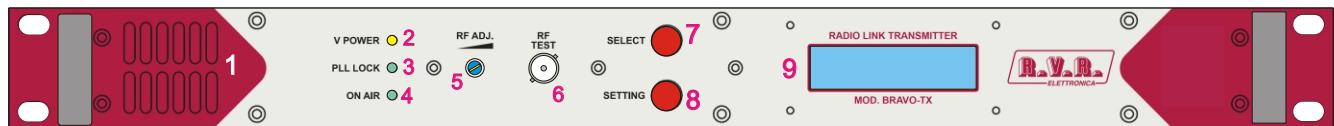




LINK TRANSMITTER

FRONT PANEL LAYOUT



1 - AIR INLET - Don't COVER

2 - POWER STAGE SUPPLY CORRECT OPERATION YELLOW INDICATOR

3 - PLL LOCK FREQUENCY CONTROL CORRECT OPERATION CIRCUIT GREEN INDICATOR

4 - PRESENCE OF RF POWER AT FREQUENCY SET ON OUTPUT CONNECTOR GREEN INDICATOR

5 - RF OUTPUT POWER ADJUSTING FROM 0 TO OVER 1W or 5W

6 - RF SAMPLER 1W OUT = 0dBm

7 - 8 - THESE PUSH BUTTONS ALLOW TO SELECT ON LCD DISPLAY THE FOLLOWING MENU:

- display parameter
- password
- change of operational frequency

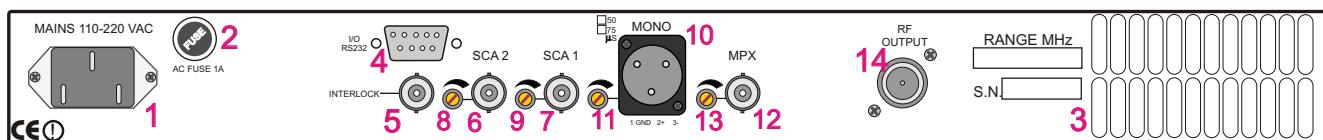
9- LCD MULTIMETER DISPLAY SHOWING:

- operational frequency
- modulation
- forward rf power
- reflected power

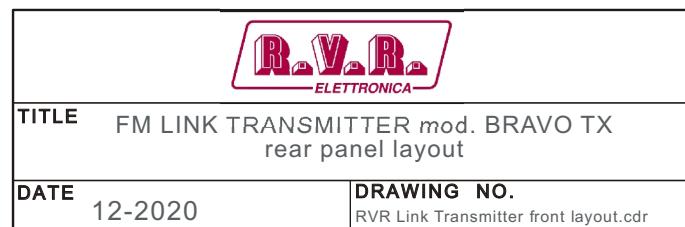
TITLE	FM LINK TRANSMITTER mod. BRAVO TX front panel layout
DATE	12-2020
DRAWING NO.	RVR Link Transmitter front layout.cdr



LINK TRANSMITTER REAR PANEL LAYOUT



- 1 - MAINS SUPPLY CONNECTOR
 - 2 - AC FUSE 1A
 - 3 - FAN air ouput
 - 4 - DB 9 PIN INPUT / OUTPUT CONNECTOR FOR TELEMETRY (opt.01)
 - 5 - BNC FEMALE FOR CONNECTION OF THE INTERLOCK LOOP -
THE CONNECTION GOES TO GROUND WHEN MUTE IS ON
 - 6-7- BNC FEMALES FOR SUBCARRIERS OUTPUTS
 - 8-9- SCA OUTPUT ADJUSTING LEVELS
 - 10 - XLR FEMALE BALANCED MODE MONO AUDIO OUTPUT
 - 11 - MONO OUTPUT ADJUSTING LEVEL
 - 12 - BNC FEMALE FOR THE COMPOSITE MPX OUTPUT
 - 13 - MPXOUTPUT ADJUSTING LEVEL
 - 14 - N FEMALE FOR RF INPUT SIGNAL





BRAVO-RX

&

BRAVO-TX

USAGE INSTRUCTION



Connected a $50\ \Omega$ load or $50\ \Omega$ antenna to the RF output, connect the equipment into a mains supply (100÷240 VAC) with earth point. The transmitter equipment is factory pre-set to 0.0 W.

Switch ON the power switch and the yellow V POWER led will light.

The Display will show:

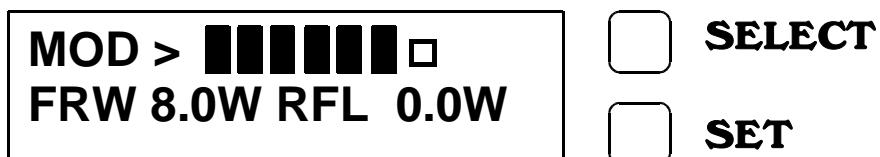


After 3 seconds the green PLL LOCK led will light and the Display will show an increasing bar, after a further 5 seconds the green ON AIR led will light and there will be output power.



At this point the Display will show the next parameter for the transmitter:

- Level Modulation (MOD >);
- Forward Power (FRW 5.0W);
- Reflected Power (RFL 0.1W);



instead for the receiver:

- Level Modulation (MOD >);
- Level Signal(50dBuV).



MOD > <input type="checkbox"/>	SELECT
SGN 50dBuV	<input type="checkbox"/> SET

To display the frequency push the SET key.
In order to display the parameter push the SELECT key.

Display Password

The Password mode is factory set to enable, and is not possible change this SET.

The default password is 1 2 3.

The WAIT of changing the password is as follows:

- Press for 3 seconds the SELECT key;

PASSWORD <u>0 1 2 3 4 5 6 7 8 9</u>	<input type="checkbox"/> SELECT
	<input type="checkbox"/> SET

- Press the SELECT key for move the underscore character position at the required digit, and press the SET key to confirm the digit.

PASSWORD * 0 1 2 3 4 5 6 7 8 9	<input type="checkbox"/> SELECT
	<input type="checkbox"/> SET

Carry out the same operation for the two remaining digits.

PASSWORD * * * 0 1 2 3 4 5 6 7 8 9	<input type="checkbox"/> SELECT
	<input type="checkbox"/> SET

- If the password is corrected press SET key to confirm, otherwise press SELECT key to leave the choice.



CONFIRM (Y/N) ?
N=SEL. Y=SET.

SELECT
 SET

If the password is not corrected an error is displayed:

ERROR
PASSWORD

SELECT
 SET

After few seconds display will show again the parameters.

- When the password is corrected the display will show:

NEW PASS . = SEL .
NEW FREQ . = SET .

SELECT
 SET

To change the password press the SET key.

To change the frequency press the SELECT key.

- For changing the password proceed at the same method for the required password:

NEW PASSWORD
0 1 2 3 4 5 6 7 8 9

SELECT
 SET

The confirmation password will be required.

CONFIRMATION
0 1 2 3 4 5 6 7 8 9

SELECT
 SET

If the password is corrected the display will show:



**STORED
NEW PASSWORD**

SELECT
 SET

If the confirmation password is wrong the display will show:

**ERROR
CONFIRMATION**

SELECT
 SET

IMPORTANT NOTE

! BE CAREFULLY !

Once the password is set, it must be remembered otherwise neither can the frequency be changed or a new password entered.

Display Change of Frequency.

- Press 3 seconds the SELECT key and put the correct password, at this point press again the SELECT key:

**NEW PASS . = SEL .
NEW FREQ . = SET .**

SELECT
 SET

- Press the SELECT key to change the digit and press the SET key to confirm the digit.

**FREQUENCY ?
MHz XXX.000**

SELECT
 SET

The underscore character move the position one place to the left.



When the five digit is changed the further press SET key confirm the new frequency.

At this operation follows the WAIT cycle and after this the display will show the parameters:



After 7 minutes the display light switch off and the display will show:





Environmental conditions for the installation

Each equipment produced by our Company has been carefully designed and tested in compliance with the European normative.

The reported marks placed in the rear panel and in the manual are relevant to the tests realized on the equipment according to rigorous safety criteria advised by the Country where the equipment will operate.

Some tests require that the equipment is able to stand specific very severe environmental conditions for a brief period of time.

Although the equipment is actually able to operate properly even under severe conditions, they haven't to be considered as regular, and therefore cannot be applied neither permanently nor for long periods.

The manufacturer has designed the equipment for lasting duration, provided it operates under correct environmental conditions.

In other words, the equipment can stand extreme environmental conditions for a limited period of time, at the same time operating in compliance with the quality figures advised in the technical data-sheet.

In case the equipment is expected to operate under very critical conditions which have been previously advised by the end user, upon his request the design of the equipment will be then reconsidered, to make it suitable for the severe environmental conditions in order to save the regular technical data.

The ambient where the equipment operates should be dry and with no dust; the ambient temperature is supposed to be within the range advised by the manufacturer.



No material such as a rope, insulating material, or clothing should cover the equipment at any time. Make sure that no kind of materials or objects can somehow reduce the regular cooling air flow through the equipment. Before operating the equipment, make sure that all the advises reported in the manual are fully complied.

In this section, the data concerning the minimum room where the equipment should operate are intended as minimum figures, sufficient to keep the internal parts of the equipment perfectly cooled.

In case that in the same shelter more equipment are placed, it will be necessary installing an effective air condition system to ensure the recommended operational conditions. It is understood that in case the advised conditions are not complied, the manufacturer will not be liable for any inconveniences or damages that may occur, as the warranty conditions will be void.



Package description

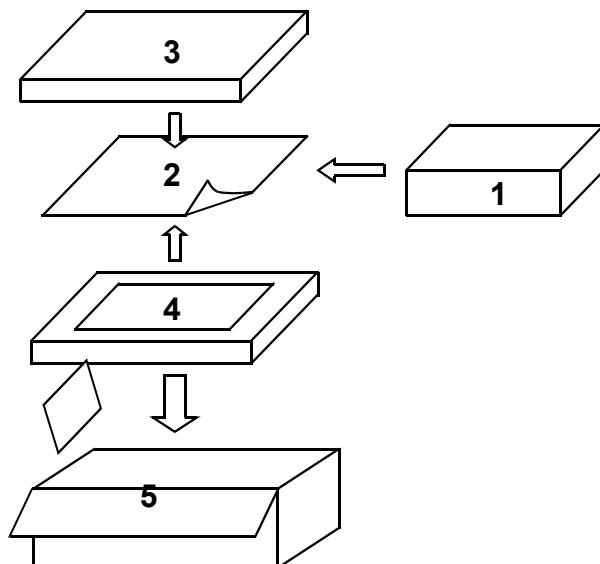
Any equipment is always supplied by us inside a suitable package for a safe freighting, to avoid damages to the equipment due to small shocks. Basically, the package is a carton box sealed with adhesive tape with the manufacturer brand name, then externally tighten by a wide plastic cord. In case one or more sides of the box have a different tape with respect to the original one, it means that the box has been opened during the despatch operations; this should be reported in an attached sheet.

At the time of opening the package, if a damage of the equipment or if something is missing, we recommend to fill-up the form which is included in the manual, and accurately describe the inconvenience.

Upon that, the manufacturer will check where the problem may have occurred and will decide to grant the replacement and if due , the correspondent refund.

Besides the equipment, the carton box package should include:

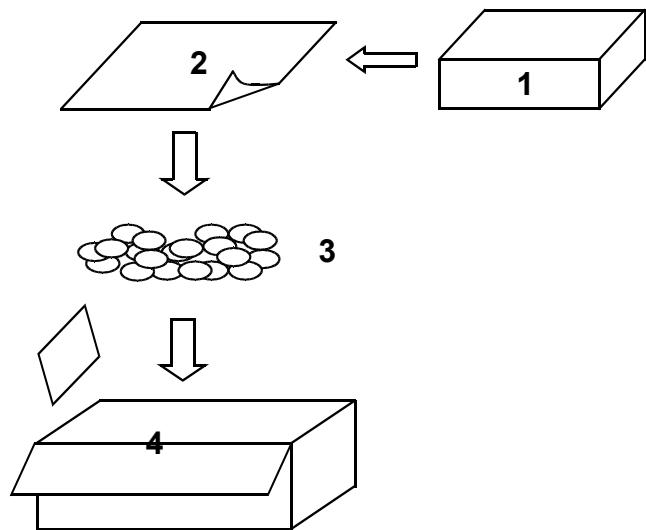
- 1) Polythene bag
- 2) Polystyrene bottom and cover





Small equipment or spare modules are usually supplied with the following kind of package:

- 1) Carton box
- 2) Polythene bag
- 3) Polystyrene material to absorb mechanical shocks





Installing operations

⚠ The installation of any electrical equipment should be always made by technical and specifically trained technicians, who are supposed to be aware of the risks related to the connection to an electrical supply. Before proceeding to the installation, it is mandatory to verify that the general electrical supply is fully in compliance with the normative of the Country where the equipment will operate. In the rear panel of the equipment, the requested electrical features of mains are reported.

⚠ ⚡ The utmost attention should be devoted to the grounding system of the mains: this grants the personal safety of the technical personnel in case of stray currents due to static voltages accumulated in the equipment.

Before proceeding to any operations, we strongly recommend to make sure that an adequate and certified grounding system has been set.

In case of disregard of the above mentioned recommendations, the manufacturer does not take any responsibilities about damages to persons and materials.

Once the place where the equipment will be situated, it is important to verify the compliance with some specific criteria.

Any materials or objects should be placed at a distance of at least 30cms from the cooling air ducts of the equipment. This will assure the regular cooling conditions of the heat-sink of the equipment.



Disregarding the above mentioned advises and recommendations will bring damages to the internal components and risk of fire

Make sure that the equipment is placed in a stable and secure position, to easily allow the access to the front panel and to the rear panel too.

This will permit in the future a simple and fast inspection of the connections if they are necessary.

First, connect the transmitting antenna cable to the correspondent N type male connector placed in the rear panel; then connect the receiving antenna cable.

Eventually connect the included power cord to the female plug placed on the rear panel and protected by a fuse, and then connect the other end to the mains plug.



Maintenance and cleanliness

Routine maintenance and cleanliness can be exclusively done when the equipment is not connected to the mains. Disregarding this caution, may have the effect of serious problems to the personal safety.

For no reasons, the equipment should have any contacts with water or other liquids.

To clean the equipment, only use a soft cloth. In case that much dust is accumulated inside the equipment, use a vacuum-cleaner or a dry and soft brush to remove it.

The routine maintenance of the equipment is intended also as the periodical control of the operational parameters, following the instructions written in the chapter “putting in operation”.



Safety

Read this chapter carefully before installation and use of the equipment.

Introduction

The equipment described in this manual, has been designed for use by properly trained personnel only.

Adjustment, maintenance and repair of the exposed equipment should only be carried out by qualified personnel who are aware of hazards involved.

Safety Precautions

For the correct and safe use of the equipment, it is essential that both operating and servicing personnel follow generally accepted safety procedures in addition to the safety precautions specified in this manual. Specific warning and caution statements, where applicable, are found throughout this manual. Note that warning and caution statements and/or symbols are marked on the equipment as well.

This manual provides technical information important for safe operation of the equipment.

Please refer to the relevant sections of the manual for technical specifications, installation and operating instructions.

Special attention must be paid to the following issues:

- ◆ Protective grounding of the instrument is required for the accessible terminals to be safe.
(IEC 1010-1 Safety class I instrument)
- ◆ The actual environmental conditions must be checked against the specification
- ◆ Mains voltage must be inside the specified range

The opening of covers or removal of parts, except those to which access can be gained by hand, is liable to expose live parts and terminals.



If adjustment, maintenance, or repair of the opened instrument is unavoidable, it must only be carried out by a skilled person who is aware of the hazards involved.

Caution and Warning Statements

Caution

Used to indicate correct operation or maintenance in order to prevent damage to, or destruction of equipment or other property.

Warning

Used to indicate a potential hazard that requires correct procedures or practices in order to prevent personal injury.

Impaired Safety Protection

Technical Specifications

This manual provides technical information important for safe operation of the equipment.

Please refer to the Chapter **Product Data** for information regarding technical specifications and the Chapter **Installation and Operating Instructions** regarding instructions for use.



The equipment is designed for the following environmental conditions:

- ◆ Indoor use
- ◆ Altitudes up to 2000 m
- ◆ Temperatures between +5°C and +45°C

Maximum relative humidity of 95% for temperatures up to 20°C.
The equipment is equipped with a number of input and output terminals as described in the Chapter **Product Data**.



The terminals are protected from becoming hazardous live by means of basic insulation and protective screening.

Whenever it is likely that safe operation is impaired, the equipment must be made inoperative and secured against unintended operation. The appropriate servicing authority must be informed.

For example, safety is likely to be impaired if the equipment fails to perform the intended measurements or shows visible damage.

WARNING: Protection provided by the equipment may be impaired, if the equipment is used in a manner not specified by this manual.

ATTENTION

Electrostatic Sensitive Devices

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce lifetime drastically.

When repairing, make sure that you are connected to the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

Symbols

Symbol	Colour:	Explanation:
	Red	High voltage terminal: a terminal at which a voltage, with respect to another terminal or parts exists or may be adjusted to 1000 V or more. (High voltage > 1000 V).
	Black/Yellow	Live part shock risk of electric shock.
	Black/Yellow	To preserve the instrument from damage, the operator must refer to an explanation in the instruction manual.
	White/Black	Protective earth (grounding) terminal.
	Black	Alternating current (placed on the identification plate).
	White/Green	On (supply - mains switch). Off (supply - mains switch).



General safety recommendations

When connecting the equipment to the power, please follow these important recommendations:

- This product is intended to operate from a power source that will not apply more than 10% of the voltage specified on the rear panel between the supply conductors or between either supply conductor and ground. A protective-ground connection by way of the grounding conductor in the power cord is essential for safe operation.
- This equipment is grounded through the grounding conductor of the power cord. To avoid electrical shock, plug the power cord into a properly wired socket before connecting to the product input or output terminals.
- Upon loss of the protective-ground connection, all accessible conductive parts (including parts that may appear to be insulating) can render an electric shock.
- To avoid fire hazard, use only the fuse of correct type, voltage rating, and current rating. Refer fuse replacement to qualified service personnel.
- To avoid explosion, do not operate this equipment in an explosive atmosphere.
- To avoid personal injury, do not remove the product covers or panels. Do not operate the product without the covers and panels properly installed.



Good practices

In maintaining the equipment described in this manual, please keep in mind the following, standard good practices:

- When connecting any instrument (wattmeter, spectrum analyzer, etc.) to a high frequency output, use the appropriate attenuator or dummy load to protect the final amplifiers and the instrument input.
 - When inserting or removing printed circuit boards (PCBs), cable connectors, or fuses, always turn off power to the affected portion of the equipment. After power is removed, allow sufficient time for the power supplies to bleed down before reinserting PCBs.
 - When troubleshooting, remember that FETs and other metal-oxide semiconductor (MOS) devices may appear defective because of leakage between traces or component leads on the printed circuit board. Clean the printed circuit board and recheck the MOS device before assuming it is defective.
 - When replacing MOS devices, follow standard practices to avoid damage caused by static charges and soldering.
 - When removing components from PCBs (particularly ICs), use care to avoid damaging PCB traces.
-

First AID in case of electrical shock

If someone seems unable to free himself while receiving an electric shock, **turn power off** before rendering aid. A muscular spasm or unconsciousness can make a victim unable to free himself from the electrical power.

If power cannot be turned off immediately, **very carefully** loop a length of dry non-conducting material (such as a rope, insulating material, or clothing) around the victim and pull him free of the power. Carefully avoid touching him or his clothing until free of power.

Emergency resuscitation Technique



Step 1

Check the victim for unresponsiveness. If there is no response, **immediately call for medical assistance**, and then return to the person.



Step 2

Position the person flat on their back. Kneel by their side and place one hand on the forehead and the other under the chin. Tilt the head back and lift the chin until teeth almost touch. Look and listen for breathing.



Step 3

If not breathing normally, pinch the nose and cover the mouth with yours. Give two full breaths. The person's chest will rise if you are giving enough air.



Step 4

Put the fingertips of your hand on the Adam's apple, slide them into the groove next to the windpipe. Feel for a pulse. If you can not feel a pulse or are unsure, move on to the next step.



Step 5

Position your hands in the center of the chest between the nipples. Place one hand on top of the other.



Step 6

Push down firmly two inches. Push on chest 15 times.

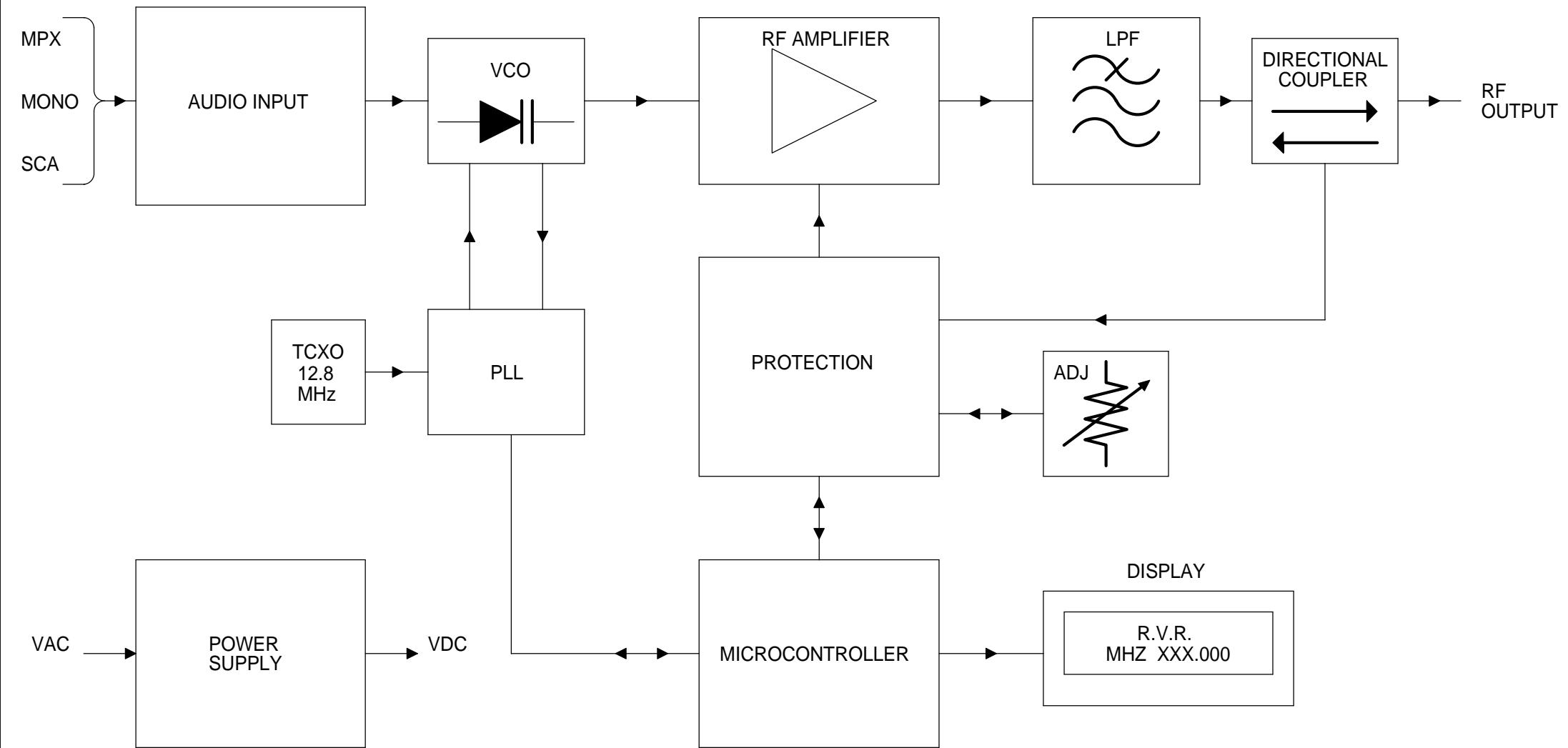
CONTINUE WITH TWO BREATHS AND 15 PUMPS UNTIL HELP ARRIVES.

