_TSM	2SB624	5	T452	T544	T101	T521	T301		
2SK3276	2SK3476	1	T141						
T_USM	1SS372	3	D411	T521	T301				
T_USM	2SC3356	1	T111						
T_USM	DTC114EE	2	T181	T171					
T_USM	MRF497	1	T411						
T_USV	UMC4	1	T313						
ESM-2SC473	2SC4738	1	T662						BL放大最大
ESM-DTA114	DTA114EE	1	T661						
ESM-DTA114	DTA114YE	1	T663						
电解类									
ECS2213	100uF	1	E457						
ELA3216	10uF	4	E456	E631	E623	E269			
晶体类									
CR_DS0603	32.768KHz	1	CR521						
CR_DS6055	29.250MHz	1	FL251						
FX-DS0971	14.4MHz	1	CR311_1						
可调类									
VR1208	10K	1	VR552						
VR1208	50K	1	VR471						
线圈类									
LC042320	3T	1	L151						0.4*1.5*3
LC042424	4T	1	L163						0.4*1.5*4
LC042426	5T	2	L165	L167					0.4*1.5*5
L5T	8T	1	L142						0.31*1.5*8
LC032326	6T	2	L211	L212					0.31*1.5*6
其它类									
EF450R15KR	450K	1	FL261						
QFP44	QFP44	1	U511						
ANT	ANT	1	ANT111						
C28	C28	1	CR261						
JK-ST-106	2.5mm	1	JK591						
JK-ST-301	3.5mm	1	JK592						
JP-18-1	18PIN	1	C681						
SW-SKRE	ANKEY	2	AN593	AN591					
SW-SKRT	ANKEY	1	AN592						