Treatment for Burns

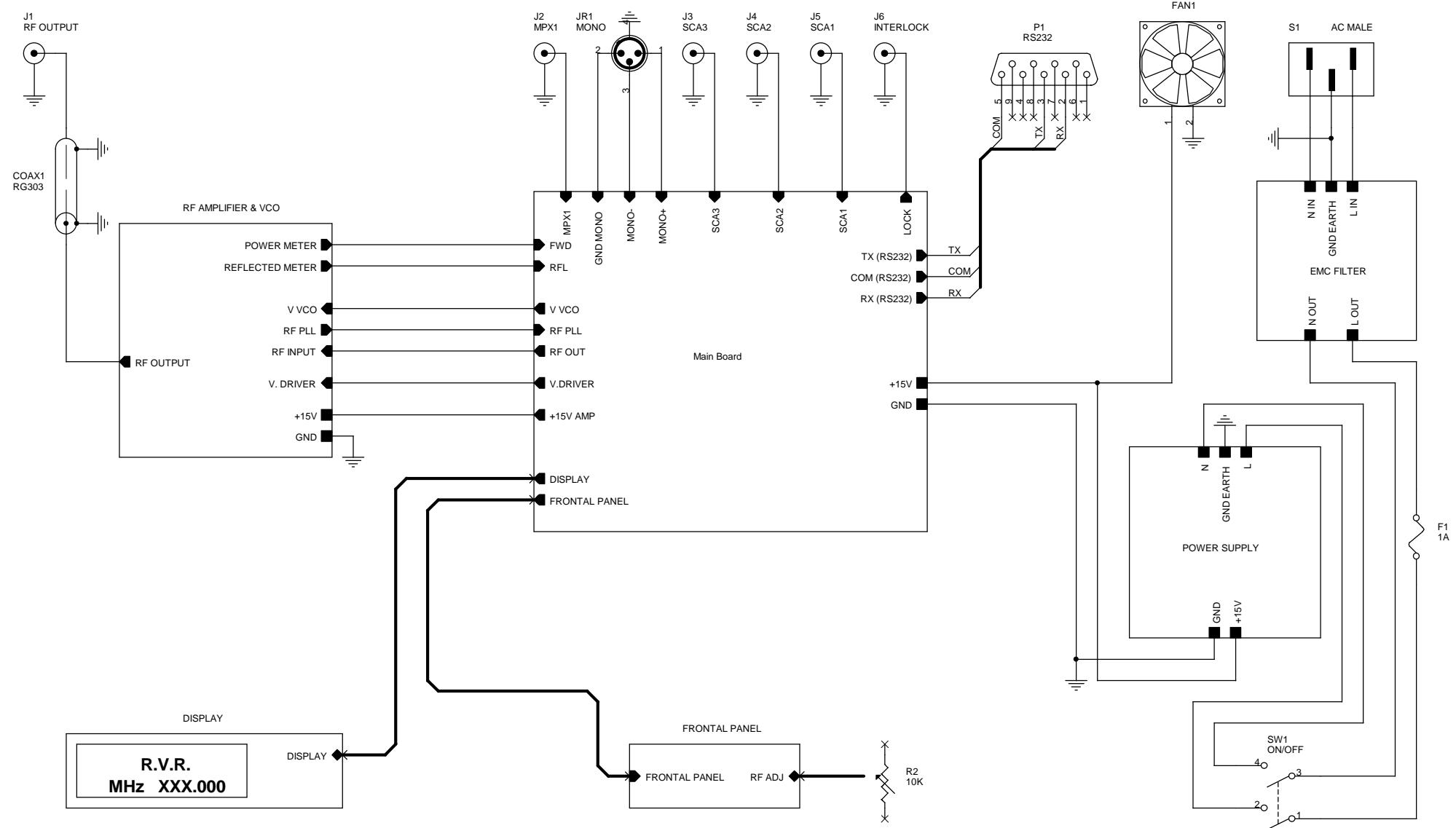
- Continue treat victim for electrical shock.
 - Check for points of entry and exit of current.
-

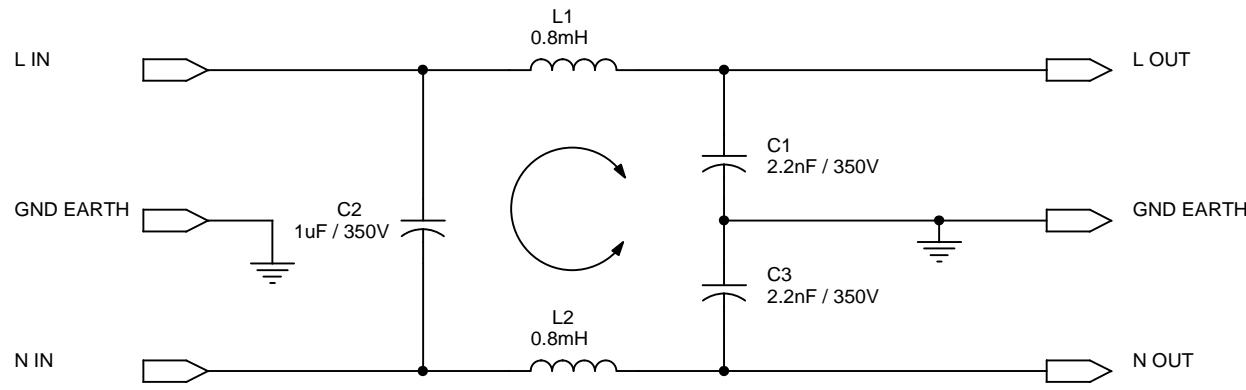


-
- Cover burned surface with a clean dressing.
 - Remove all clothing from the injured area, but cut around any clothing that adheres to the skin and leave it in place. Keep the patient covered, except the injured part, since there is a tendency to chill.
 - Splint all fractures. (Violent muscle contractions caused by the electricity may result in fractures.)
 - Never permit burned surfaces to be in contact with each other, such as: areas between the fingers or toes, the ears and the side of the head, the undersurface of the arm and the chest wall, the folds of the groin, and similar places..
 - Transport to a medical facility



Title		FUNCTIONAL SCHEMATIC
Size B	Document Number Mod. BRAVO-TX	Rev 1.0
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Title

EMC FILTER

Size
A

Document Number

Mod. EMC-02

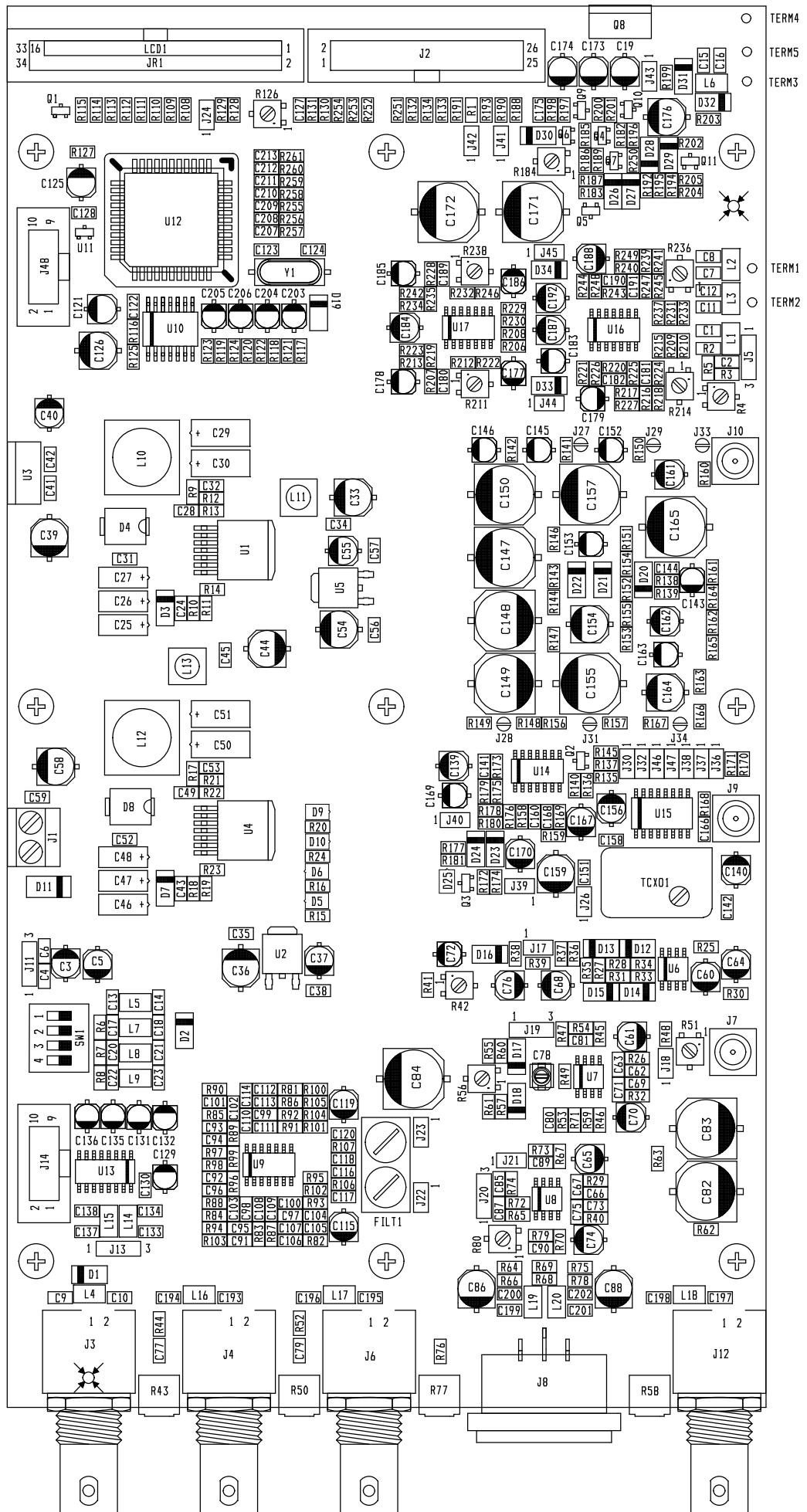
Rev
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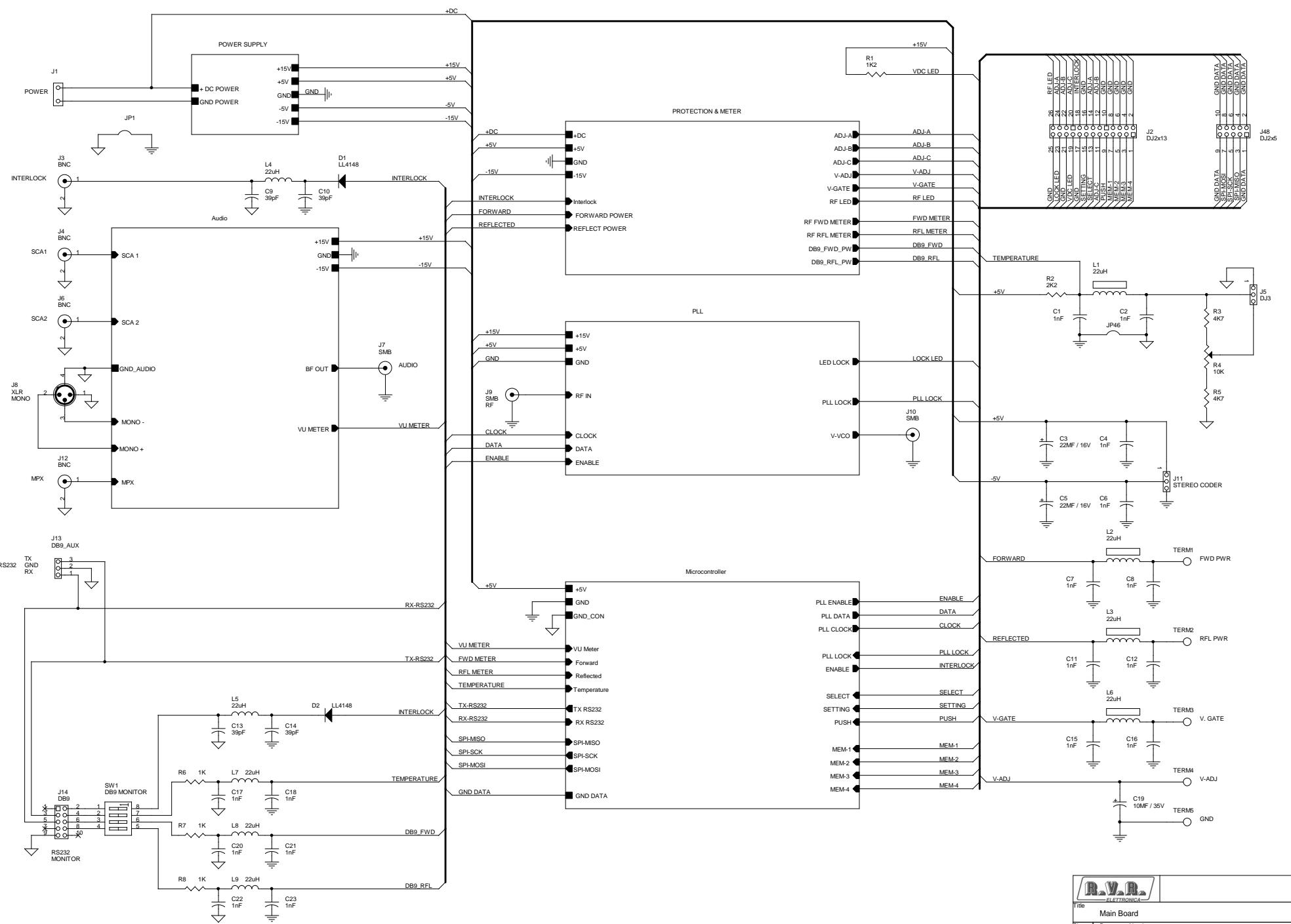
Date:

Wednesday, January 13, 2021

Sheet 1

of 1





RAYRA
ELETTRONICA

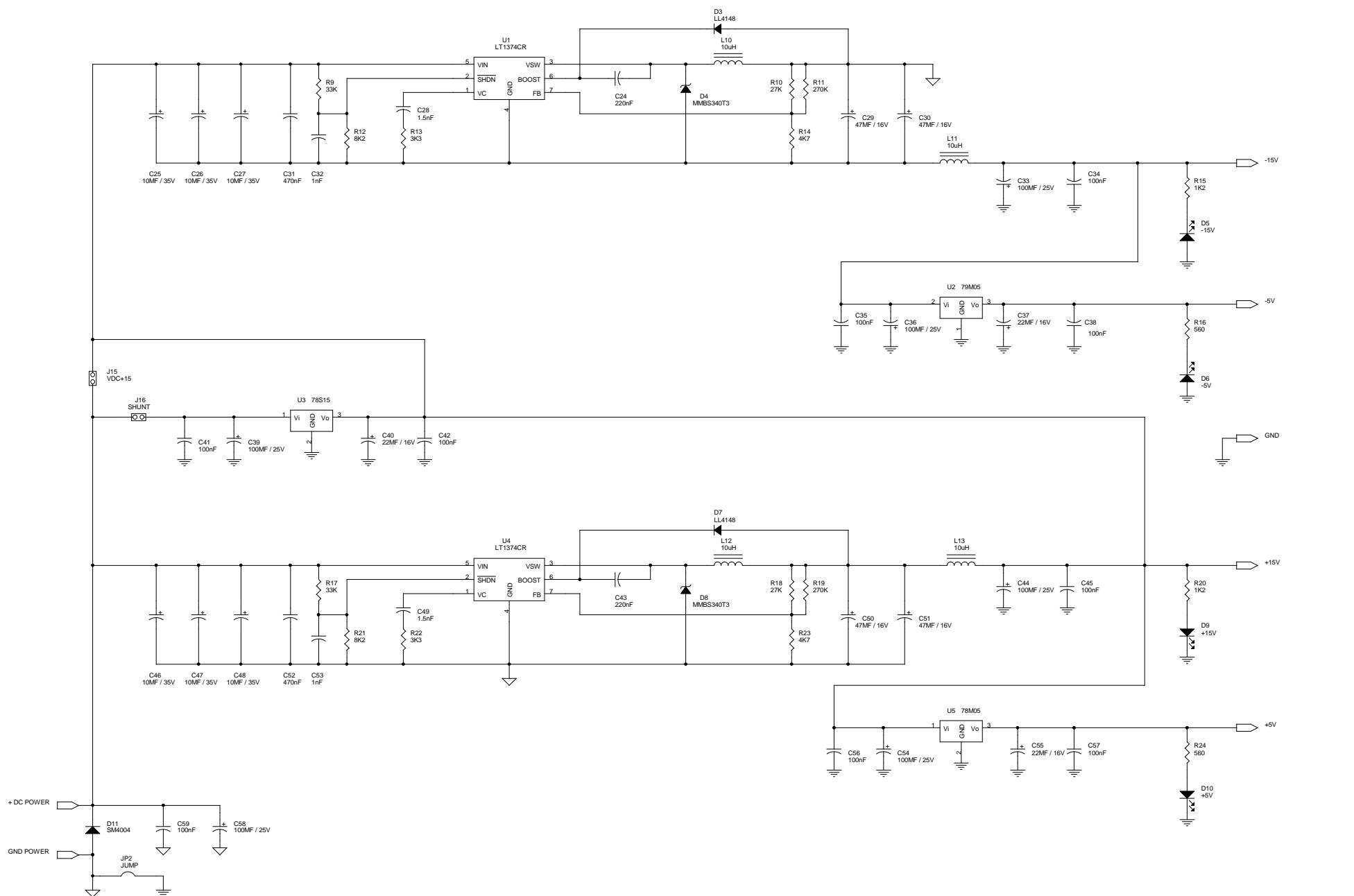
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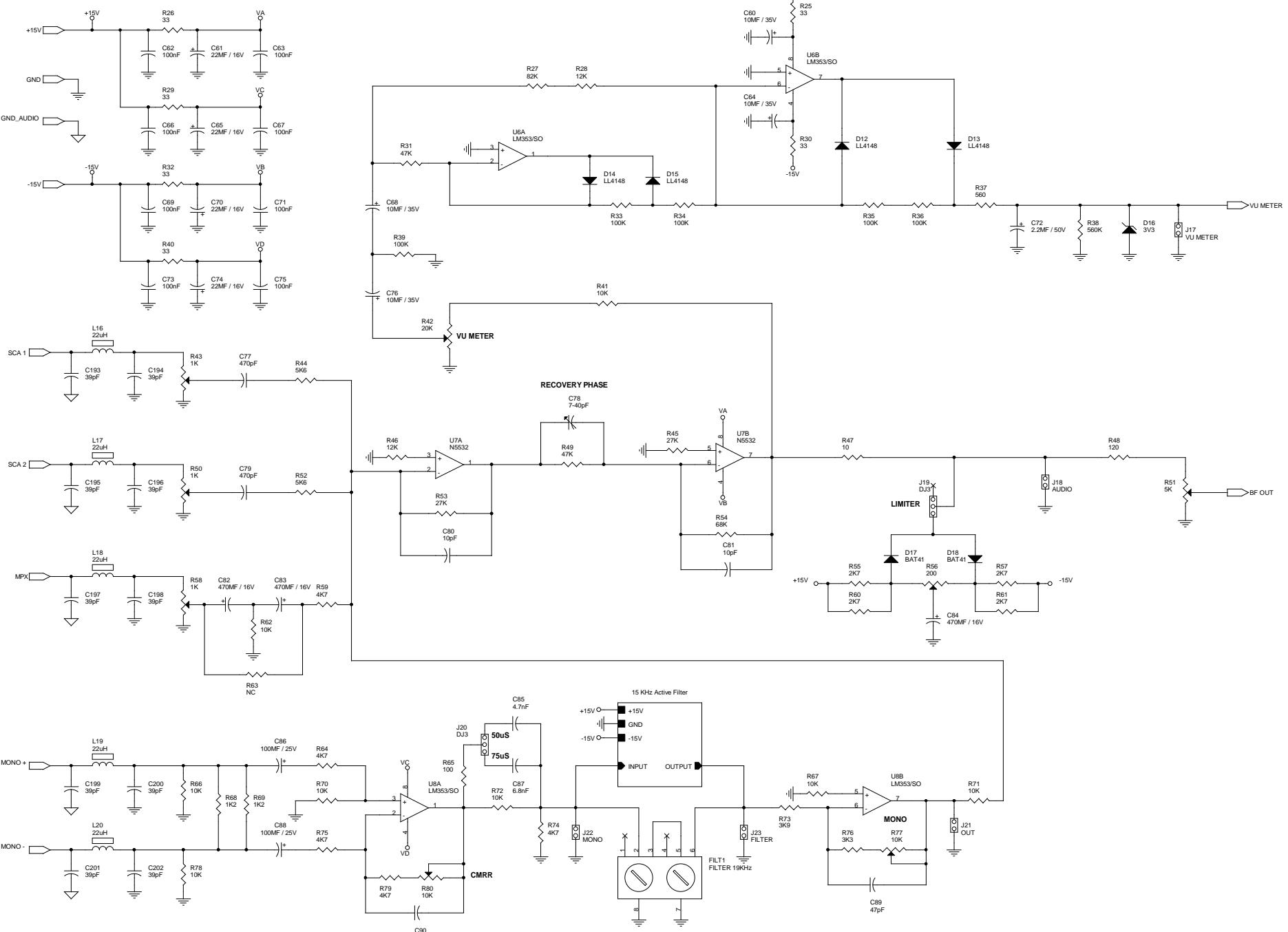
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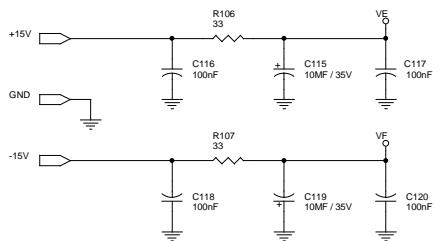
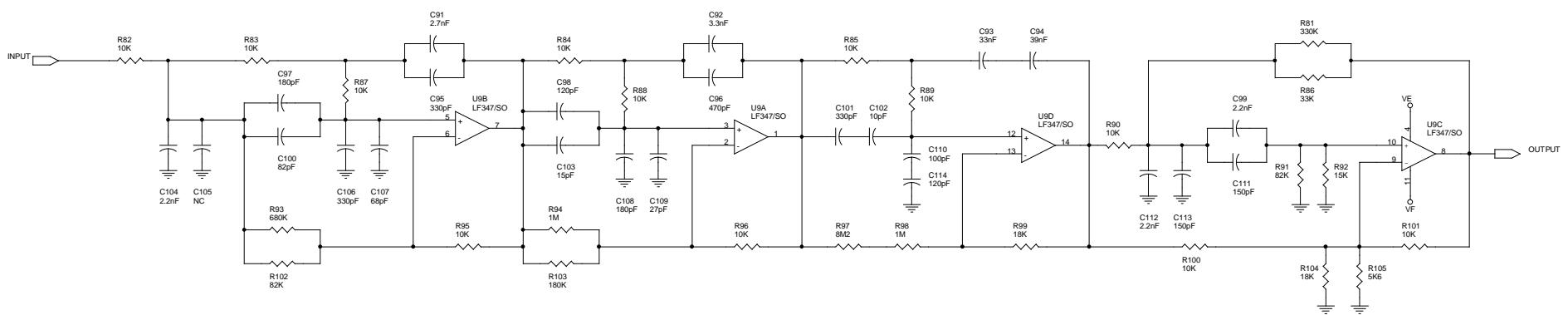
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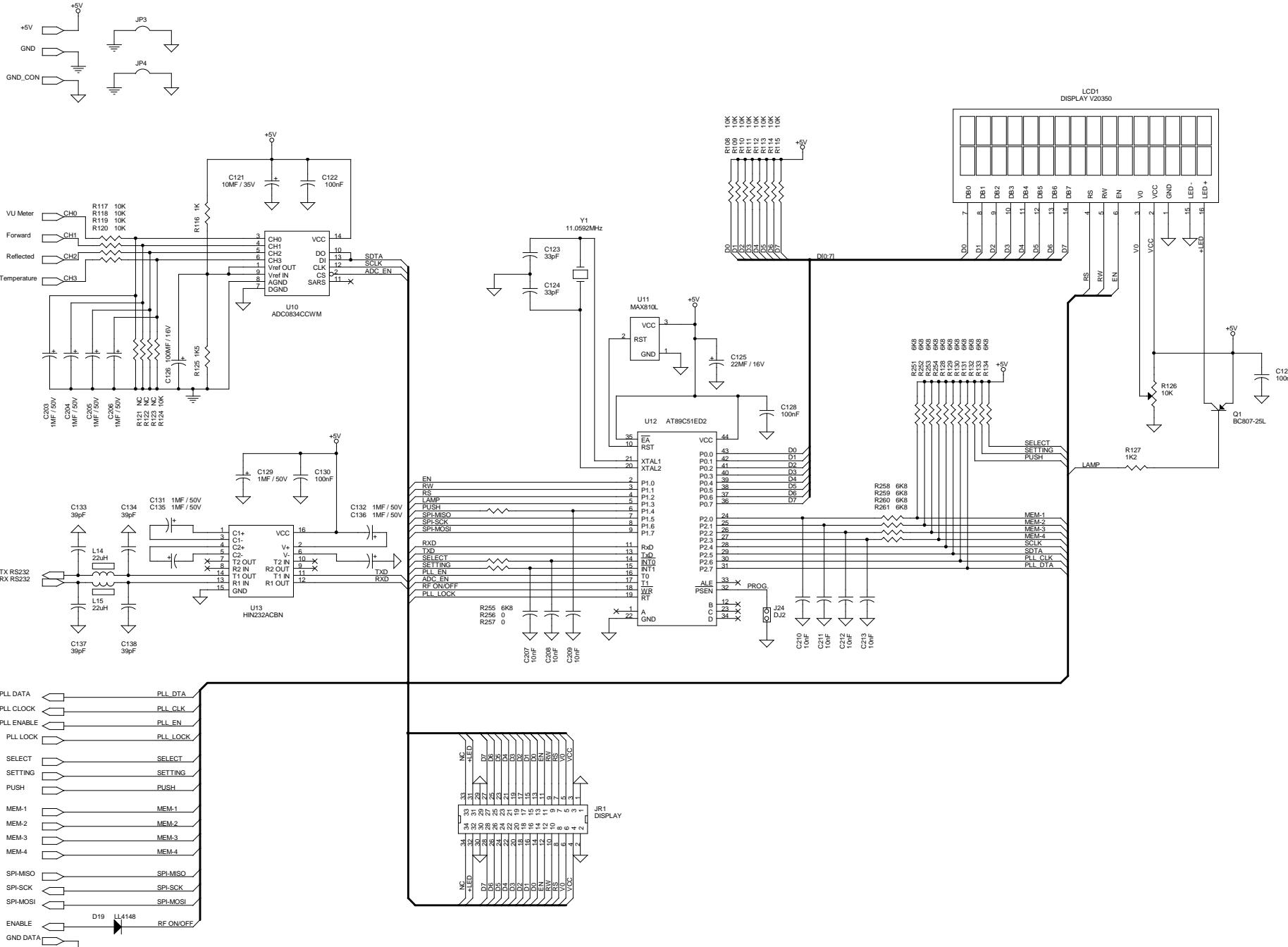
Sheet 1 of 7