Block diagram



M1 $\begin{matrix} \uparrow Y \\ \rightarrow X \end{matrix}$
0mm,0mm



136-174MHz

BATT

QFP44

LMX2332

136-174MHz

LM2904V

2SK3476

2SK3078

2SC499B

2SC3356

HSC277

LM2904V

R12

R12

R12

R12

100R

100R

100R

101T

101T

101T

101T

101T

0U1F

2U2F

0U1F

4U7F

1U1F

4U7F

4.7uF

4.7uF

4.7uF

15NH

68NH

68NH

5T

5T

4T

6T

6T

68NH

68NH

68NH

68NH

68NH

68NH

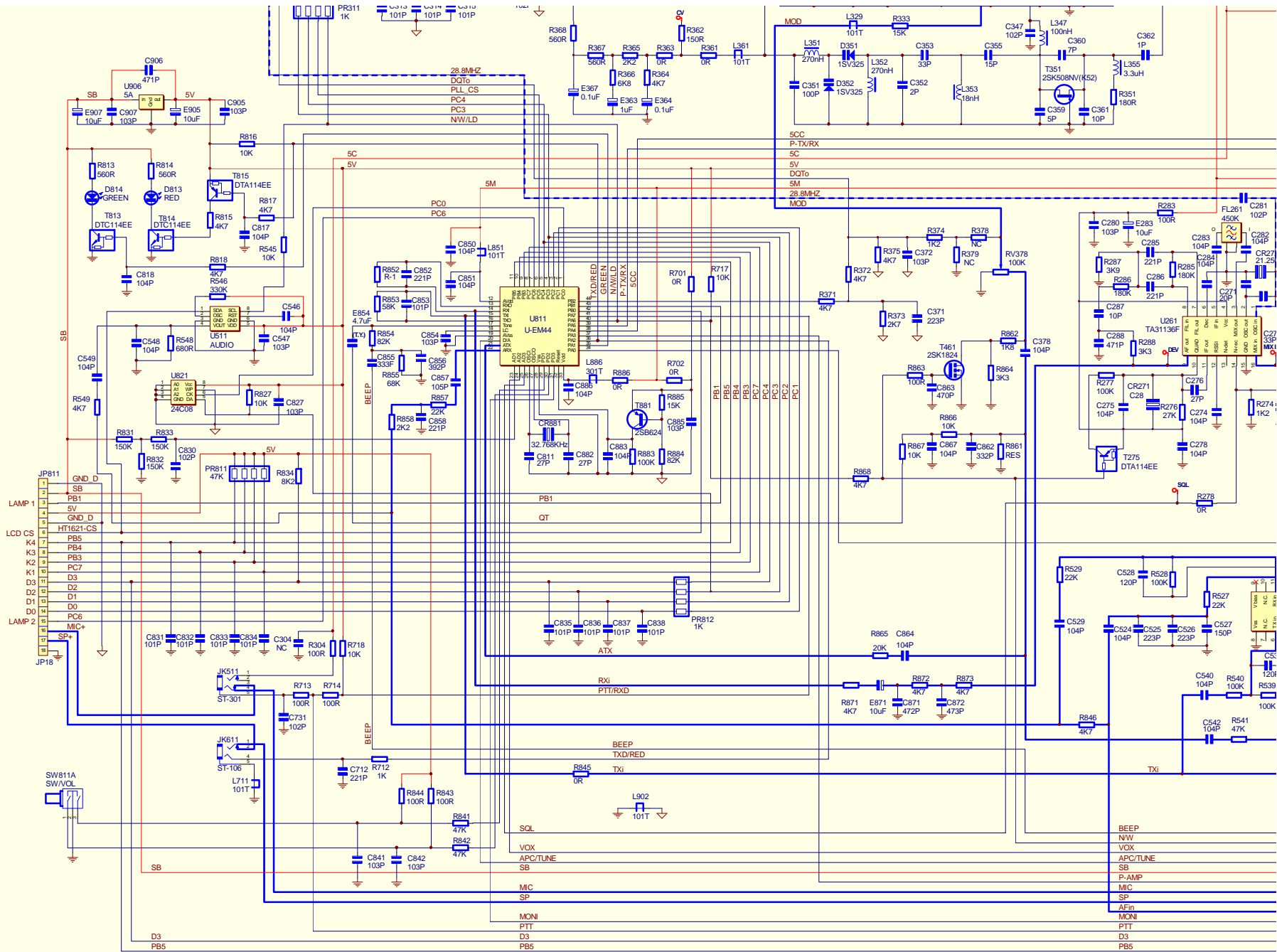
68NH

68NH

68NH

68NH

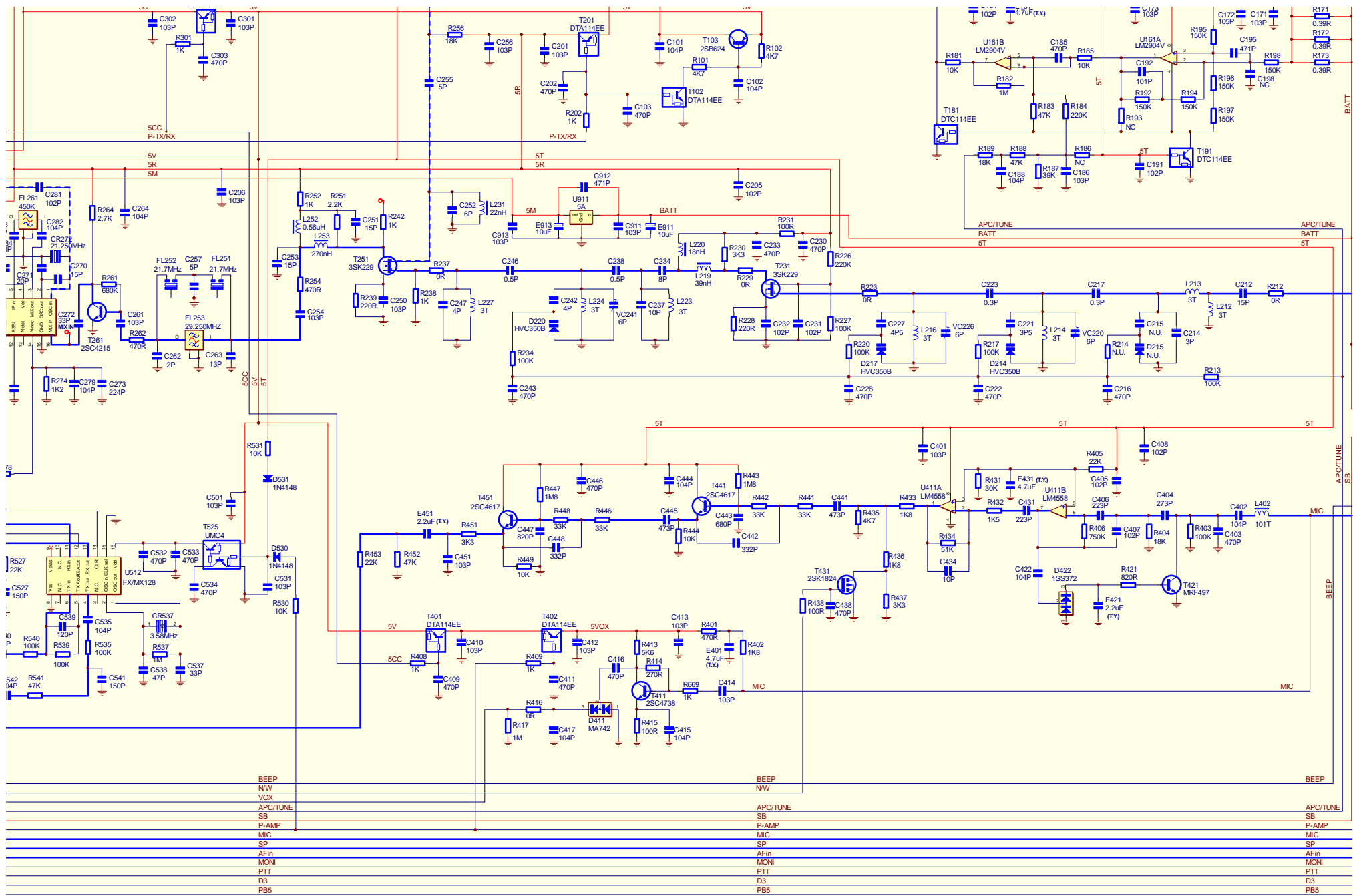
68NH



- 1 GND D
- 2 SB
- 3 PB1
- 4 SV
- 5 GND D
- 6 HT1621-CS
- 7 PB5
- 8 PB4
- 9 PB3
- 10 PC7
- 11 D3
- 12 D2
- 13 D1
- 14 D0
- 15 PC6
- 16 MIC+
- 17 SP+
- 18 JP18

- 1 SB
- 2 MC
- 3 SP
- 4 MON
- 5 PTT
- 6 D3
- 7 PB5

- BEEP
- N/W
- VOX
- APC/TUNE
- SB
- P-AMP
- MIC
- SP
- AFin
- MCN
- PTT
- D3
- PB5



7

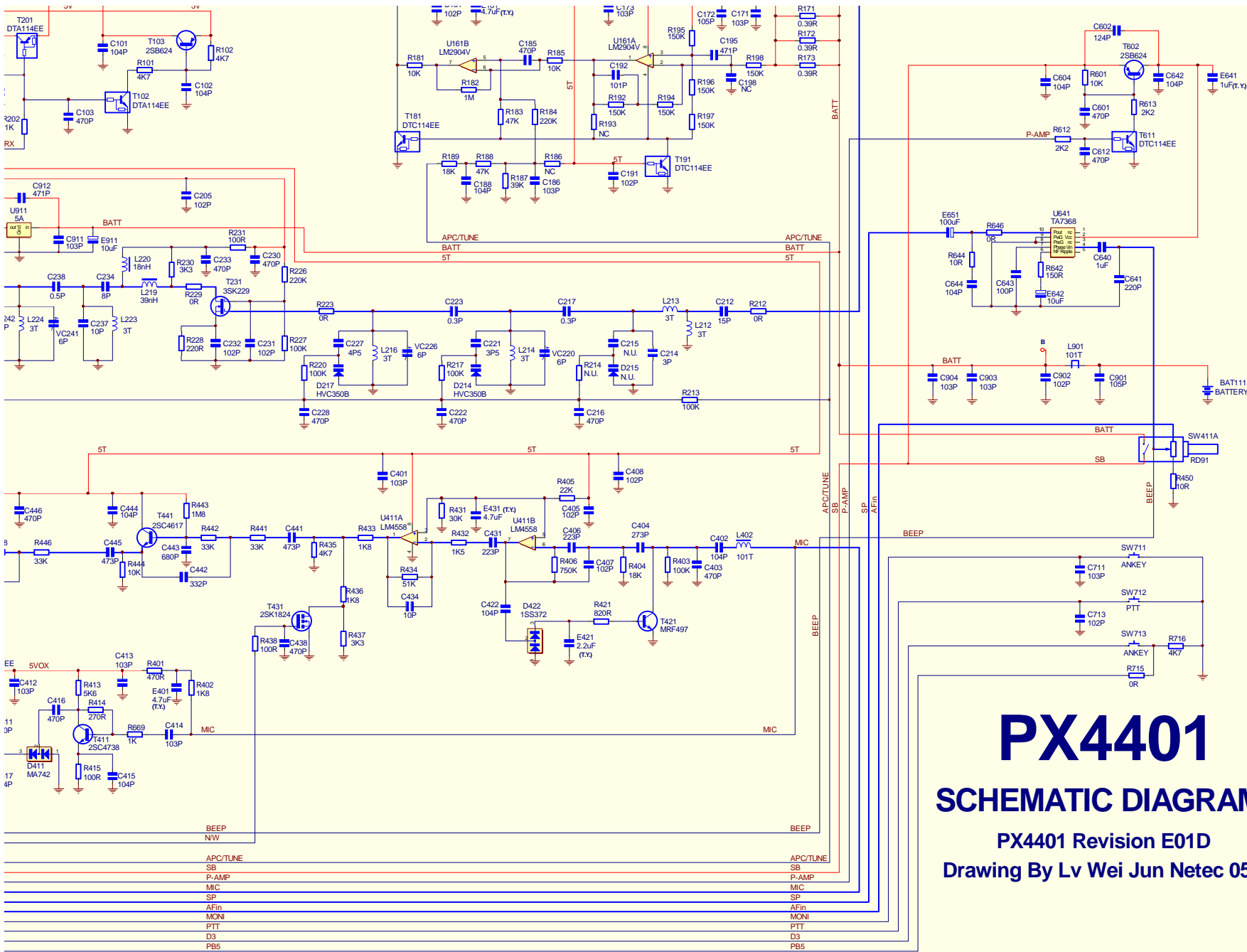