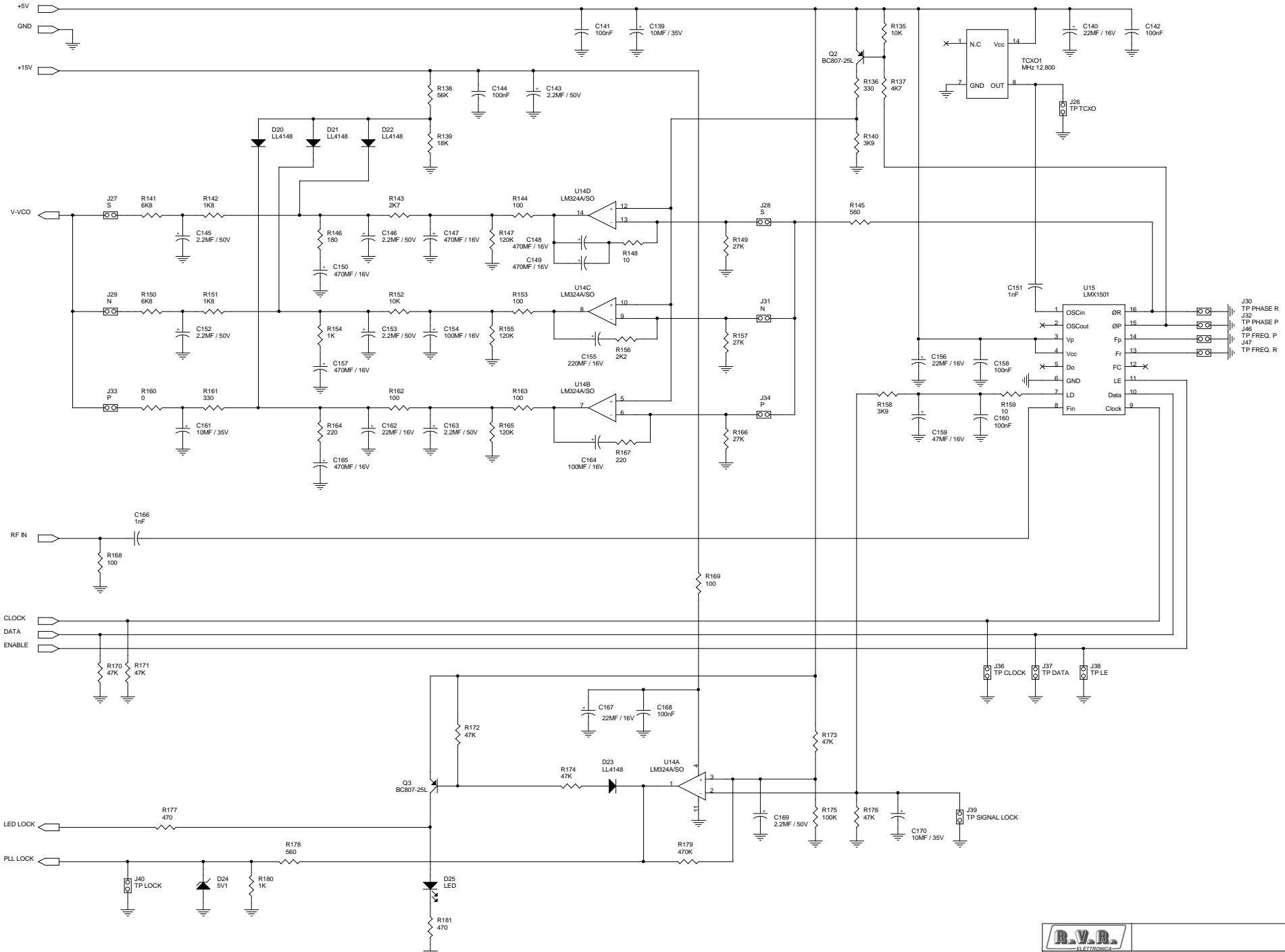
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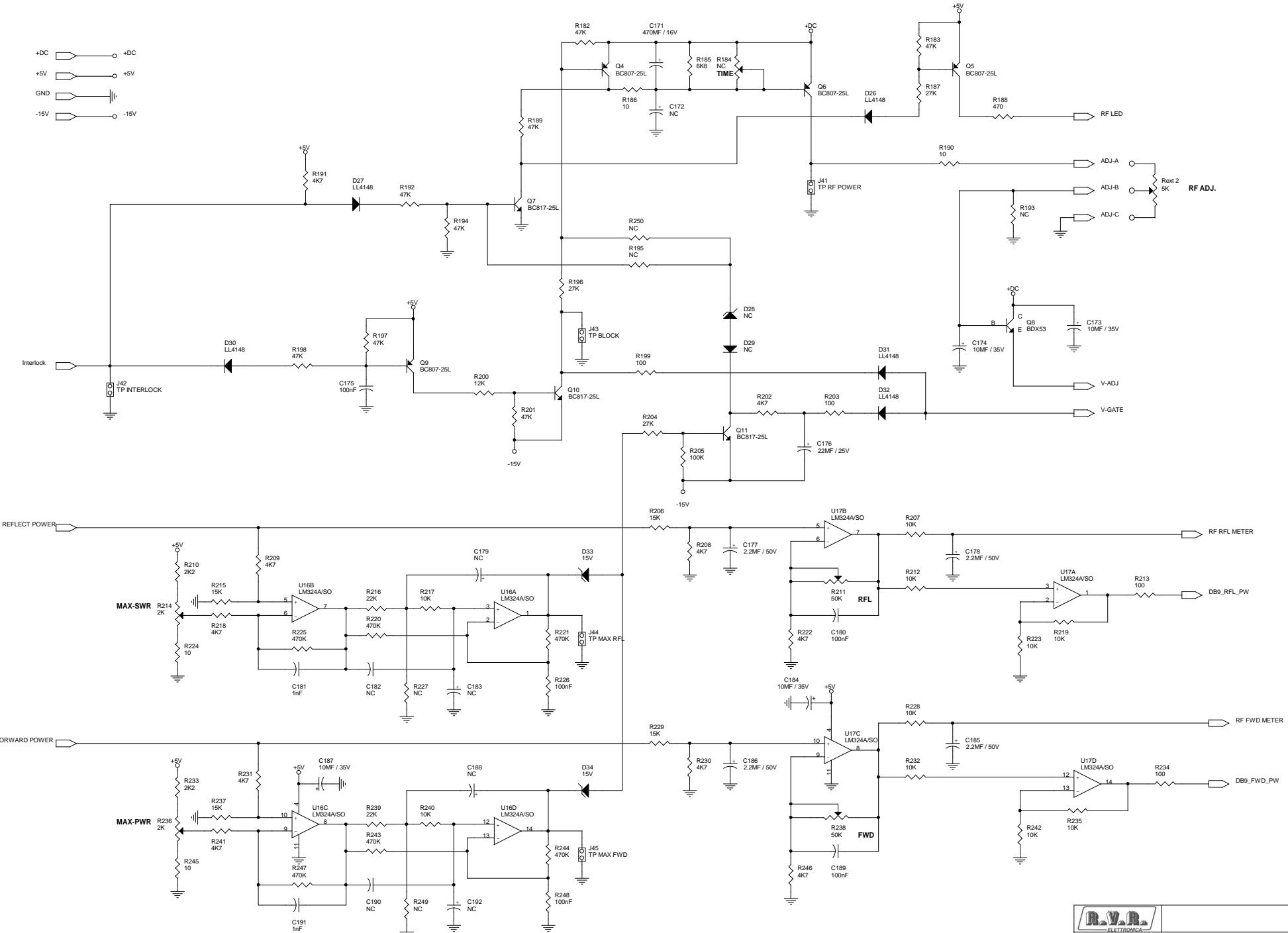


RIVRA
ELETTRONICA

Title: PLL

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Rev: 1.0 Date: Wednesday, January 13, 2021 Sheet: 6 of 7



RAYRA
ELETTRONICA

Title

Protection & Meter

Size C

Document Number

Mod. MAIN.TX

Rev. 1.0

Date: Wednesday, January 13, 2021

Sheet 7 of 7



Part List Schematic : MAIN-TX

Rif.	Value	Remarks	Description	Code
C1	1nF		SMD Multilayer Ceramic Capacitor	
C2	1nF		SMD Multilayer Ceramic Capacitor	
C3	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C4	1nF		SMD Multilayer Ceramic Capacitor	
C5	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C6	1nF		SMD Multilayer Ceramic Capacitor	
C6	1nF		SMD Multilayer Ceramic Capacitor	
C7	1nF		SMD Multilayer Ceramic Capacitor	
C8	1nF		SMD Multilayer Ceramic Capacitor	
C9	39pF		SMD Multilayer Ceramic Capacitor	
C10	39pF		SMD Multilayer Ceramic Capacitor	
C11	1nF		SMD Multilayer Ceramic Capacitor	
C12	1nF		SMD Multilayer Ceramic Capacitor	
C13	39pF		SMD Multilayer Ceramic Capacitor	
C14	39pF		SMD Multilayer Ceramic Capacitor	
C15	1nF		SMD Multilayer Ceramic Capacitor	
C16	1nF		SMD Multilayer Ceramic Capacitor	
C17	1nF		SMD Multilayer Ceramic Capacitor	
C18	1nF		SMD Multilayer Ceramic Capacitor	
C19	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C20	1nF		SMD Multilayer Ceramic Capacitor	
C21	1nF		SMD Multilayer Ceramic Capacitor	
C22	1nF		SMD Multilayer Ceramic Capacitor	
C23	1nF		SMD Multilayer Ceramic Capacitor	
C24	220nF		SMD Multilayer Ceramic Capacitor	
C25	10MF	35V	SMD Tantalum Capacitor	
C26	10MF	35V	SMD Tantalum Capacitor	
C27	10MF	35V	SMD Tantalum Capacitor	
C28	1.5nF		SMD Multilayer Ceramic Capacitor	
C29	47MF	16V	SMD Tantalum Capacitor	
C30	47MF	16V	SMD Tantalum Capacitor	
C31	470nF		SMD Multilayer Ceramic Capacitor	
C32	1nF		SMD Multilayer Ceramic Capacitor	
C33	100MF	25V	SMD Aluminium Electrolytic Capacitor	
C34	100nF		SMD Multilayer Ceramic Capacitor	
C35	100nF		SMD Multilayer Ceramic Capacitor	
C36	100MF	25V	SMD Aluminium Electrolytic Capacitor	
C37	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C38	100nF		SMD Multilayer Ceramic Capacitor	
C39	100MF	25V	SMD Aluminium Electrolytic Capacitor	
C40	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C41	100nF		SMD Multilayer Ceramic Capacitor	
C42	100nF		SMD Multilayer Ceramic Capacitor	
C43	220nF		SMD Multilayer Ceramic Capacitor	
C44	100MF	25V	SMD Aluminium Electrolytic Capacitor	
C45	100nF		SMD Multilayer Ceramic Capacitor	
C46	10MF	35V	SMD Tantalum Capacitor	
C47	10MF	35V	SMD Tantalum Capacitor	
C48	10MF	35V	SMD Tantalum Capacitor	



Rif.	Value	Remarks	Description	Code
C49	1.5nF		SMD Multilayer Ceramic Capacitor	
C50	47MF	16V	SMD Tantalum Capacitor	
C51	47MF	16V	SMD Tantalum Capacitor	
C52	470nF		SMD Multilayer Ceramic Capacitor	
C53	1nF		SMD Multilayer Ceramic Capacitor	
C54	100MF	25V	SMD Aluminium Electrolytic Capacitor	
C55	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C56	100nF		SMD Multilayer Ceramic Capacitor	
C57	100nF		SMD Multilayer Ceramic Capacitor	
C58	100MF	25V	SMD Aluminium Electrolytic Capacitor	
C59	100nF		SMD Multilayer Ceramic Capacitor	
C60	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C61	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C62	100nF		SMD Multilayer Ceramic Capacitor	
C63	100nF		SMD Multilayer Ceramic Capacitor	
C64	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C65	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C66	100nF		SMD Multilayer Ceramic Capacitor	
C67	100nF		SMD Multilayer Ceramic Capacitor	
C68	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C69	100nF		SMD Multilayer Ceramic Capacitor	
C70	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C71	100nF		SMD Multilayer Ceramic Capacitor	
C72	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C73	100nF		SMD Multilayer Ceramic Capacitor	
C74	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C75	100nF		SMD Multilayer Ceramic Capacitor	
C76	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C77	470pF		SMD Multilayer Ceramic Capacitor	
C78	7-40pF		SMD Trimmer Capacitor	
C79	470pF		SMD Multilayer Ceramic Capacitor	
C80	10pF		SMD Multilayer Ceramic Capacitor	
C81	10pF		SMD Multilayer Ceramic Capacitor	
C82	470MF	16V	SMD Aluminium Electrolytic Capacitor	
C83	470MF	16V	SMD Aluminium Electrolytic Capacitor	
C84	470MF	16V	SMD Aluminium Electrolytic Capacitor	
C85	4.7nF		SMD Multilayer Ceramic Capacitor	
C86	100MF	25V	SMD Aluminium Electrolytic Capacitor	
C87	6.8nF		SMD Multilayer Ceramic Capacitor	
C88	100MF	25V	SMD Aluminium Electrolytic Capacitor	
C89	47pF		SMD Multilayer Ceramic Capacitor	
C90	47pF		SMD Multilayer Ceramic Capacitor	
C91	2.7nF		SMD Multilayer Ceramic Capacitor	
C92	3.3nF		SMD Multilayer Ceramic Capacitor	
C93	33nF		SMD Multilayer Ceramic Capacitor	
C94	39nF		SMD Multilayer Ceramic Capacitor	
C95	330pF		SMD Multilayer Ceramic Capacitor	
C96	470pF		SMD Multilayer Ceramic Capacitor	
C97	180pF		SMD Multilayer Ceramic Capacitor	
C98	120pF		SMD Multilayer Ceramic Capacitor	
C99	2.2nF		SMD Multilayer Ceramic Capacitor	
C100	82pF		SMD Multilayer Ceramic Capacitor	



Rif.	Value	Remarks	Description	Code
C101	330pF		SMD Multilayer Ceramic Capacitor	
C102	10pF		SMD Multilayer Ceramic Capacitor	
C103	15pF		SMD Multilayer Ceramic Capacitor	
C104	2.2nF		SMD Multilayer Ceramic Capacitor	
C105	NC		SMD Multilayer Ceramic Capacitor	
C106	330pF		SMD Multilayer Ceramic Capacitor	
C107	68pF		SMD Multilayer Ceramic Capacitor	
C108	180pF		SMD Multilayer Ceramic Capacitor	
C109	27pF		SMD Multilayer Ceramic Capacitor	
C110	100pF		SMD Multilayer Ceramic Capacitor	
C111	150pF		SMD Multilayer Ceramic Capacitor	
C112	2.2nF		SMD Multilayer Ceramic Capacitor	
C113	150pF		SMD Multilayer Ceramic Capacitor	
C114	120pF		SMD Multilayer Ceramic Capacitor	
C115	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C116	100nF		SMD Multilayer Ceramic Capacitor	
C117	100nF		SMD Multilayer Ceramic Capacitor	
C118	100nF		SMD Multilayer Ceramic Capacitor	
C119	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C120	100nF		SMD Multilayer Ceramic Capacitor	
C121	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C122	100nF		SMD Multilayer Ceramic Capacitor	
C123	33pF		SMD Multilayer Ceramic Capacitor	
C124	33pF		SMD Multilayer Ceramic Capacitor	
C125	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C126	100MF	16V	SMD Aluminium Electrolytic Capacitor	
C127	100nF		SMD Multilayer Ceramic Capacitor	
C128	100nF		SMD Multilayer Ceramic Capacitor	
C129	1MF	50V	SMD Aluminium Electrolytic Capacitor	
C130	100nF		SMD Multilayer Ceramic Capacitor	
C131	1MF	50V	SMD Aluminium Electrolytic Capacitor	
C132	1MF	50V	SMD Aluminium Electrolytic Capacitor	
C133	39pF		SMD Multilayer Ceramic Capacitor	
C134	39pF		SMD Multilayer Ceramic Capacitor	
C135	1MF	50V	SMD Aluminium Electrolytic Capacitor	
C136	1MF	50V	SMD Aluminium Electrolytic Capacitor	
C137	39pF		SMD Multilayer Ceramic Capacitor	
C138	39pF		SMD Multilayer Ceramic Capacitor	
C139	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C140	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C141	100nF		SMD Multilayer Ceramic Capacitor	
C142	100nF		SMD Multilayer Ceramic Capacitor	
C143	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C144	100nF		SMD Multilayer Ceramic Capacitor	
C145	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C146	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C147	470MF	16V	SMD Aluminium Electrolytic Capacitor	
C148	470MF	16V	SMD Aluminium Electrolytic Capacitor	
C149	470MF	16V	SMD Aluminium Electrolytic Capacitor	
C150	470MF	16V	SMD Aluminium Electrolytic Capacitor	
C151	1nF		SMD Multilayer Ceramic Capacitor	
C152	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	