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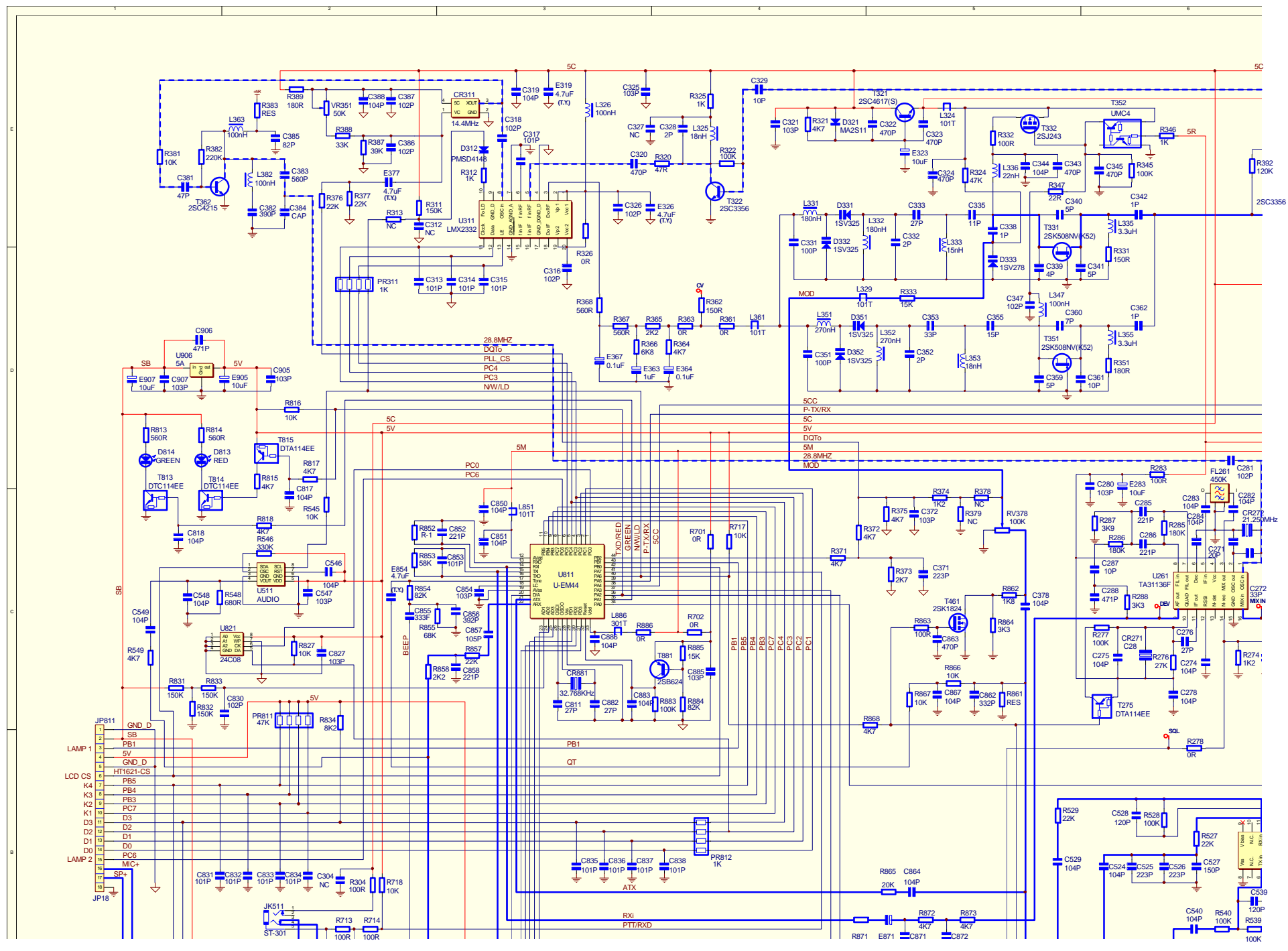
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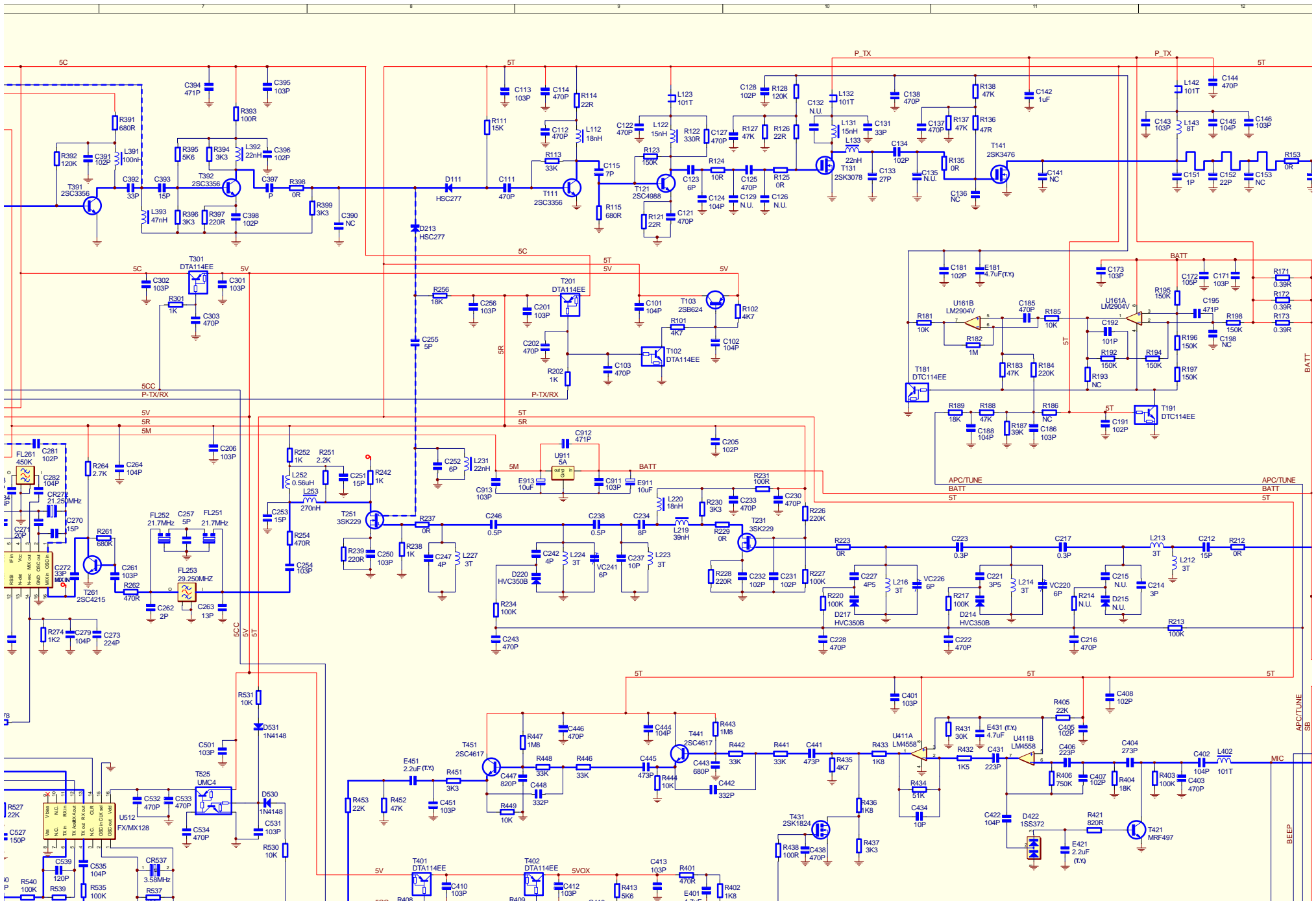
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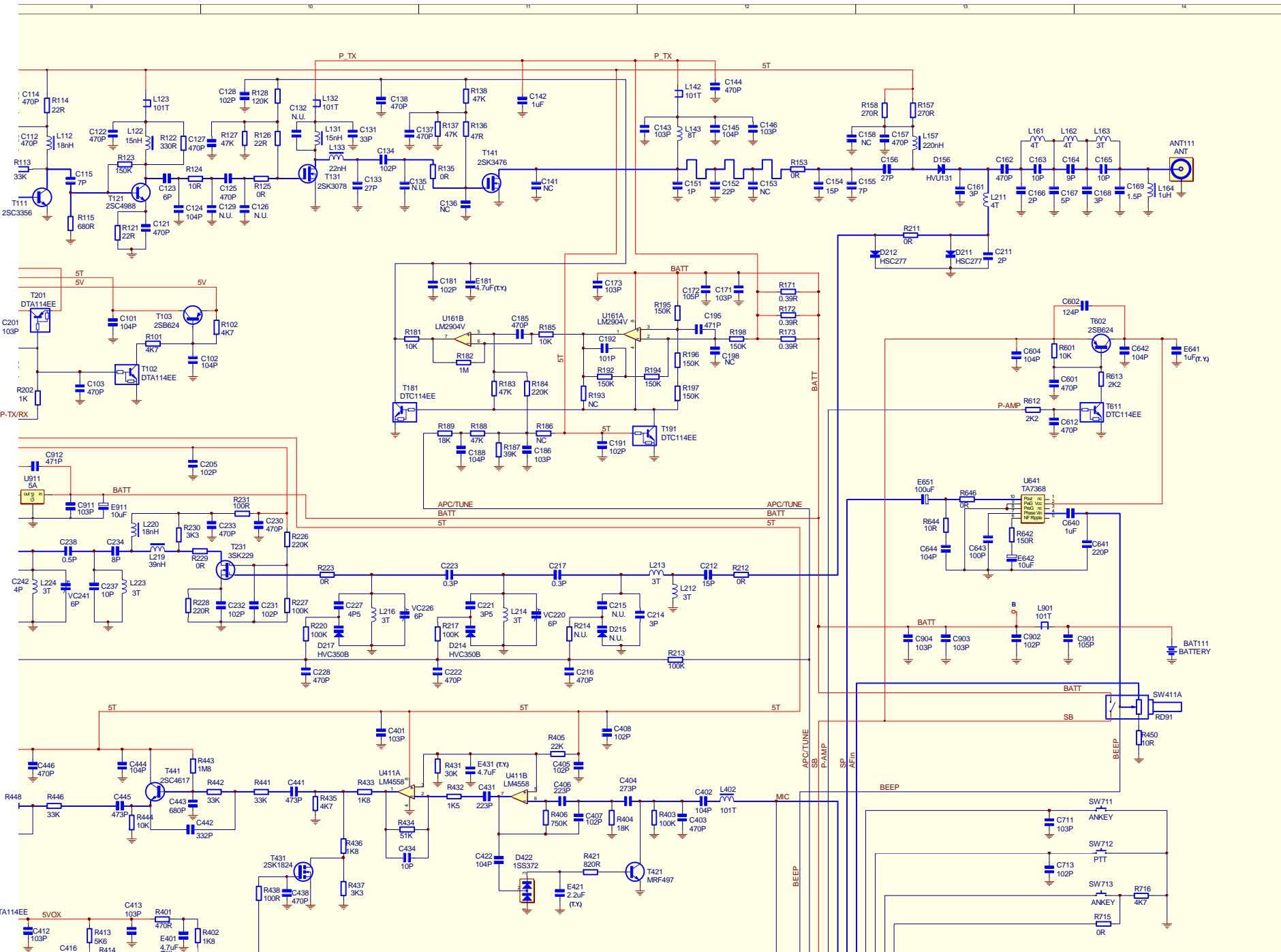
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PX4401
SCHEMATIC DIAGRAM
 PX4401 Revision E01D
 Drawing By Lv Wei Jun Netec 0540







PX4101