Rif.	Value	Remarks	Description	Code
C153	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C154	100MF	16V	SMD Aluminium Electrolytic Capacitor	
C155	220MF	16V	SMD Aluminium Electrolytic Capacitor	
C156	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C157	470MF	16V	SMD Aluminium Electrolytic Capacitor	
C158	100nF		SMD Multilayer Ceramic Capacitor	
C159	47MF	16V	SMD Aluminium Electrolytic Capacitor	
C160	100nF		SMD Multilayer Ceramic Capacitor	
C161	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C162	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C163	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C164	100MF	16V	SMD Aluminium Electrolytic Capacitor	
C165	470MF	16V	SMD Aluminium Electrolytic Capacitor	
C166	1nF		SMD Multilayer Ceramic Capacitor	
C167	22MF	16V	SMD Aluminium Electrolytic Capacitor	
C168	100nF		SMD Multilayer Ceramic Capacitor	
C169	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C170	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C171	470MF	16V	SMD Aluminium Electrolytic Capacitor	
C172	NC		SMD Multilayer Ceramic Capacitor	
C173	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C174	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C175	100nF		SMD Multilayer Ceramic Capacitor	
C176	22MF	25V	SMD Aluminium Electrolytic Capacitor	
C177	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C178	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C179	NC		SMD Multilayer Ceramic Capacitor	
C180	100nF		SMD Multilayer Ceramic Capacitor	
C181	1nF		SMD Multilayer Ceramic Capacitor	
C182	NC		SMD Multilayer Ceramic Capacitor	
C183	NC		SMD Multilayer Ceramic Capacitor	
C184	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C185	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C186	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C187	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C188	NC		SMD Multilayer Ceramic Capacitor	
C189	100nF		SMD Multilayer Ceramic Capacitor	
C190	NC		SMD Multilayer Ceramic Capacitor	
C191	1nF		SMD Multilayer Ceramic Capacitor	
C192	NC		SMD Multilayer Ceramic Capacitor	
C193	39pF		SMD Multilayer Ceramic Capacitor	
C194	39pF		SMD Multilayer Ceramic Capacitor	
C195	39pF		SMD Multilayer Ceramic Capacitor	
C196	39pF		SMD Multilayer Ceramic Capacitor	
C197	39pF		SMD Multilayer Ceramic Capacitor	
C198	39pF		SMD Multilayer Ceramic Capacitor	
C199	39pF		SMD Multilayer Ceramic Capacitor	
C200	39pF		SMD Multilayer Ceramic Capacitor	
C201	39pF		SMD Multilayer Ceramic Capacitor	
C202	39pF		SMD Multilayer Ceramic Capacitor	
C203	1MF	50V	SMD Aluminium Electrolytic Capacitor	
C204	1MF	50V	SMD Aluminium Electrolytic Capacitor	



Rif.	Value	Remarks	Description	Code
C205	1MF	50V	SMD Aluminium Electrolytic Capacitor	
C206	1MF	50V	SMD Aluminium Electrolytic Capacitor	
C207	10nF		SMD Multilayer Ceramic Capacitor	
C208	10nF		SMD Multilayer Ceramic Capacitor	
C209	10nF		SMD Multilayer Ceramic Capacitor	
C210	10nF		SMD Multilayer Ceramic Capacitor	
C211	10nF		SMD Multilayer Ceramic Capacitor	
C212	10nF		SMD Multilayer Ceramic Capacitor	
C213	10nF		SMD Multilayer Ceramic Capacitor	
L1	22uH		SMD Inductor	
L2	22uH		SMD Inductor	
L3	22uH		SMD Inductor	
L4	22uH		SMD Inductor	
L5	22uH		SMD Inductor	
L6	22uH		SMD Inductor	
L7	22uH		SMD Inductor	
L8	22uH		SMD Inductor	
L9	22uH		SMD Inductor	
L10	10uH		SMD Inductor	
L11	10uH		SMD Inductor	
L12	10uH		SMD Inductor	
L13	10uH		SMD Inductor	
L14	22uH		SMD Inductor	
L15	22uH		SMD Inductor	
L16	22uH		SMD Inductor	
L17	22uH		SMD Inductor	
L18	22uH		SMD Inductor	
L19	22uH		SMD Inductor	
L20	22uH		SMD Inductor	
R1	1K2	1/8W	SMD Thick Film Resistor	
R2	2K2	1/8W	SMD Thick Film Resistor	
R3	4K7	1/8W	SMD Thick Film Resistor	
R4	10K	1/4W	SMD Cermet Skeleton Trimmer Resistor	
R5	4K7	1/8W	SMD Thick Film Resistor	
R6	1K	1/8W	SMD Thick Film Resistor	
R7	1K	1/8W	SMD Thick Film Resistor	
R8	1K	1/8W	SMD Thick Film Resistor	
R9	33K	1/8W	SMD Thick Film Resistor	
R10	27K	1/8W	SMD Thick Film Resistor	
R11	270K	1/8W	SMD Thick Film Resistor	
R12	8K2	1/8W	SMD Thick Film Resistor	
R13	3K3	1/8W	SMD Thick Film Resistor	
R14	4K7	1/8W	SMD Thick Film Resistor	
R15	1K2	1/8W	SMD Thick Film Resistor	
R16	560	1/8W	SMD Thick Film Resistor	
R17	33K	1/8W	SMD Thick Film Resistor	
R18	27K	1/8W	SMD Thick Film Resistor	
R19	270K	1/8W	SMD Thick Film Resistor	
R20	1K2	1/8W	SMD Thick Film Resistor	
R21	8K2	1/8W	SMD Thick Film Resistor	



Rif.	Value	Remarks	Description	Code
R22	3K3	1/8W	SMD Thick Film Resistor	
R23	4K7	1/8W	SMD Thick Film Resistor	
R24	560	1/8W	SMD Thick Film Resistor	
R25	33	1/8W	SMD Thick Film Resistor	
R26	33	1/8W	SMD Thick Film Resistor	
R27	82K	1/8W	SMD Thick Film Resistor	
R28	12K	1/8W	SMD Thick Film Resistor	
R29	33	1/8W	SMD Thick Film Resistor	
R30	33	1/8W	SMD Thick Film Resistor	
R31	47K	1/8W	SMD Thick Film Resistor	
R32	33	1/8W	SMD Thick Film Resistor	
R33	100K	1/8W	SMD Thick Film Resistor	
R34	100K	1/8W	SMD Thick Film Resistor	
R35	100K	1/8W	SMD Thick Film Resistor	
R36	100K	1/8W	SMD Thick Film Resistor	
R37	560	1/8W	SMD Thick Film Resistor	
R38	560K	1/8W	SMD Thick Film Resistor	
R39	100K	1/8W	SMD Thick Film Resistor	
R40	33	1/8W	SMD Thick Film Resistor	
R41	10K	1/8W	SMD Thick Film Resistor	
R42	20K	1/4W	SMD Cermet Skeleton Trimmer Resistor	
R43	1K	1/4W	SMD Cermet Skeleton Trimmer Resistor	
R44	5K6	1/8W	SMD Thick Film Resistor	
R45	27K	1/8W	SMD Thick Film Resistor	
R46	12K	1/8W	SMD Thick Film Resistor	
R47	10	1/8W	SMD Thick Film Resistor	
R48	120	1/8W	SMD Thick Film Resistor	
R49	47K	1/8W	SMD Thick Film Resistor	
R50	1K	1/4W	SMD Cermet Skeleton Trimmer Resistor	
R51	5K	1/4W	SMD Cermet Skeleton Trimmer Resistor	
R52	5K6	1/8W	SMD Thick Film Resistor	
R53	27K	1/8W	SMD Thick Film Resistor	
R54	68K	1/8W	SMD Thick Film Resistor	
R55	2K7	1/8W	SMD Thick Film Resistor	
R56	200	1/4W	SMD Cermet Skeleton Trimmer Resistor	
R57	2K7	1/8W	SMD Thick Film Resistor	
R58	1K	1/4W	SMD Cermet Skeleton Trimmer Resistor	
R59	4K7	1/8W	SMD Thick Film Resistor	
R60	2K7	1/8W	SMD Thick Film Resistor	
R61	2K7	1/8W	SMD Thick Film Resistor	
R62	10K	1/8W	SMD Thick Film Resistor	
R63	NC	1/8W	SMD Thick Film Resistor	
R64	4K7	1/8W	SMD Thick Film Resistor	
R65	100	1/8W	SMD Thick Film Resistor	
R66	10K	1/8W	SMD Thick Film Resistor	
R67	10K	1/8W	SMD Thick Film Resistor	
R68	1K2	1/8W	SMD Thick Film Resistor	
R69	1K2	1/8W	SMD Thick Film Resistor	
R70	10K	1/8W	SMD Thick Film Resistor	
R71	10K	1/8W	SMD Thick Film Resistor	
R72	10K	1/8W	SMD Thick Film Resistor	
R73	3K9	1/8W	SMD Thick Film Resistor	



Rif.	Value	Remarks	Description	Code
R74	4K7	1/8W	SMD Thick Film Resistor	
R75	4K7	1/8W	SMD Thick Film Resistor	
R76	3K3	1/8W	SMD Thick Film Resistor	
R77	10K	1/4W	SMD Cermet Skeleton Trimmer Resistor	
R78	10K	1/8W	SMD Thick Film Resistor	
R79	4K7	1/8W	SMD Thick Film Resistor	
R80	10K	1/4W	SMD Cermet Skeleton Trimmer Resistor	
R81	330K	1/8W	SMD Thick Film Resistor	
R82	10K	1/8W	SMD Thick Film Resistor	
R83	10K	1/8W	SMD Thick Film Resistor	
R84	10K	1/8W	SMD Thick Film Resistor	
R85	10K	1/8W	SMD Thick Film Resistor	
R86	33K	1/8W	SMD Thick Film Resistor	
R87	10K	1/8W	SMD Thick Film Resistor	
R88	10K	1/8W	SMD Thick Film Resistor	
R89	10K	1/8W	SMD Thick Film Resistor	
R90	10K	1/8W	SMD Thick Film Resistor	
R91	82K	1/8W	SMD Thick Film Resistor	
R92	15K	1/8W	SMD Thick Film Resistor	
R93	680K	1/8W	SMD Thick Film Resistor	
R94	1M	1/8W	SMD Thick Film Resistor	
R95	10K	1/8W	SMD Thick Film Resistor	
R96	10K	1/8W	SMD Thick Film Resistor	
R97	8M2	1/8W	SMD Thick Film Resistor	
R98	1M	1/8W	SMD Thick Film Resistor	
R99	18K	1/8W	SMD Thick Film Resistor	
R100	10K	1/8W	SMD Thick Film Resistor	
R101	10K	1/8W	SMD Thick Film Resistor	
R102	82K	1/8W	SMD Thick Film Resistor	
R103	180K	1/8W	SMD Thick Film Resistor	
R104	18K	1/8W	SMD Thick Film Resistor	
R105	5K6	1/8W	SMD Thick Film Resistor	
R106	33	1/8W	SMD Thick Film Resistor	
R107	33	1/8W	SMD Thick Film Resistor	
R108	10K	1/8W	SMD Thick Film Resistor	
R109	10K	1/8W	SMD Thick Film Resistor	
R110	10K	1/8W	SMD Thick Film Resistor	
R111	10K	1/8W	SMD Thick Film Resistor	
R112	10K	1/8W	SMD Thick Film Resistor	
R113	10K	1/8W	SMD Thick Film Resistor	
R114	10K	1/8W	SMD Thick Film Resistor	
R115	10K	1/8W	SMD Thick Film Resistor	
R116	1K	1/8W	SMD Thick Film Resistor	
R117	10K	1/8W	SMD Thick Film Resistor	
R118	10K	1/8W	SMD Thick Film Resistor	
R119	10K	1/8W	SMD Thick Film Resistor	
R120	10K	1/8W	SMD Thick Film Resistor	
R121	NC	1/8W	SMD Thick Film Resistor	
R122	NC	1/8W	SMD Thick Film Resistor	
R123	NC	1/8W	SMD Thick Film Resistor	
R124	10K	1/8W	SMD Thick Film Resistor	
R125	1K5	1/8W	SMD Thick Film Resistor	



Rif.	Value	Remarks	Description	Code
R126	10K	1/4W	SMD Cermet Skeleton Trimmer Resistor	
R127	1K2	1/8W	SMD Thick Film Resistor	
R128	6K8	1/8W	SMD Thick Film Resistor	
R129	6K8	1/8W	SMD Thick Film Resistor	
R130	6K8	1/8W	SMD Thick Film Resistor	
R131	6K8	1/8W	SMD Thick Film Resistor	
R132	6K8	1/8W	SMD Thick Film Resistor	
R133	6K8	1/8W	SMD Thick Film Resistor	
R134	6K8	1/8W	SMD Thick Film Resistor	
R135	10K	1/8W	SMD Thick Film Resistor	
R136	330	1/8W	SMD Thick Film Resistor	
R137	4K7	1/8W	SMD Thick Film Resistor	
R138	56K	1/8W	SMD Thick Film Resistor	
R139	18K	1/8W	SMD Thick Film Resistor	
R140	3K9	1/8W	SMD Thick Film Resistor	
R141	6K8	1/8W	SMD Thick Film Resistor	
R142	1K8	1/8W	SMD Thick Film Resistor	
R143	2K7	1/8W	SMD Thick Film Resistor	
R144	100	1/8W	SMD Thick Film Resistor	
R145	560	1/8W	SMD Thick Film Resistor	
R146	180	1/8W	SMD Thick Film Resistor	
R147	120K	1/8W	SMD Thick Film Resistor	
R148	10	1/8W	SMD Thick Film Resistor	
R149	27K	1/8W	SMD Thick Film Resistor	
R150	6K8	1/8W	SMD Thick Film Resistor	
R151	1K8	1/8W	SMD Thick Film Resistor	
R152	10K	1/8W	SMD Thick Film Resistor	
R153	100	1/8W	SMD Thick Film Resistor	
R154	1K	1/8W	SMD Thick Film Resistor	
R155	120K	1/8W	SMD Thick Film Resistor	
R156	2K2	1/8W	SMD Thick Film Resistor	
R157	27K	1/8W	SMD Thick Film Resistor	
R158	3K9	1/8W	SMD Thick Film Resistor	
R159	10	1/8W	SMD Thick Film Resistor	
R160	1,5K	1/8W	SMD Thick Film Resistor	
R161	330	1/8W	SMD Thick Film Resistor	
R162	100	1/8W	SMD Thick Film Resistor	
R163	100	1/8W	SMD Thick Film Resistor	
R164	220	1/8W	SMD Thick Film Resistor	
R165	120K	1/8W	SMD Thick Film Resistor	
R166	27K	1/8W	SMD Thick Film Resistor	
R167	220	1/8W	SMD Thick Film Resistor	
R168	100	1/8W	SMD Thick Film Resistor	
R169	100	1/8W	SMD Thick Film Resistor	
R170	47K	1/8W	SMD Thick Film Resistor	
R171	47K	1/8W	SMD Thick Film Resistor	
R172	47K	1/8W	SMD Thick Film Resistor	
R173	47K	1/8W	SMD Thick Film Resistor	
R174	47K	1/8W	SMD Thick Film Resistor	
R175	100K	1/8W	SMD Thick Film Resistor	
R176	47K	1/8W	SMD Thick Film Resistor	
R177	470	1/8W	SMD Thick Film Resistor	



Rif.	Value	Remarks	Description	Code
R178	560	1/8W	SMD Thick Film Resistor	
R179	470K	1/8W	SMD Thick Film Resistor	
R180	1K	1/8W	SMD Thick Film Resistor	
R181	470	1/8W	SMD Thick Film Resistor	
R182	47K	1/8W	SMD Thick Film Resistor	
R183	47K	1/8W	SMD Thick Film Resistor	
R184	NC	1/4W	SMD Cermet Skeleton Trimmer Resistor	
R185	6K8	1/8W	SMD Thick Film Resistor	
R186	10	1/8W	SMD Thick Film Resistor	
R187	27K	1/8W	SMD Thick Film Resistor	
R188	470	1/8W	SMD Thick Film Resistor	
R189	47K	1/8W	SMD Thick Film Resistor	
R190	10	1/8W	SMD Thick Film Resistor	
R191	4K7	1/8W	SMD Thick Film Resistor	
R192	47K	1/8W	SMD Thick Film Resistor	
R193	NC	1/8W	SMD Thick Film Resistor	
R194	47K	1/8W	SMD Thick Film Resistor	
R195	NC	1/8W	SMD Thick Film Resistor	
R196	27K	1/8W	SMD Thick Film Resistor	
R197	47K	1/8W	SMD Thick Film Resistor	
R198	47K	1/8W	SMD Thick Film Resistor	
R199	100	1/8W	SMD Thick Film Resistor	
R200	12K	1/8W	SMD Thick Film Resistor	
R201	47K	1/8W	SMD Thick Film Resistor	
R202	4K7	1/8W	SMD Thick Film Resistor	
R203	100	1/8W	SMD Thick Film Resistor	
R204	27K	1/8W	SMD Thick Film Resistor	
R205	100K	1/8W	SMD Thick Film Resistor	
R206	15K	1/8W	SMD Thick Film Resistor	
R207	10K	1/8W	SMD Thick Film Resistor	
R208	4K7	1/8W	SMD Thick Film Resistor	
R209	4K7	1/8W	SMD Thick Film Resistor	
R210	2K2	1/8W	SMD Thick Film Resistor	
R211	50K	1/4W	SMD Cermet Skeleton Trimmer Resistor	
R212	10K	1/8W	SMD Thick Film Resistor	
R213	100	1/8W	SMD Thick Film Resistor	
R214	2K	1/4W	SMD Cermet Skeleton Trimmer Resistor	
R215	15K	1/8W	SMD Thick Film Resistor	
R216	22K	1/8W	SMD Thick Film Resistor	
R217	10K	1/8W	SMD Thick Film Resistor	
R218	4K7	1/8W	SMD Thick Film Resistor	
R219	10K	1/8W	SMD Thick Film Resistor	
R220	470K	1/8W	SMD Thick Film Resistor	
R221	470K	1/8W	SMD Thick Film Resistor	
R222	4K7	1/8W	SMD Thick Film Resistor	
R223	10K	1/8W	SMD Thick Film Resistor	
R224	10	1/8W	SMD Thick Film Resistor	
R225	470K	1/8W	SMD Thick Film Resistor	
R226	100nF	1/8W	SMD Thick Film Resistor	
R227	NC	1/8W	SMD Thick Film Resistor	
R228	10K	1/8W	SMD Thick Film Resistor	
R229	15K	1/8W	SMD Thick Film Resistor	



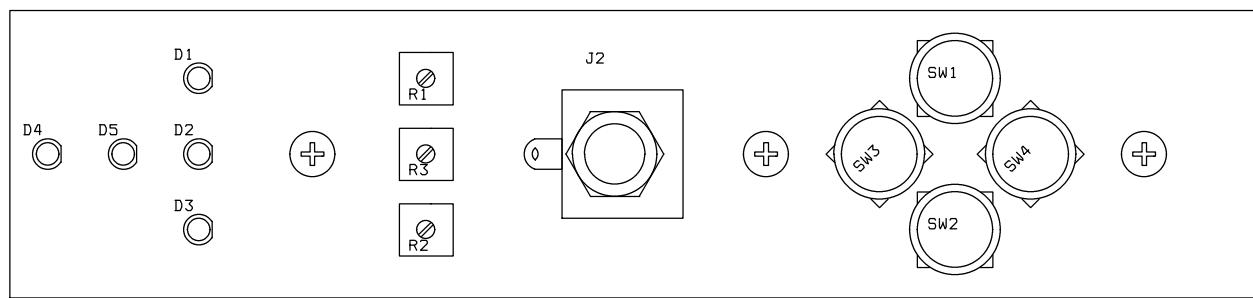
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R230	4K7	1/8W	SMD Thick Film Resistor	
R231	4K7	1/8W	SMD Thick Film Resistor	
R232	10K	1/8W	SMD Thick Film Resistor	
R233	2K2	1/8W	SMD Thick Film Resistor	
R234	100	1/8W	SMD Thick Film Resistor	
R235	10K	1/8W	SMD Thick Film Resistor	
R236	2K	1/8W	SMD Thick Film Resistor	
R237	15K	1/8W	SMD Thick Film Resistor	
R238	50K	1/8W	SMD Thick Film Resistor	
R239	22K	1/8W	SMD Thick Film Resistor	
R240	10K	1/8W	SMD Thick Film Resistor	
R241	4K7	1/8W	SMD Thick Film Resistor	
R242	10K	1/8W	SMD Thick Film Resistor	
R243	470K	1/8W	SMD Thick Film Resistor	
R244	470K	1/8W	SMD Thick Film Resistor	
R245	10	1/8W	SMD Thick Film Resistor	
R246	4K7	1/8W	SMD Thick Film Resistor	
R247	470K	1/8W	SMD Thick Film Resistor	
R248	100nF	1/8W	SMD Thick Film Resistor	
R249	NC	1/8W	SMD Thick Film Resistor	
R250	NC	1/8W	SMD Thick Film Resistor	
R251	6K8	1/8W	SMD Thick Film Resistor	
R252	6K8	1/8W	SMD Thick Film Resistor	
R253	6K8	1/8W	SMD Thick Film Resistor	
R254	6K8	1/8W	SMD Thick Film Resistor	
R255	6K8	1/8W	SMD Thick Film Resistor	
R256	0	1/8W	SMD Thick Film Resistor	
R257	0	1/8W	SMD Thick Film Resistor	
R258	6K8	1/8W	SMD Thick Film Resistor	
R259	6K8	1/8W	SMD Thick Film Resistor	
R260	6K8	1/8W	SMD Thick Film Resistor	
R261	6K8	1/8W	SMD Thick Film Resistor	
D1	LL4148		SMD Low Power Signal Diode	
D2	LL4148		SMD Low Power Signal Diode	
D3	LL4148		SMD Low Power Signal Diode	
D4	MMBS340T3		SMD Diode Schottky	
D5	-15V		SMD Light Emitting Diode	
D6	-5V		SMD Light Emitting Diode	
D7	LL4148		SMD Low Power Signal Diode	
D8	MMBS340T3		SMD Diode Schottky	
D9	+15V		SMD Light Emitting Diode	
D10	+5V		SMD Light Emitting Diode	
D11	SM4004		SMD Power Diode	
D12	LL4148		SMD Low Power Signal Diode	
D13	LL4148		SMD Low Power Signal Diode	
D14	LL4148		SMD Low Power Signal Diode	
D15	LL4148		SMD Low Power Signal Diode	
D16	3V3		SMD Diode Zener	
D17	BAT41		SMD Diode Schottky	
D18	BAT41		SMD Diode Schottky	
D19	LL4148		SMD Low Power Signal Diode	

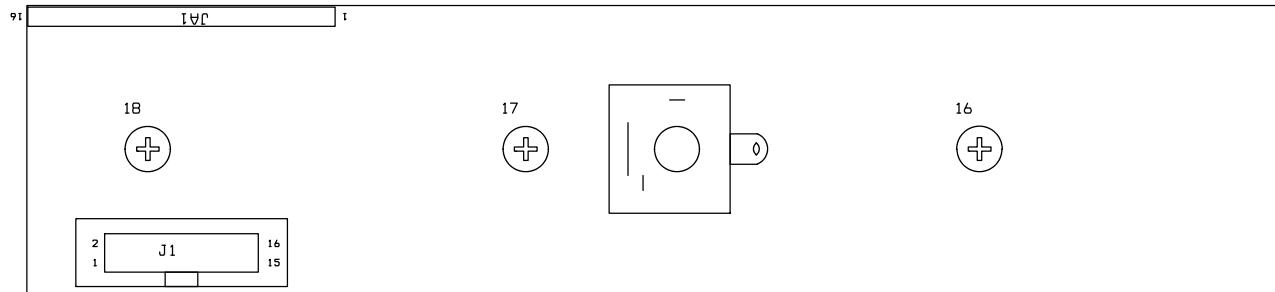


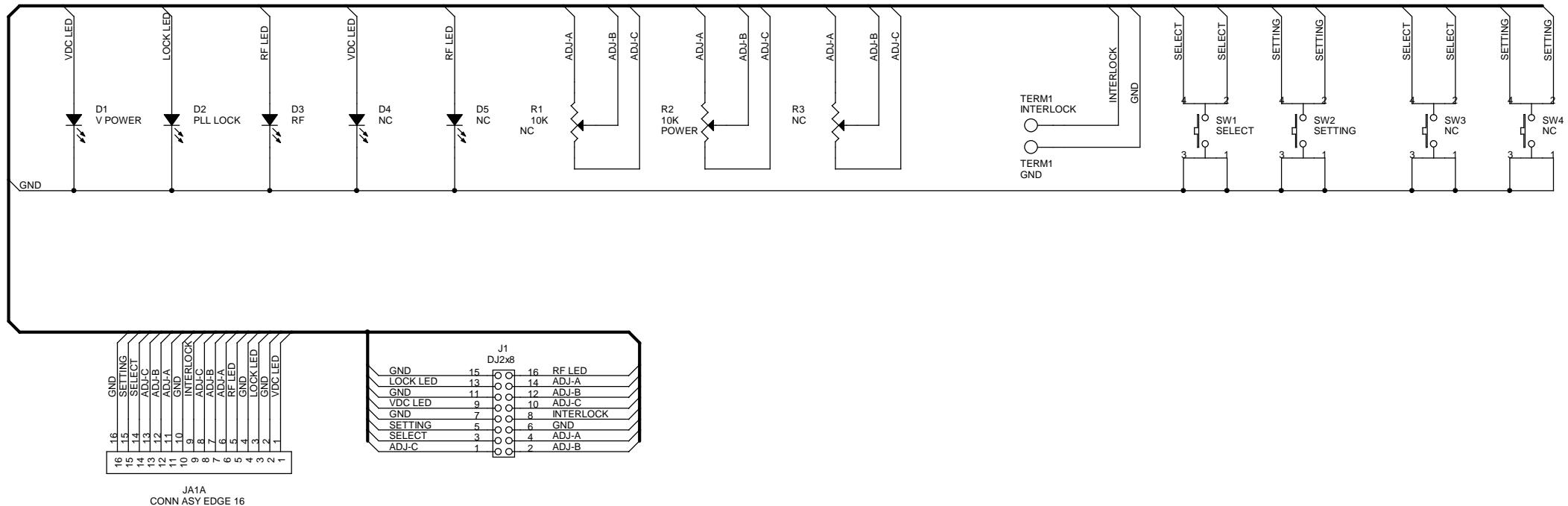
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D20	LL4148		SMD Low Power Signal Diode	
D21	LL4148		SMD Low Power Signal Diode	
D22	LL4148		SMD Low Power Signal Diode	
D23	LL4148		SMD Low Power Signal Diode	
D24	5V1		SMD Diode Zener	
D25	LED		SMD Light Emitting Diode	
D26	LL4148		SMD Low Power Signal Diode	
D27	LL4148		SMD Low Power Signal Diode	
D28	NC		SMD Diode Zener	
D29	NC		SMD Low Power Signal Diode	
D30	LL4148		SMD Low Power Signal Diode	
D31	LL4148		SMD Low Power Signal Diode	
D32	LL4148		SMD Low Power Signal Diode	
D33	15V		SMD Diode Zener	
D34	15V		SMD Diode Zener	
Q1	BC807-25L		SMD Low Power Bipolar Transistor	
Q2	BC807-25L		SMD Low Power Bipolar Transistor	
Q3	BC807-25L		SMD Low Power Bipolar Transistor	
Q4	BC807-25L		SMD Low Power Bipolar Transistor	
Q5	BC807-25L		SMD Low Power Bipolar Transistor	
Q6	BC807-25L		SMD Low Power Bipolar Transistor	
Q7	BC817-25L		SMD Low Power Bipolar Transistor	
Q8	BDX53		Medium Power Bipolar Transistor	
Q9	BC807-25L		SMD Low Power Bipolar Transistor	
Q10	BC817-25L		SMD Low Power Bipolar Transistor	
Q11	BC817-25L		SMD Low Power Bipolar Transistor	
U1	LT1374CR		Special Function Integrated Circuit	
U2	79M05		Fixed Voltage Regulator	
U3	78S15		Fixed Voltage Regulator	
U4	LT1374CR		Special Function Integrated Circuit	
U5	78M05		Fixed Voltage Regulator	
U6	LM353/SO		SMD Operational Amplifier	
U7	N5532		SMD Operational Amplifier	
U8	LM353/SO		SMD Operational Amplifier	
U9	LF347/SO		SMD Operational Amplifier	
U10	ADC0834CCWM		Special Function Integrated Circuit	
U11	MAX810L		Special Function Integrated Circuit	
U12	AT89C51ED2		Microprocessor	
U13	HIN232ACBN		Special Function Integrated Circuit	
U14	LM324A/SO		SMD Operational Amplifier	
U15	LMX1501		Special Function Integrated Circuit	
U16	LM324A/SO		SMD Operational Amplifier	
U17	LM324A/SO		SMD Operational Amplifier	
SW1	DB9 MONITOR		Slide Switcher	
TCXO1	MHz 12.800		Crystal Oscillator Module	
Y1	11.0592MHz		Quartz Crystal	
LCD1	DISPLAY		Male PCB Mounting Header	
FILT1	FILTER 19KHz		Audio Filter	



Rif.	Value	Remarks	Description	Code
J1	POWER		Panel Mount Terminal Bloks	
J2	DJ2x13		Male PCB Mounting Header	
J3	BNC		BNC Panel Connector - 50 Ohm	
J4	BNC		BNC Panel Connector - 50 Ohm	
J5	DJ3		Male PCB Mounting Header	
J6	BNC		BNC Panel Connector - 50 Ohm	
J7	SMB		SMB PCB Socket - 50 Ohm	
J8	XLR		Audio Connector - XLR Style Palastic	
J9	SMB		SMB PCB Socket - 50 Ohm	
J10	SMB		SMB PCB Socket - 50 Ohm	
J11	CODER ST		Male PCB Mounting Header	
J12	BNC		BNC Panel Connector - 50 Ohm	
J13	DB9_AUX		Male PCB Mounting Header	
J14	DB9		Female Connector DB9	
J15	VDC+15		Male PCB Mounting Header	
J16	SHUNT		Male PCB Mounting Header	
J17	VU METER		Male PCB Mounting Header	
J18	AUDIO		Male PCB Mounting Header	
J19	DJ3		Male PCB Mounting Header	
J20	DJ3		Male PCB Mounting Header	
J21	OUT		Male PCB Mounting Header	
J22	MONO		Male PCB Mounting Header	
J23	FILTER		Male PCB Mounting Header	
J24	DJ2		Male PCB Mounting Header	
J26	TP TCXO		Test Point	
J27	S		Male PCB Mounting Header	
J28	S		Male PCB Mounting Header	
J29	N		Male PCB Mounting Header	
J30	TP PHASE R		Test Point	
J31	N		Male PCB Mounting Header	
J32	TP PHASE P		Test Point	
J33	P		Male PCB Mounting Header	
J34	P		Male PCB Mounting Header	
J36	TP CLOCK		Test Point	
J37	TP DATA		Test Point	
J38	TP LE		Test Point	
J39	SIGNAL LOCK		Male PCB Mounting Header	
J40	TP LOCK		Test Point	
J41	TP RF POWER		Test Point	
J42	TP INTERLOCK		Test Point	
J43	TP BLOCK		Test Point	
J44	TP MAX RFL		Test Point	
J45	TP MAX FWD		Test Point	
J46	TP FREQ. P		Test Point	
J47	TP FREQ. R		Test Point	
J48	DJ2x5		Male PCB Mounting Header	
JR1	DISPLAY		Male PCB Mounting Header	



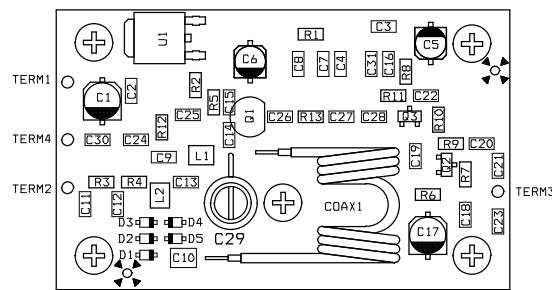


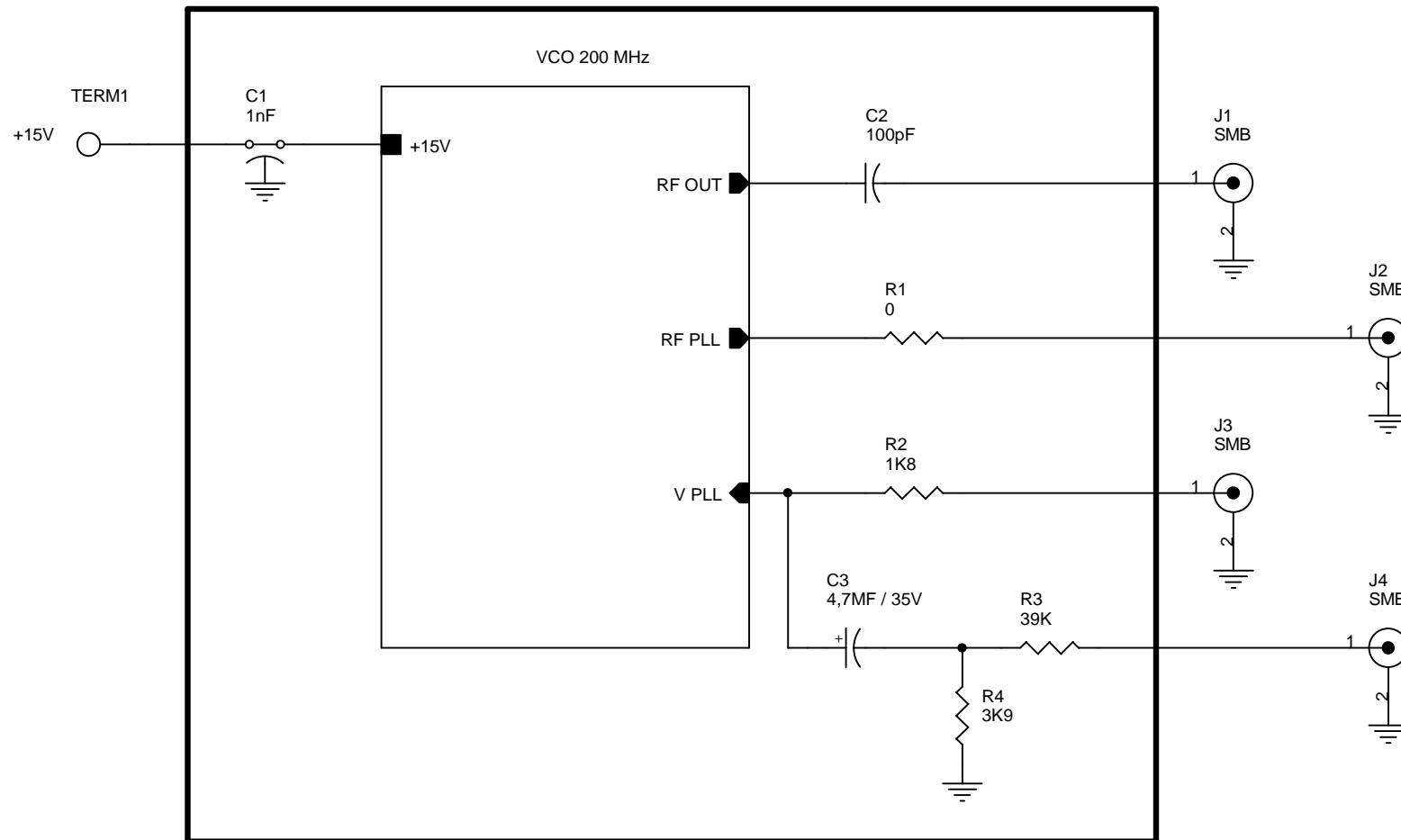


Title		FRONTAL PANEL
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Part List Schematic : FP-TX





Title

VCO MHz 200

Size A Document Number

Mod. VCO03-200

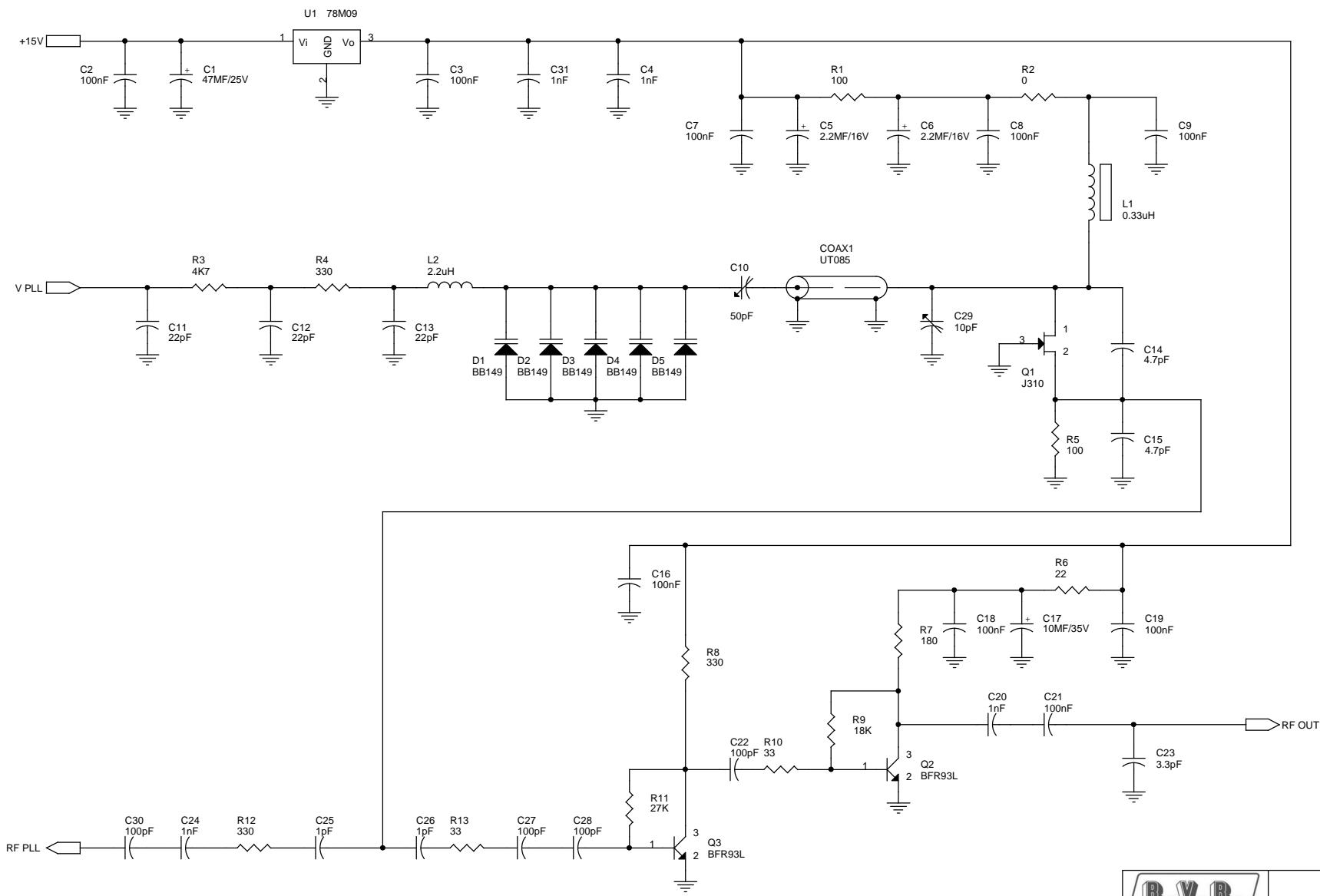
Rev 1.0

Date:

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Title

VCO MHz 200

Size B	Document Number
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B

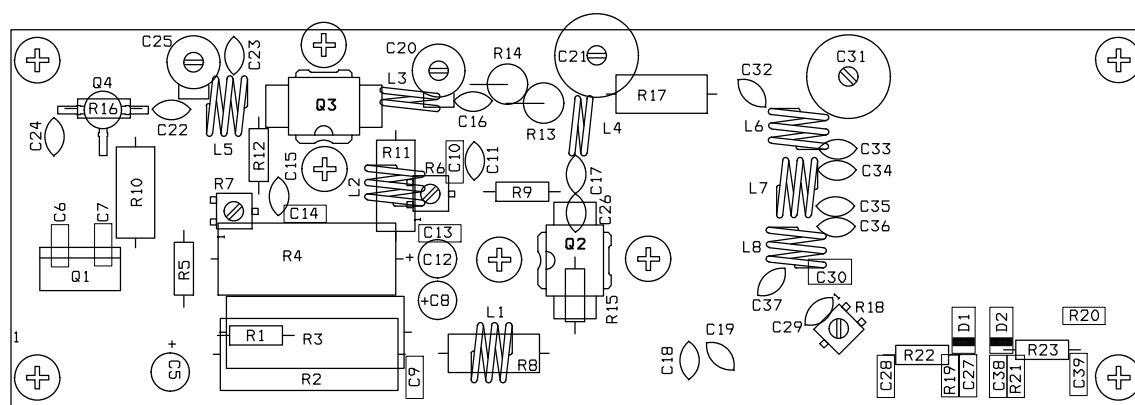
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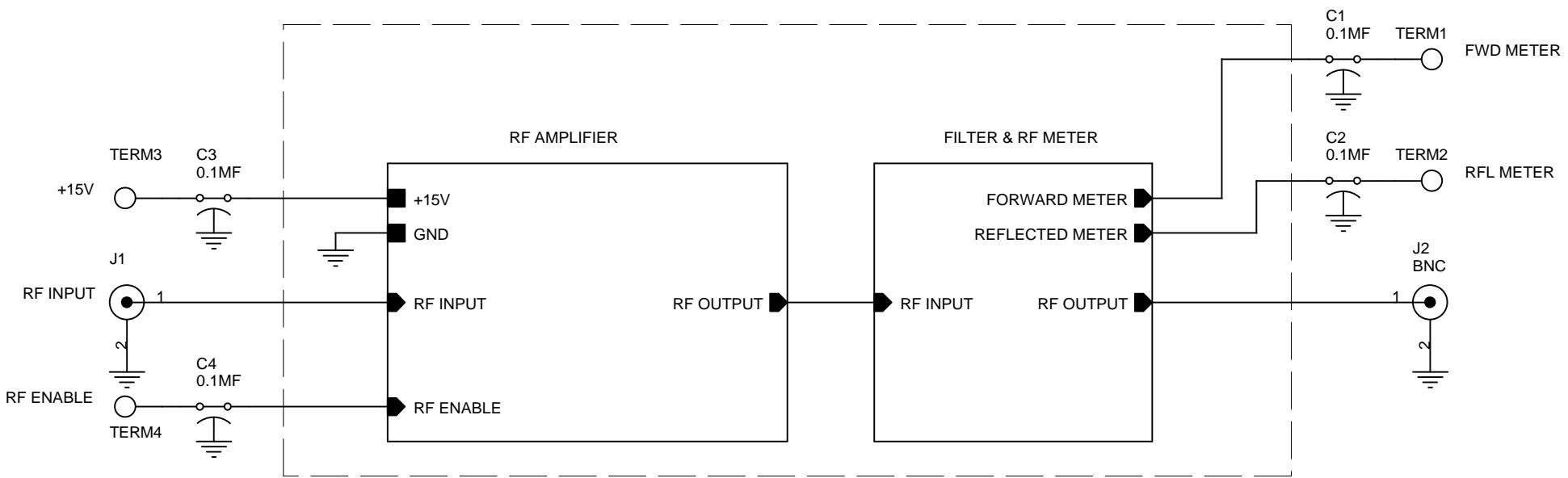


Part List Schematic : VCO 200 MHz

Rif.	Value	Remarks	Description	Code
C1	47MF	35V	Aluminium Electrolytic Capacitor	
C2	100nF		SMD Multilayer Ceramic Capacitor	
C3	100nF		SMD Multilayer Ceramic Capacitor	
C4	1nF		SMD Multilayer Ceramic Capacitor	
C5	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C6	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C7	100nF		SMD Multilayer Ceramic Capacitor	
C8	100nF		SMD Multilayer Ceramic Capacitor	
C9	100nF		SMD Multilayer Ceramic Capacitor	
C10	50pF		Trimmer Ceramic Capacitor	
C11	22pF		SMD Multilayer Ceramic Capacitor	
C12	22pF		SMD Multilayer Ceramic Capacitor	
C13	22pF		SMD Multilayer Ceramic Capacitor	
C14	4.7pF		SMD Multilayer Ceramic Capacitor	
C15	4.7pF		SMD Multilayer Ceramic Capacitor	
C16	100nF		SMD Multilayer Ceramic Capacitor	
C17	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C18	100nF		SMD Multilayer Ceramic Capacitor	
C19	100nF		SMD Multilayer Ceramic Capacitor	
C20	1nF		SMD Multilayer Ceramic Capacitor	
C21	100nF		SMD Multilayer Ceramic Capacitor	
C22	100pF		SMD Multilayer Ceramic Capacitor	
C23	3.3pF		SMD Multilayer Ceramic Capacitor	
C24	1nF		SMD Multilayer Ceramic Capacitor	
C25	1pF		SMD Multilayer Ceramic Capacitor	
C26	1pF		SMD Multilayer Ceramic Capacitor	
C27	100pF		SMD Multilayer Ceramic Capacitor	
C28	100pF		SMD Multilayer Ceramic Capacitor	
C29	10pF		SMD Multilayer Ceramic Capacitor	
C30	100pF		SMD Multilayer Ceramic Capacitor	
C31	1nF		SMD Multilayer Ceramic Capacitor	
L1	330nH		Ferrite Drum Cored Inductor	
L2	2.2uH		SMD Inductor	
R1	100	1/4W	SMD Thick Film Resistor	
R2	0	1/4W	SMD Thick Film Resistor	
R3	4K7	1/4W	SMD Thick Film Resistor	
R4	330	1/4W	SMD Thick Film Resistor	
R5	100	1/4W	SMD Thick Film Resistor	
R6	22	1/4W	SMD Thick Film Resistor	
R7	180	1/4W	SMD Thick Film Resistor	
R8	330	1/4W	SMD Thick Film Resistor	
R9	18K	1/4W	SMD Thick Film Resistor	
R10	33	1/4W	SMD Thick Film Resistor	
R11	27K	1/4W	SMD Thick Film Resistor	
R12	330	1/4W	SMD Thick Film Resistor	







Title

RF AMPLIFIER 200MHz 10W

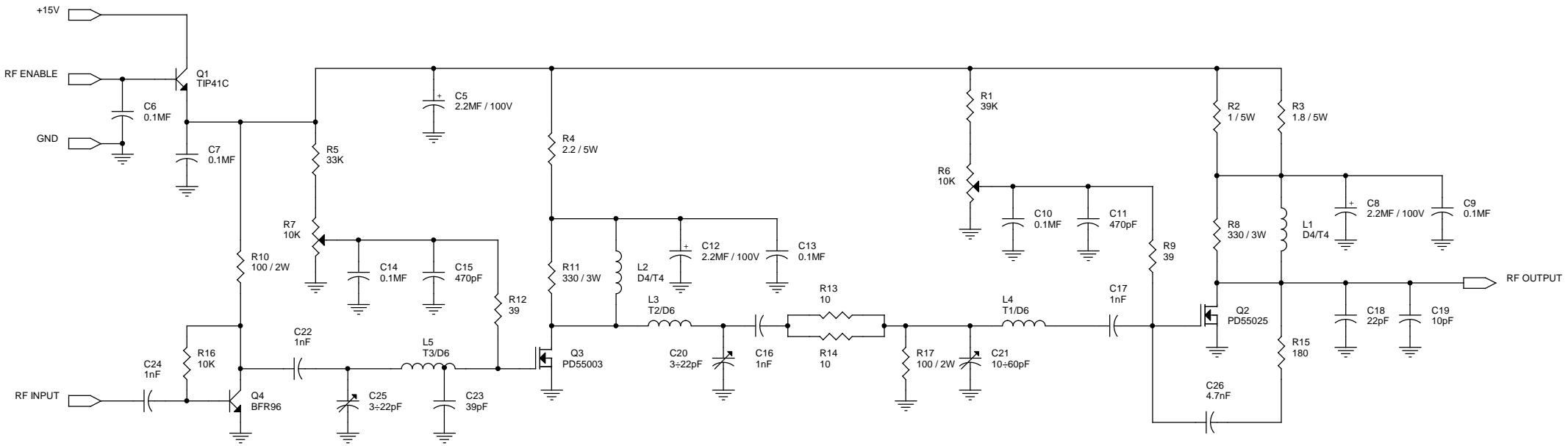
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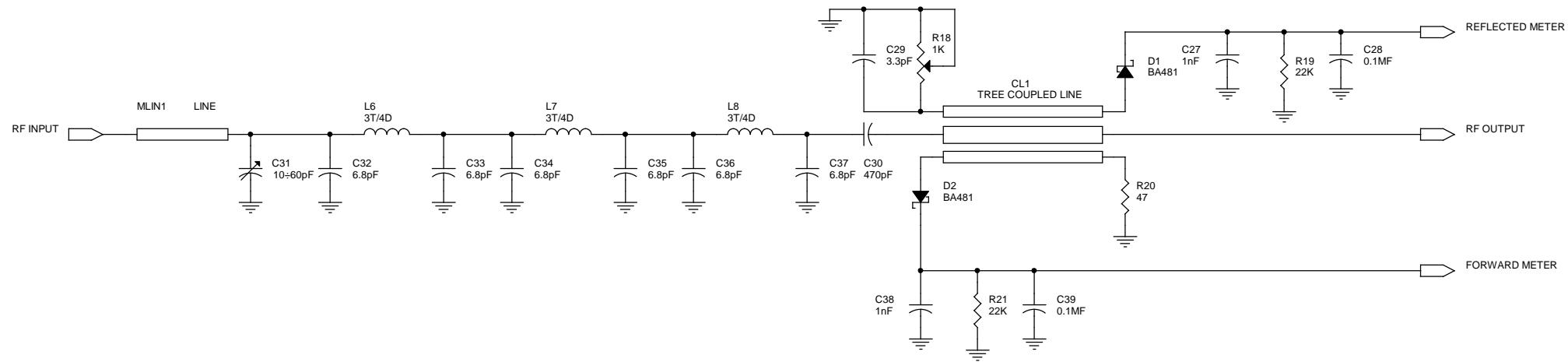
Mod. FM200-10-C

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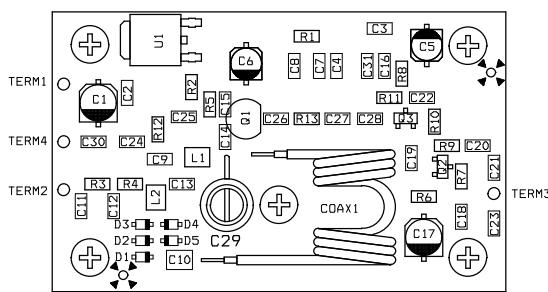
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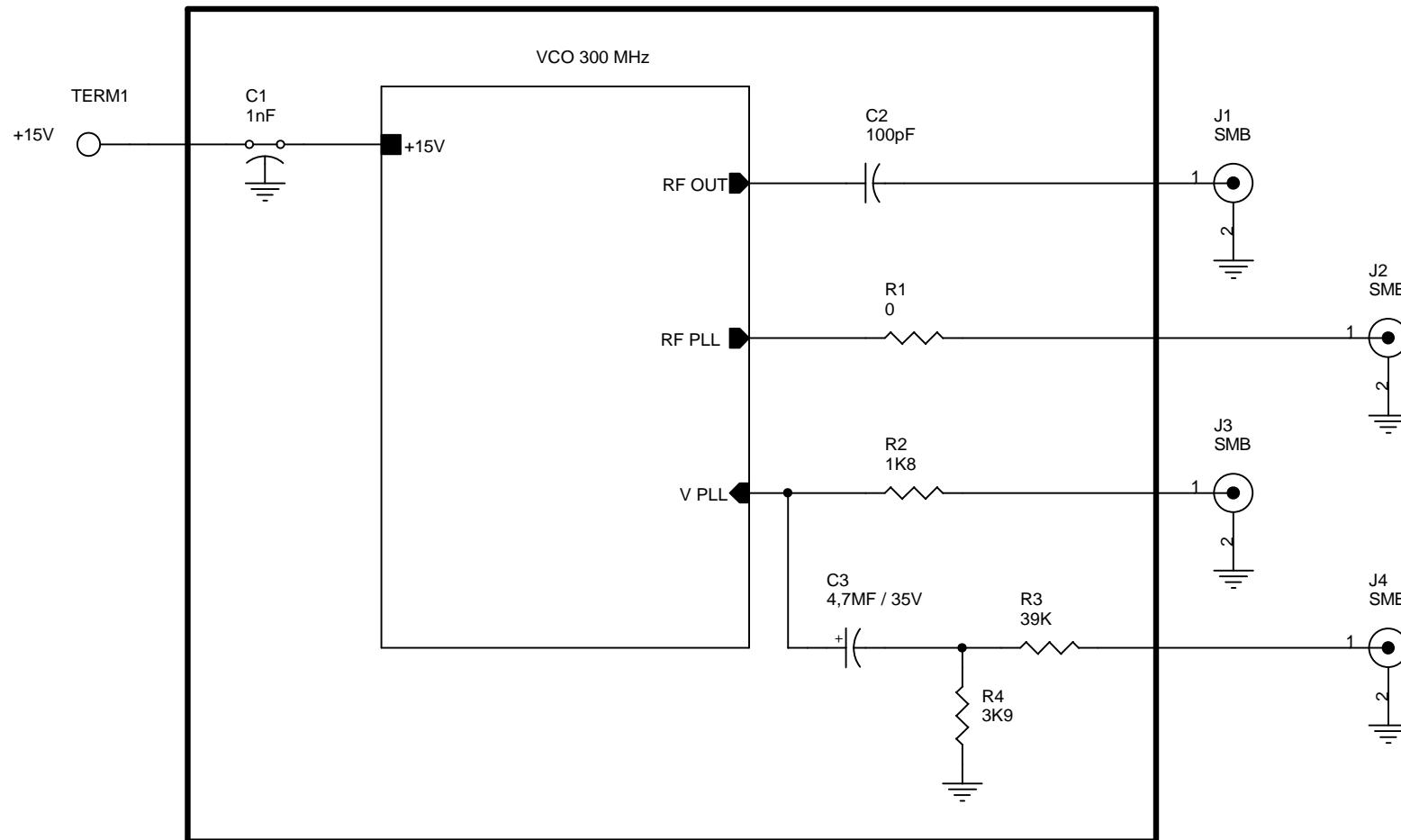


Part List Schematic : 200-10-C

Rif.	Value	Remarks	Description	Code
C1	0.1MF		Ceramic Lead Through Capacitor	
C2	0.1MF		Ceramic Lead Through Capacitor	
C3	0.1MF		Ceramic Lead Through Capacitor	
C4	0.1MF		Ceramic Lead Through Capacitor	
C5	2.2MF	100V	Aluminium Electrolytic Capacitor	
C6	0.1MF		SMD Multilayer Ceramic Capacitor	
C7	0.1MF		SMD Multilayer Ceramic Capacitor	
C8	2.2MF	100V	Aluminium Electrolytic Capacitor	
C9	0.1MF		SMD Multilayer Ceramic Capacitor	
C10	0.1MF		SMD Multilayer Ceramic Capacitor	
C11	470pF		SMD Multilayer Ceramic Capacitor	
C12	2.2MF	100V	Aluminium Electrolytic Capacitor	
C13	0.1MF		SMD Multilayer Ceramic Capacitor	
C14	0.1MF		SMD Multilayer Ceramic Capacitor	
C15	470pF		Ceramic Disc Capacitor NPO	
C16	1nF		Ceramic Disc Capacitor NPO	
C17	1nF		Ceramic Disc Capacitor NPO	
C18	22pF		Ceramic Disc Capacitor NPO	
C19	10pF		Ceramic ATC Capacitor	
C20	3÷22pF		Ceramic Disc Capacitor NPO	
C21	10÷60pF		Trimmer Polyethylene Film Capacitor	
C22	1nF		Ceramic Disc Capacitor NPO	
C23	39pF		Ceramic Disc Capacitor NPO	
C24	1nF		Ceramic Disc Capacitor NPO	
C25	3÷22pF		Trimmer Polyethylene Film Capacitor	
C26	4.7nF		Ceramic Disc Capacitor NPO	
C27	1nF		Ceramic Disc Capacitor NPO	
C28	0.1MF		SMD Multilayer Ceramic Capacitor	
C29	3.3pF		Ceramic Disc Capacitor NPO	
C30	470pF		Ceramic Disc Capacitor NPO	
C31	10÷60pF		Trimmer Polyethylene Film Capacitor	
C32	6.8pF		Ceramic Disc Capacitor NPO	
C33	6.8pF		Ceramic Disc Capacitor NPO	
C34	6.8pF		Ceramic Disc Capacitor NPO	
C35	6.8pF		Ceramic Disc Capacitor NPO	
C36	6.8pF		Ceramic Disc Capacitor NPO	
C37	6.8pF		Ceramic Disc Capacitor NPO	
C38	1nF		Ceramic Disc Capacitor NPO	
C39	0.1MF		SMD Multilayer Ceramic Capacitor	
L1	D4/T4		Enamelled Copper Wire	
L2	D4/T4		Enamelled Copper Wire	
L3	T2/D6		Tinned Copper Wire	
L4	T1/D6		Tinned Copper Wire	
L5	T3/D6		Tinned Copper Wire	
L6	3T/4D		Enamelled Copper Wire	
L7	3T/4D		Enamelled Copper Wire	
L8	3T/4D		Enamelled Copper Wire	







Title

VCO MHz 300

Size A Document Number

Mod. VCO03-300

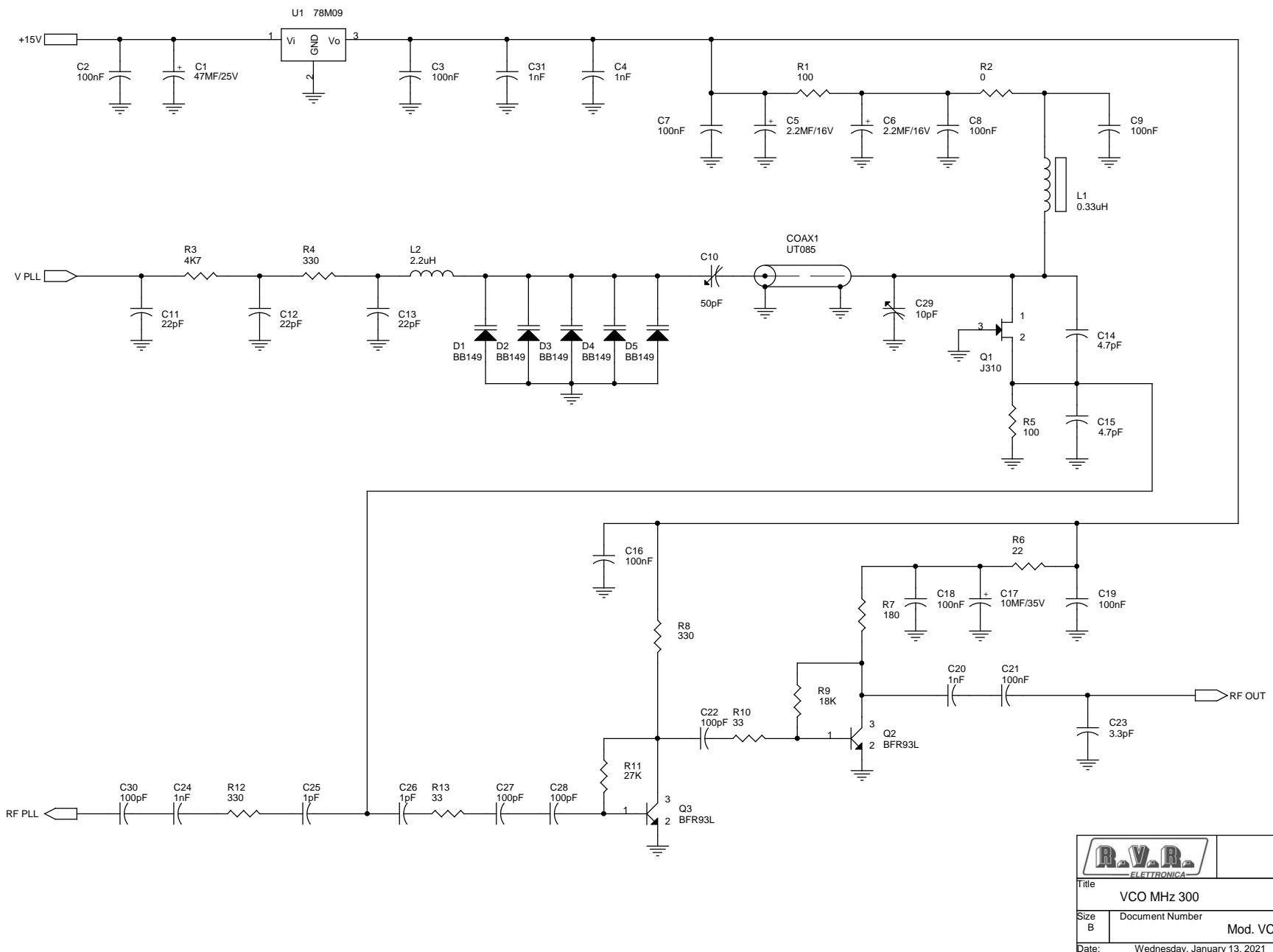
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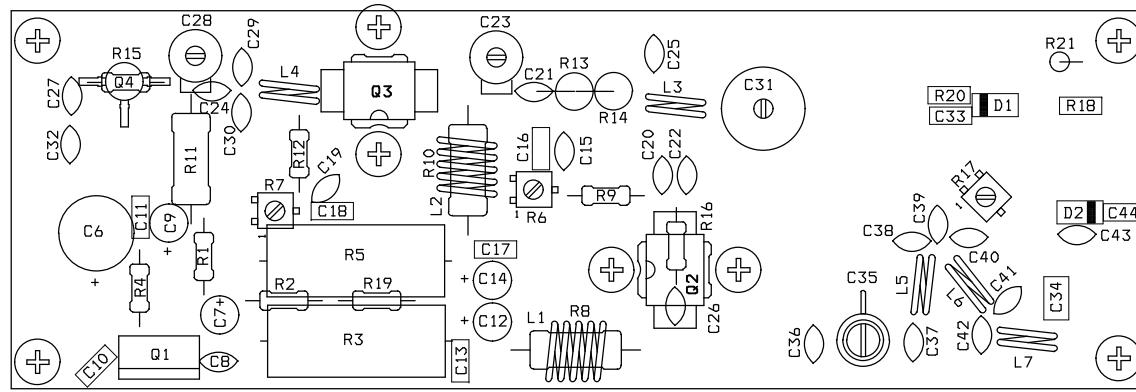
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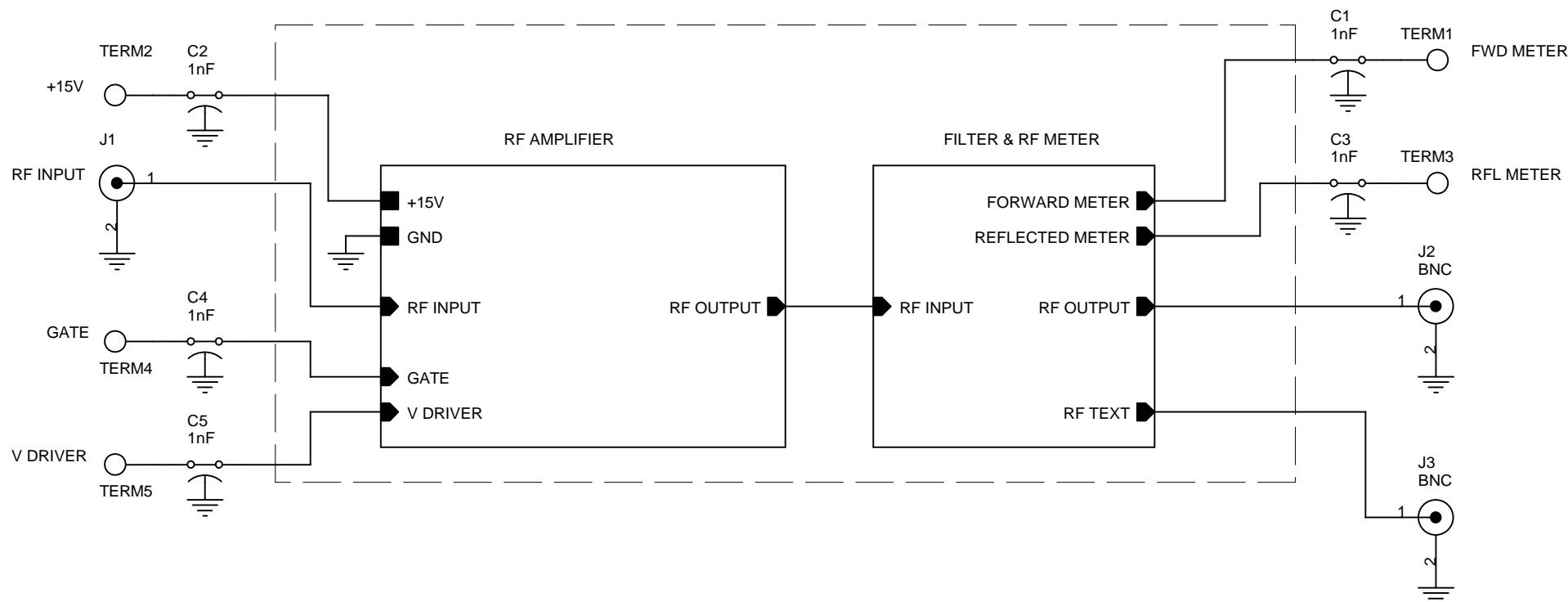


Part List Schematic : VCO 300 MHz

Rif.	Value	Remarks	Description	Code
C1	47MF	35V	Aluminium Electrolytic Capacitor	
C2	100nF		SMD Multilayer Ceramic Capacitor	
C3	100nF		SMD Multilayer Ceramic Capacitor	
C4	1nF		SMD Multilayer Ceramic Capacitor	
C5	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C6	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C7	100nF		SMD Multilayer Ceramic Capacitor	
C8	100nF		SMD Multilayer Ceramic Capacitor	
C9	100nF		SMD Multilayer Ceramic Capacitor	
C10	50pF		Trimmer Ceramic Capacitor	
C11	22pF		SMD Multilayer Ceramic Capacitor	
C12	22pF		SMD Multilayer Ceramic Capacitor	
C13	22pF		SMD Multilayer Ceramic Capacitor	
C14	4.7pF		SMD Multilayer Ceramic Capacitor	
C15	4.7pF		SMD Multilayer Ceramic Capacitor	
C16	100nF		SMD Multilayer Ceramic Capacitor	
C17	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C18	100nF		SMD Multilayer Ceramic Capacitor	
C19	100nF		SMD Multilayer Ceramic Capacitor	
C20	1nF		SMD Multilayer Ceramic Capacitor	
C21	100nF		SMD Multilayer Ceramic Capacitor	
C22	100pF		SMD Multilayer Ceramic Capacitor	
C23	3.3pF		SMD Multilayer Ceramic Capacitor	
C24	1nF		SMD Multilayer Ceramic Capacitor	
C25	1pF		SMD Multilayer Ceramic Capacitor	
C26	1pF		SMD Multilayer Ceramic Capacitor	
C27	100pF		SMD Multilayer Ceramic Capacitor	
C28	100pF		SMD Multilayer Ceramic Capacitor	
C29	10pF		SMD Multilayer Ceramic Capacitor	
C30	100pF		SMD Multilayer Ceramic Capacitor	
C31	1nF		SMD Multilayer Ceramic Capacitor	
L1	330nH		Ferrite Drum Cored Inductor	
L2	2.2uH		SMD Inductor	
R1	100	1/4W	SMD Thick Film Resistor	
R2	0	1/4W	SMD Thick Film Resistor	
R3	4K7	1/4W	SMD Thick Film Resistor	
R4	330	1/4W	SMD Thick Film Resistor	
R5	100	1/4W	SMD Thick Film Resistor	
R6	22	1/4W	SMD Thick Film Resistor	
R7	180	1/4W	SMD Thick Film Resistor	
R8	330	1/4W	SMD Thick Film Resistor	
R9	18K	1/4W	SMD Thick Film Resistor	
R10	33	1/4W	SMD Thick Film Resistor	
R11	27K	1/4W	SMD Thick Film Resistor	
R12	330	1/4W	SMD Thick Film Resistor	







Title

RF AMPLIFIER 300MHz 10W

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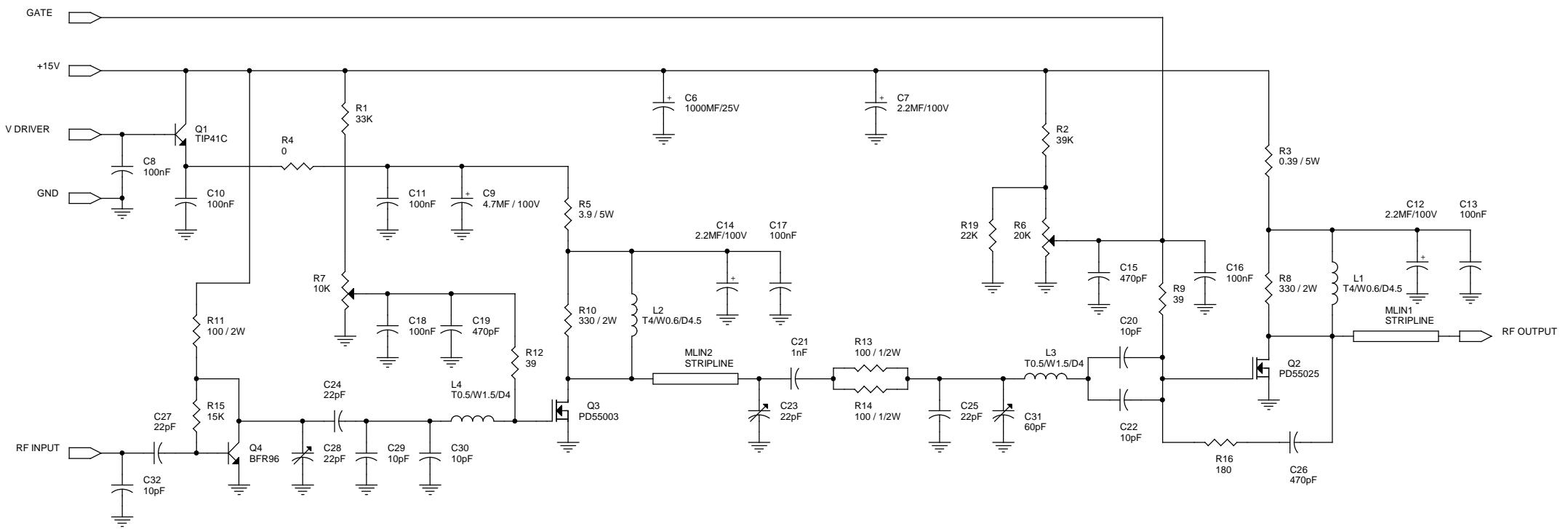
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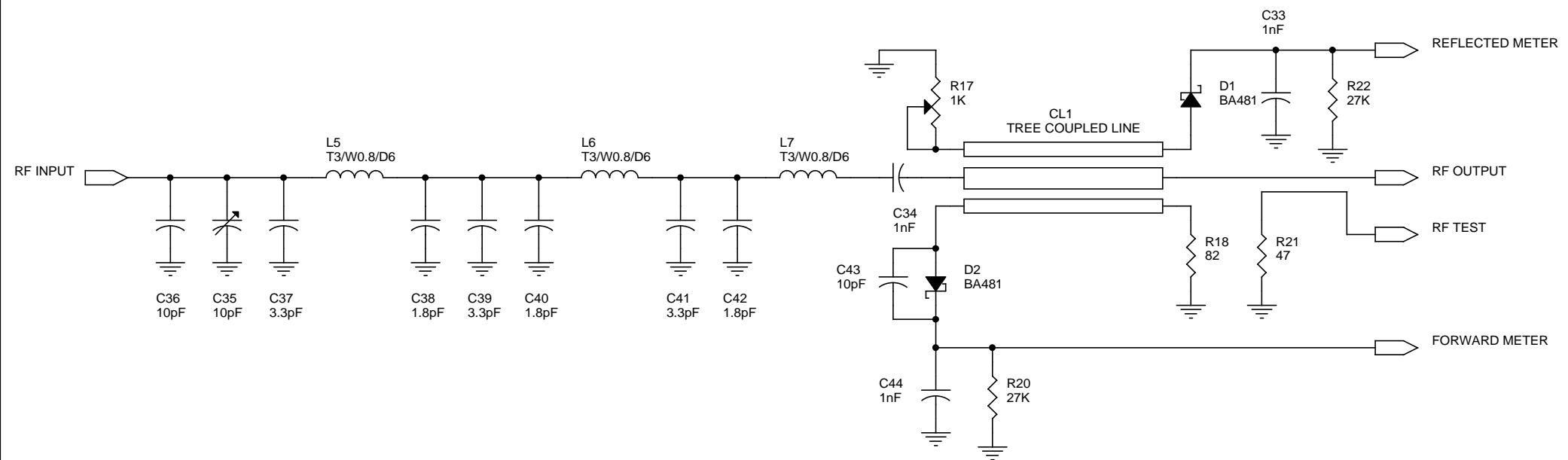
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FILTER & METER

Size

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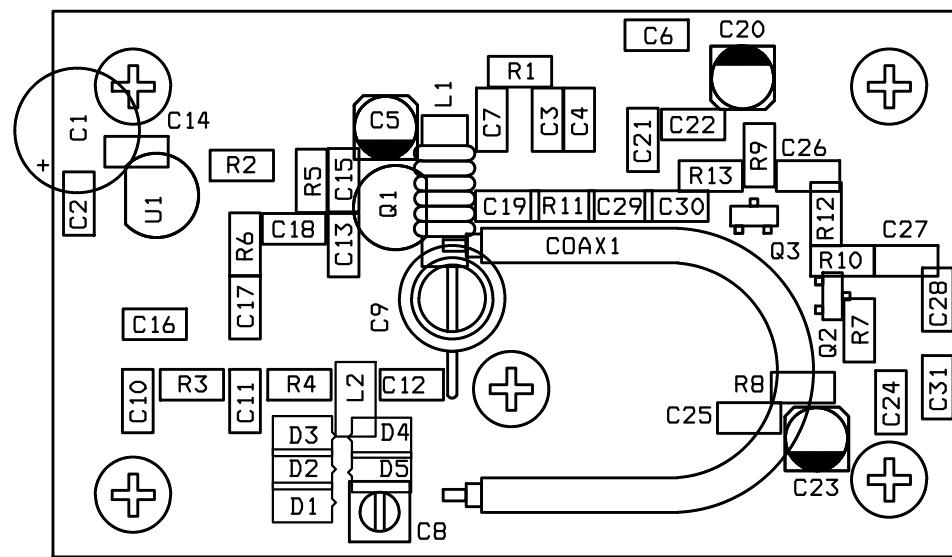
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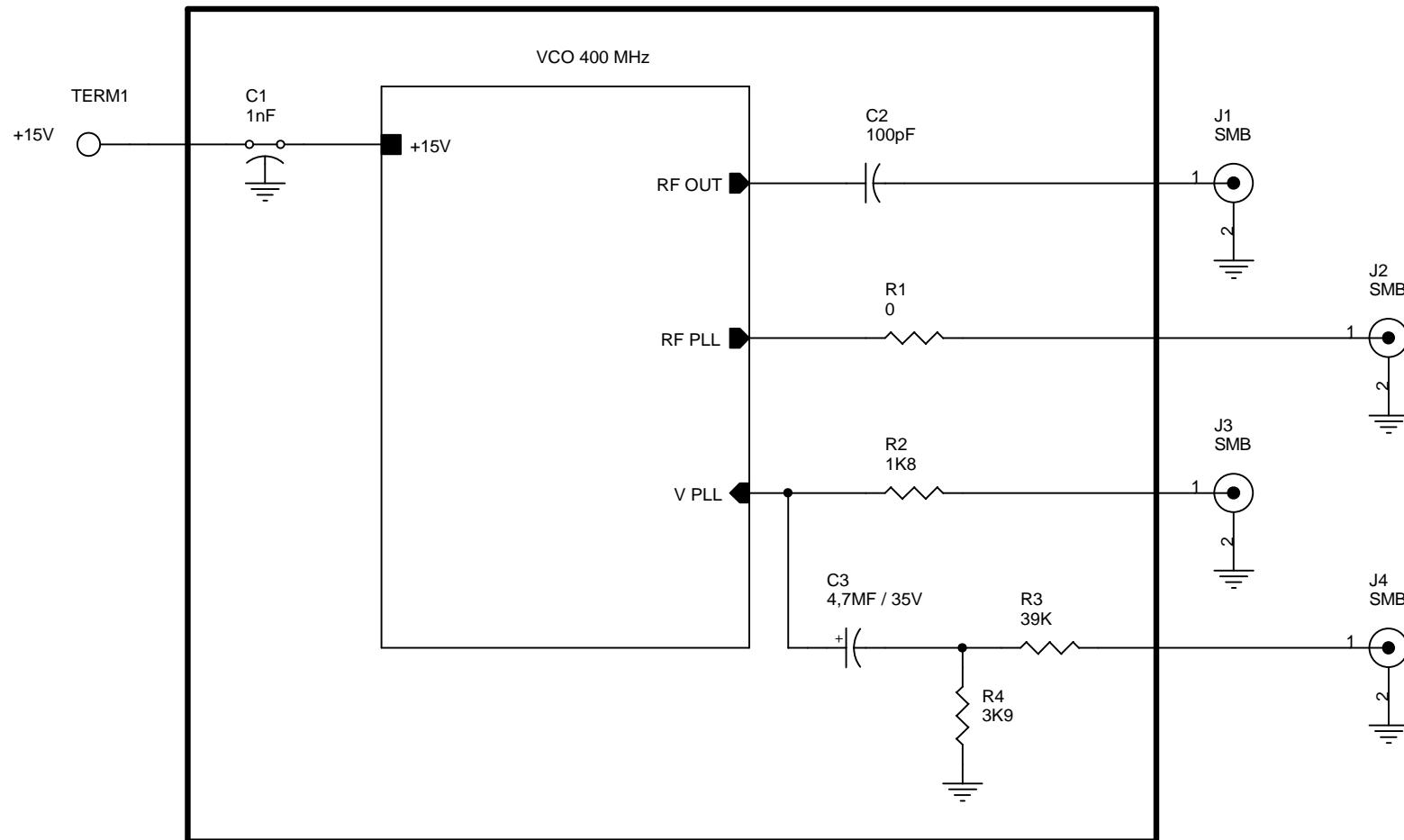


Part List Schematic : RF AMPLIFIER 300 MHz 10W

Rif.	Value	Remarks	Description	Code
C1	1nF		Ceramic Lead Through Capacitor	
C2	1nF		Ceramic Lead Through Capacitor	
C3	1nF		Ceramic Lead Through Capacitor	
C4	1nF		Ceramic Lead Through Capacitor	
C5	1nF		Ceramic Lead Through Capacitor	
C6	1000MF	25V	Aluminium Electrolytic Capacitor	
C7	2.2MF	100V	Aluminium Electrolytic Capacitor	
C8	100nF		SMD Multilayer Ceramic Capacitor	
C9	4.7MF	100V	Aluminium Electrolytic Capacitor	
C10	100nF		SMD Multilayer Ceramic Capacitor	
C11	100nF		SMD Multilayer Ceramic Capacitor	
C12	2.2MF	100V	Aluminium Electrolytic Capacitor	
C13	100nF		SMD Multilayer Ceramic Capacitor	
C14	2.2MF	100V	Aluminium Electrolytic Capacitor	
C15	470pF		Ceramic Disc Capacitor NPO	
C16	100nF		SMD Multilayer Ceramic Capacitor	
C17	100nF		SMD Multilayer Ceramic Capacitor	
C18	100nF		SMD Multilayer Ceramic Capacitor	
C19	470pF		Ceramic Disc Capacitor NPO	
C20	10pF		Ceramic Disc Capacitor NPO	
C21	1nF		Ceramic Disc Capacitor NPO	
C22	10pF		Ceramic Disc Capacitor NPO	
C23	22pF		Trimmer Polyethylene Film Capacitor	
C24	22pF		Ceramic Disc Capacitor NPO	
C25	22pF		Ceramic Disc Capacitor NPO	
C26	470pF		Ceramic Disc Capacitor NPO	
C27	22pF		Ceramic Disc Capacitor NPO	
C28	22pF		Trimmer Polyethylene Film Capacitor	
C29	10pF		Ceramic Disc Capacitor NPO	
C30	10pF		Ceramic Disc Capacitor NPO	
C31	60pF		Trimmer Polyethylene Film Capacitor	
C32	10pF		Ceramic Disc Capacitor NPO	
C33	1nF		SMD Multilayer Ceramic Capacitor	
C34	1nF		SMD Ceramic ATC Capacitor	
C35	10pF		Trimmer Ceramic Capacitor	
C36	10pF		Ceramic Disc Capacitor NPO	
C37	3.3pF		Ceramic Disc Capacitor NPO	
C38	1.8pF		Ceramic Disc Capacitor NPO	
C39	3.3pF		Ceramic Disc Capacitor NPO	
C40	1.8pF		Ceramic Disc Capacitor NPO	
C41	3.3pF		Ceramic Disc Capacitor NPO	
C42	1.8pF		Ceramic Disc Capacitor NPO	
C43	10pF		Ceramic Disc Capacitor NPO	
C44	1nF		SMD Multilayer Ceramic Capacitor	
L1	T4/W0.6/D4.5		Enamelled Copper Wire	
L2	T4/W0.6/D4.5		Enamelled Copper Wire	
L3	T0.5/W1.5/D4		Enamelled Copper Wire	
L4	T0.5/W1.5/D4		Enamelled Copper Wire	







Title

VCO MHz 400

Size Document Number

Mod. VCO03-400

Rev

1.0

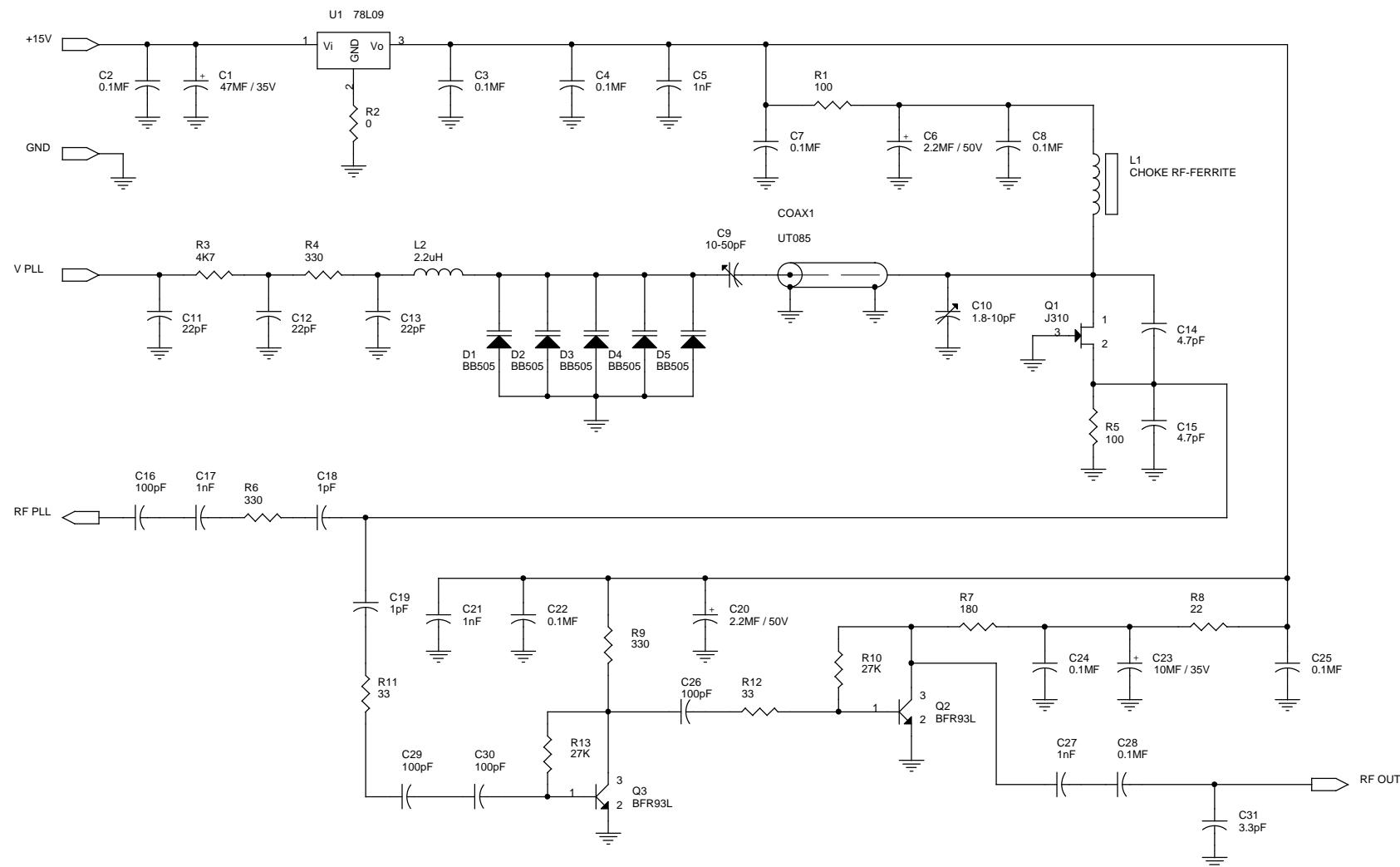
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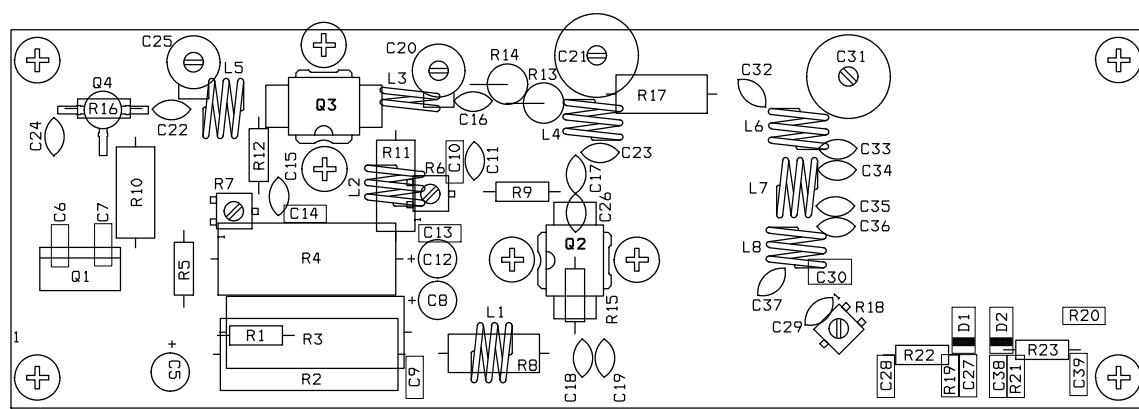
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Size B	Document Number Mod. VCO03-400	Rev 1.0
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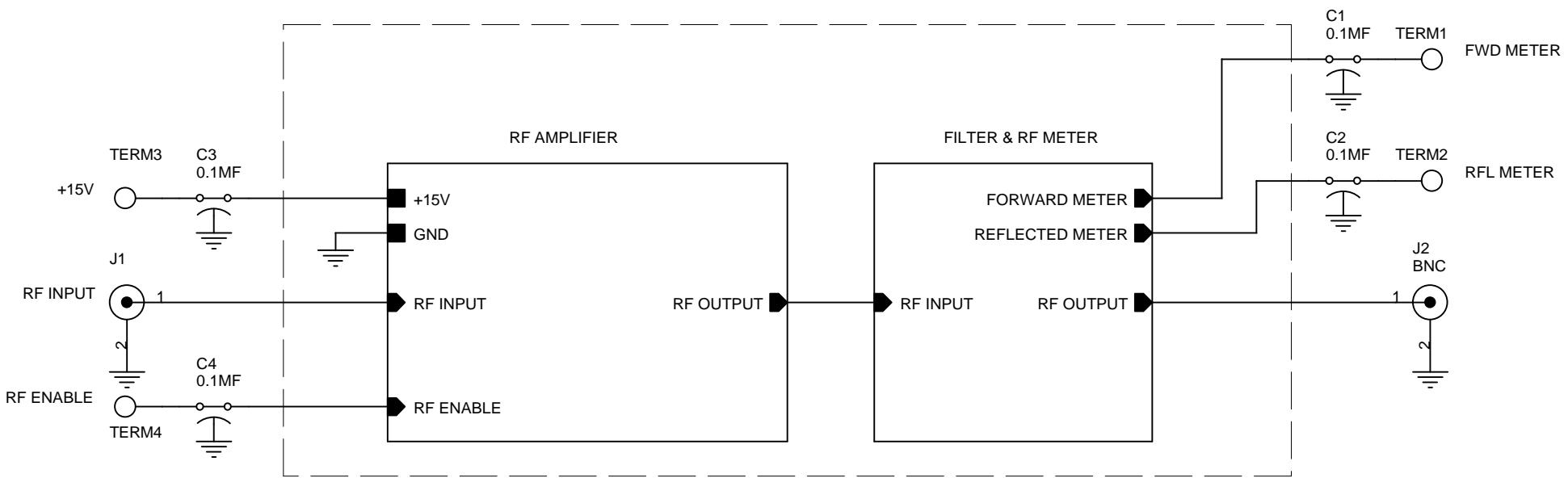


Part List Schematic : VCO 400 MHz

Rif.	Value	Remarks	Description	Code
C1	47MF	35V	Aluminium Electrolytic Capacitor	
C2	0.1MF		SMD Multilayer Ceramic Capacitor	
C3	0.1MF		SMD Multilayer Ceramic Capacitor	
C4	1nF		SMD Multilayer Ceramic Capacitor	
C5	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C6	0.1MF		SMD Multilayer Ceramic Capacitor	
C7	0.1MF		SMD Multilayer Ceramic Capacitor	
C8	10-50pF		SMD Multilayer Ceramic Capacitor	
C9	1.8-10pF		SMD Multilayer Ceramic Capacitor	
C10	22pF		SMD Multilayer Ceramic Capacitor	
C11	22pF		SMD Multilayer Ceramic Capacitor	
C12	22pF		SMD Multilayer Ceramic Capacitor	
C13	4.7pF		SMD Multilayer Ceramic Capacitor	
C14	0.1MF		SMD Multilayer Ceramic Capacitor	
C15	4.7pF		SMD Multilayer Ceramic Capacitor	
C16	100pF		SMD Multilayer Ceramic Capacitor	
C17	1nF		SMD Multilayer Ceramic Capacitor	
C18	1pF		SMD Multilayer Ceramic Capacitor	
C19	1pF		SMD Multilayer Ceramic Capacitor	
C20	2.2MF	50V	SMD Aluminium Electrolytic Capacitor	
C21	1nF		SMD Multilayer Ceramic Capacitor	
C22	0.1MF		SMD Multilayer Ceramic Capacitor	
C23	10MF	35V	SMD Aluminium Electrolytic Capacitor	
C24	0.1MF		SMD Multilayer Ceramic Capacitor	
C25	0.1MF		SMD Multilayer Ceramic Capacitor	
C26	100pF		SMD Multilayer Ceramic Capacitor	
C27	1nF		SMD Multilayer Ceramic Capacitor	
C28	0.1MF		SMD Multilayer Ceramic Capacitor	
C29	100pF		SMD Multilayer Ceramic Capacitor	
C30	100pF		SMD Multilayer Ceramic Capacitor	
C31	3.3pF		SMD Multilayer Ceramic Capacitor	
L1	330nH		Ferrite Drum Cored Inductor	
L2	2.2uH		SMD Inductor	
R1	100	1/4W	SMD Thick Film Resistor	
R2	0	1/4W	SMD Thick Film Resistor	
R3	4K7	1/4W	SMD Thick Film Resistor	
R4	330	1/4W	SMD Thick Film Resistor	
R5	100	1/4W	SMD Thick Film Resistor	
R6	330	1/4W	SMD Thick Film Resistor	
R7	180	1/4W	SMD Thick Film Resistor	
R8	22	1/4W	SMD Thick Film Resistor	
R9	330	1/4W	SMD Thick Film Resistor	
R10	27K	1/4W	SMD Thick Film Resistor	
R11	33	1/4W	SMD Thick Film Resistor	
R12	33	1/4W	SMD Thick Film Resistor	
R13	27K	1/4W	SMD Thick Film Resistor	





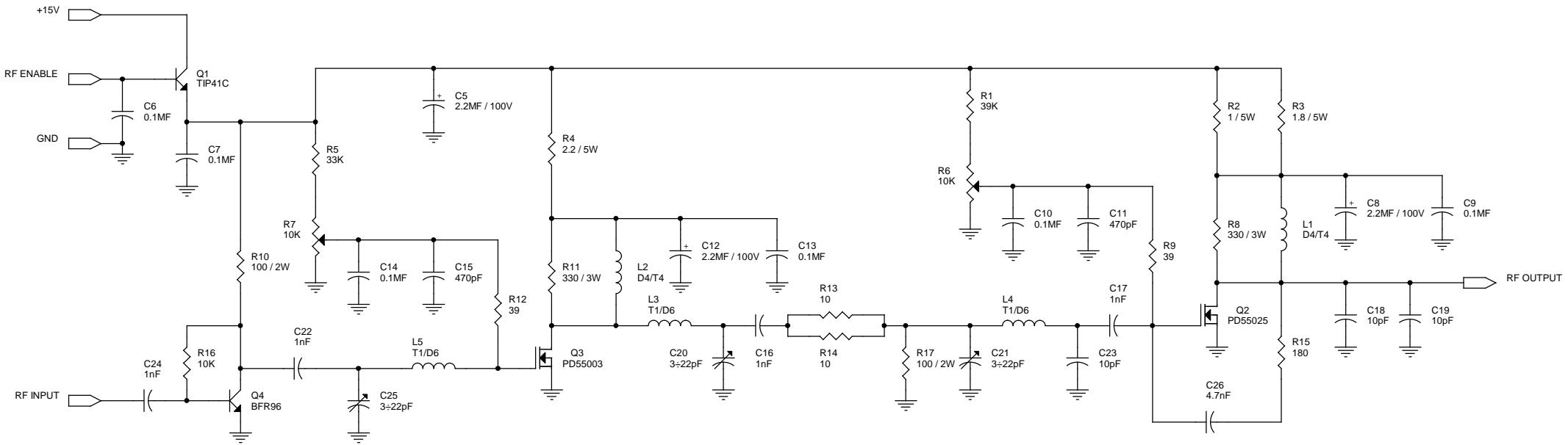


Title
RF AMPLIFIER 400MHz 10W

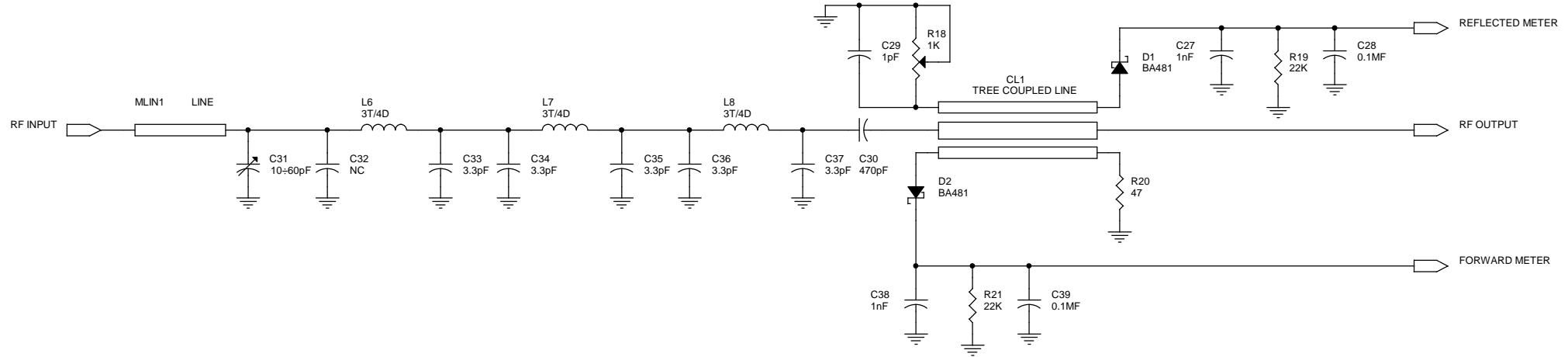
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Mod. FM400-10-C

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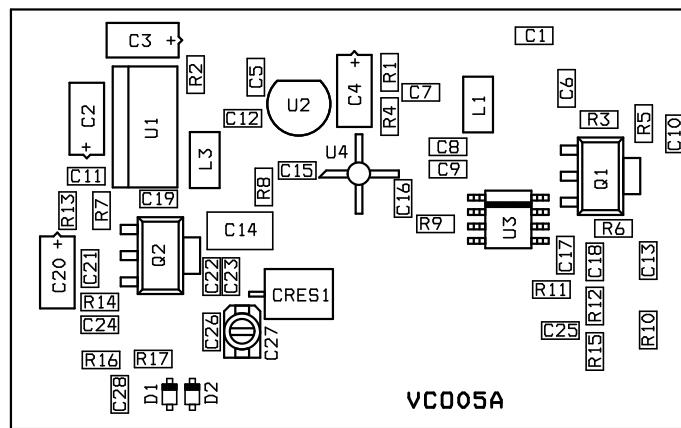
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FILTER & METER		
Size B	Document Number Mod. FM400-10-C	Rev 1.0
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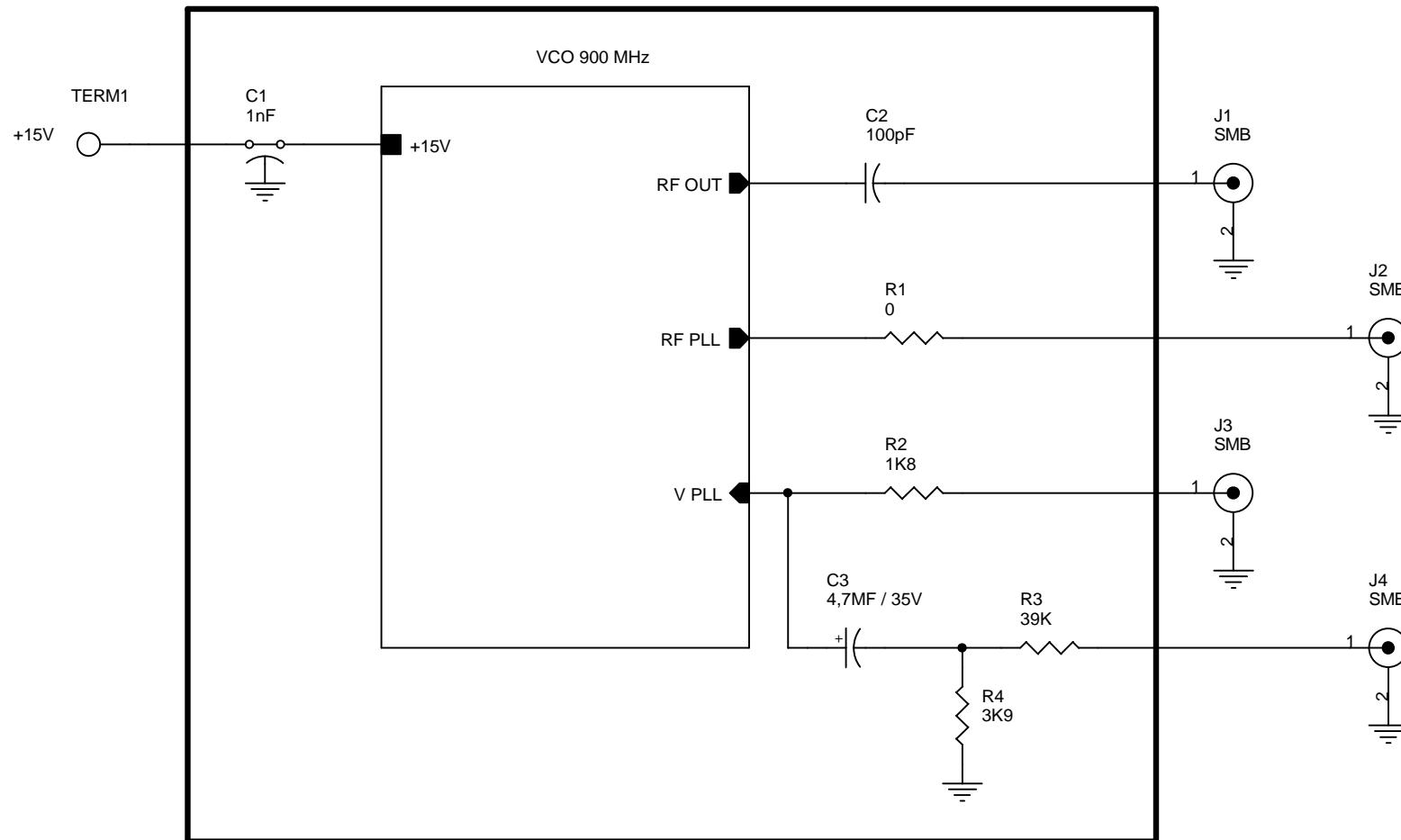


Part List Schematic : FM400-10-C

Rif.	Value	Remarks	Description	Code
C1	0.1MF		Ceramic Lead Through Capacitor	
C2	0.1MF		Ceramic Lead Through Capacitor	
C3	0.1MF		Ceramic Lead Through Capacitor	
C4	0.1MF		Ceramic Lead Through Capacitor	
C5	2.2MF	100V	Aluminium Electrolytic Capacitor	
C6	0.1MF		SMD Multilayer Ceramic Capacitor	
C7	0.1MF		SMD Multilayer Ceramic Capacitor	
C8	2.2MF	100V	Aluminium Electrolytic Capacitor	
C9	0.1MF		SMD Multilayer Ceramic Capacitor	
C10	0.1MF		SMD Multilayer Ceramic Capacitor	
C11	470pF		SMD Multilayer Ceramic Capacitor	
C12	2.2MF	100V	Aluminium Electrolytic Capacitor	
C13	0.1MF		SMD Multilayer Ceramic Capacitor	
C14	0.1MF		SMD Multilayer Ceramic Capacitor	
C15	470pF		Ceramic Disc Capacitor NPO	
C16	1nF		Ceramic Disc Capacitor NPO	
C17	1nF		Ceramic Disc Capacitor NPO	
C18	10pF		Ceramic Disc Capacitor NPO	
C19	10pF		Ceramic Disc Capacitor NPO	
C20	3-22pF		Ceramic Disc Capacitor NPO	
C21	3-22pF		Trimmer Polyethylene Film Capacitor	
C22	1nF		Ceramic Disc Capacitor NPO	
C23	10pF		Ceramic Disc Capacitor NPO	
C24	1nF		Ceramic Disc Capacitor NPO	
C25	3-22pF		Trimmer Polyethylene Film Capacitor	
C26	4.7nF		Ceramic Disc Capacitor NPO	
C27	1nF		Ceramic Disc Capacitor NPO	
C28	0.1MF		SMD Multilayer Ceramic Capacitor	
C29	1pF		Ceramic Disc Capacitor NPO	
C30	470pF		Ceramic ATC Capacitor	
C31	10-60pF		Trimmer Polyethylene Film Capacitor	
C32	NC		Ceramic Disc Capacitor NPO	
C33	3.3pF		Ceramic Disc Capacitor NPO	
C34	3.3pF		Ceramic Disc Capacitor NPO	
C35	3.3pF		Ceramic Disc Capacitor NPO	
C36	3.3pF		Ceramic Disc Capacitor NPO	
C37	3.3pF		Ceramic Disc Capacitor NPO	
C38	1nF		Ceramic Disc Capacitor NPO	
C39	0.1MF		SMD Multilayer Ceramic Capacitor	
L1	D4/T4		Enamelled Copper Wire	
L2	D4/T4		Enamelled Copper Wire	
L3	T1/D6		Tinned Copper Wire	
L4	T1/D6		Tinned Copper Wire	
L5	T1/D6		Tinned Copper Wire	
L6	3T/4D		Enamelled Copper Wire	
L7	3T/4D		Enamelled Copper Wire	
L8	3T/4D		Enamelled Copper Wire	







Title

VCO MHz 900

Size A Document Number

Mod. VCO05-900

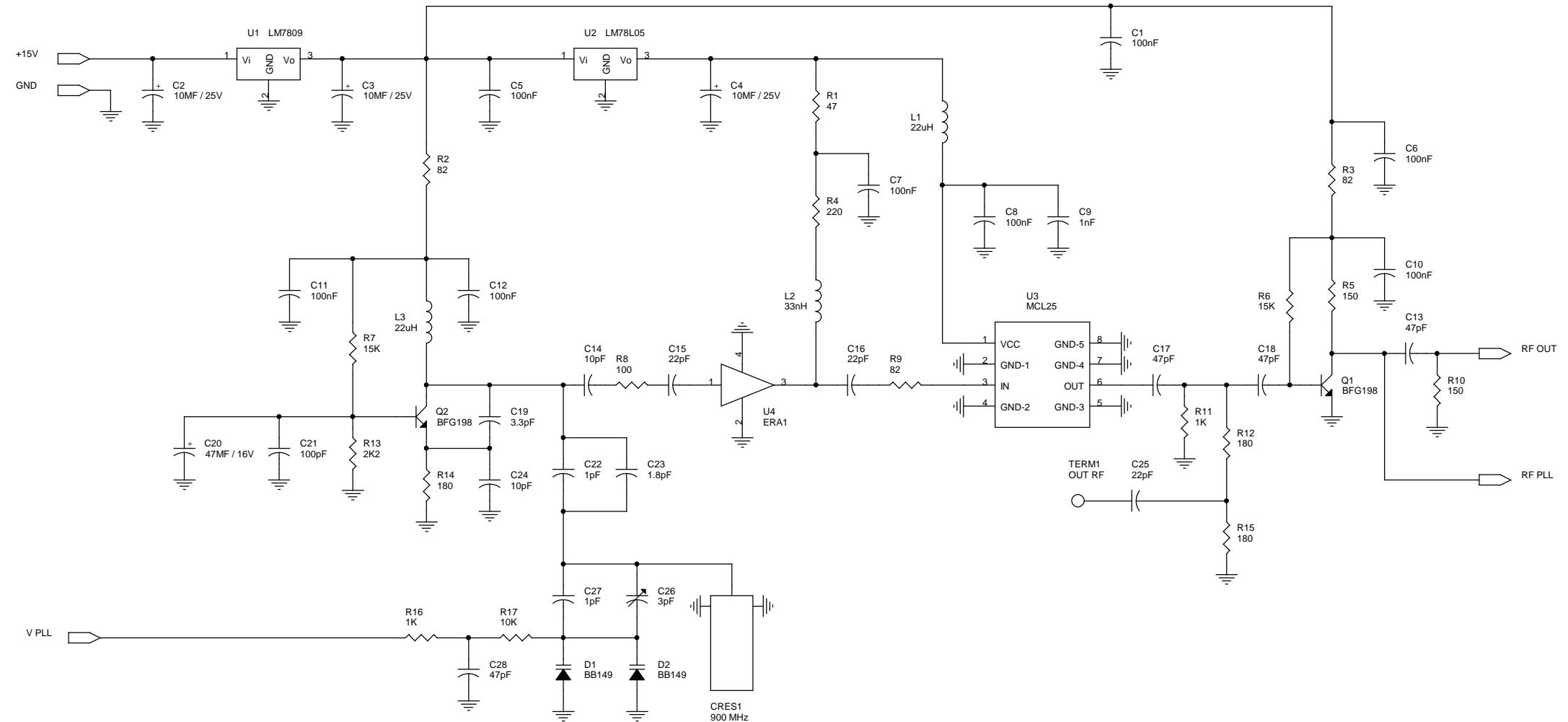
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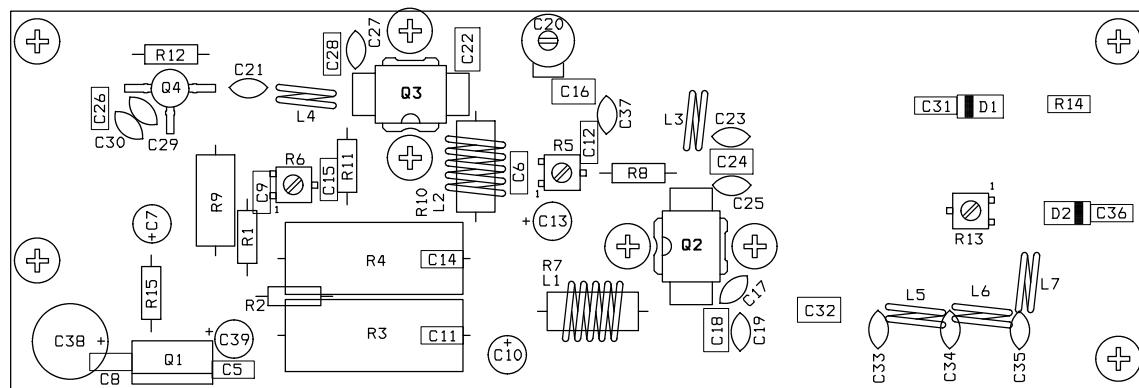
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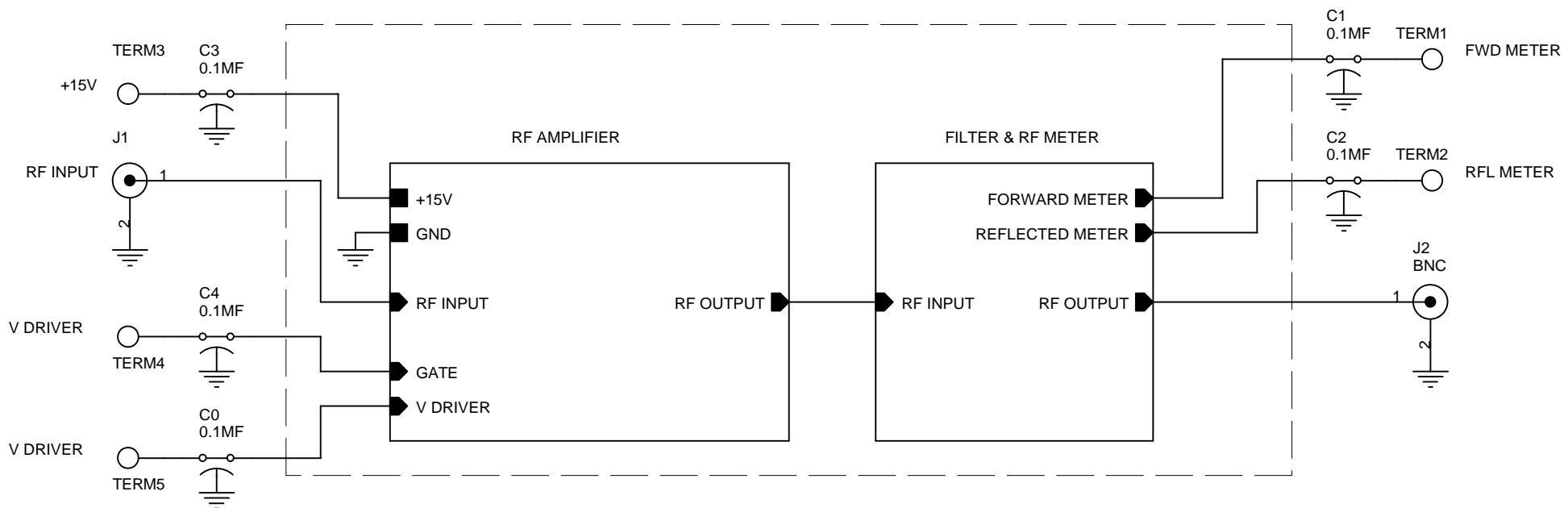


Part List Schematic : VCO 900 MHz

Rif.	Value	Remarks	Description	Code
C1	100nF		SMD Multilayer Ceramic Capacitor	
C2	10MF	25V	SMD Tantalum Capacitor	
C3	10MF	25V	SMD Tantalum Capacitor	
C4	10MF	25V	SMD Tantalum Capacitor	
C5	100nF		SMD Multilayer Ceramic Capacitor	
C6	100nF		SMD Multilayer Ceramic Capacitor	
C7	100nF		SMD Multilayer Ceramic Capacitor	
C8	100nF		SMD Multilayer Ceramic Capacitor	
C9	1nF		SMD Multilayer Ceramic Capacitor	
C10	100nF		SMD Multilayer Ceramic Capacitor	
C11	100nF		SMD Multilayer Ceramic Capacitor	
C12	100nF		SMD Multilayer Ceramic Capacitor	
C13	47pF		SMD Multilayer Ceramic Capacitor	
C14	10pF		SMD Multilayer Ceramic Capacitor	
C15	22pF		SMD Multilayer Ceramic Capacitor	
C16	22pF		SMD Multilayer Ceramic Capacitor	
C17	47pF		SMD Multilayer Ceramic Capacitor	
C18	47pF		SMD Multilayer Ceramic Capacitor	
C19	3.3pF		SMD Multilayer Ceramic Capacitor	
C20	47MF	16V	SMD Tantalum Capacitor	
C21	100pF		SMD Multilayer Ceramic Capacitor	
C22	1pF		SMD Multilayer Ceramic Capacitor	
C23	1.8pF		SMD Multilayer Ceramic Capacitor	
C24	10pF		SMD Multilayer Ceramic Capacitor	
C25	22pF		SMD Multilayer Ceramic Capacitor	
C26	3pF		SMD Trimmer Capacitor	
C27	1pF		SMD Multilayer Ceramic Capacitor	
C28	47pF		SMD Multilayer Ceramic Capacitor	
L1	22uH		SMD Inductor	
L2	33nH		SMD Inductor	
L3	22uH		SMD Inductor	
R1	47		SMD Thick Film Resistor	
R2	82		SMD Thick Film Resistor	
R3	82		SMD Thick Film Resistor	
R4	220		SMD Thick Film Resistor	
R5	150		SMD Thick Film Resistor	
R6	15K		SMD Thick Film Resistor	
R7	15K		SMD Thick Film Resistor	
R8	100		SMD Thick Film Resistor	
R9	82		SMD Thick Film Resistor	
R10	150		SMD Thick Film Resistor	
R11	1K		SMD Thick Film Resistor	
R12	180		SMD Thick Film Resistor	
R13	2K2		SMD Thick Film Resistor	
R14	180		SMD Thick Film Resistor	
R15	180		SMD Thick Film Resistor	
R16	1K		SMD Thick Film Resistor	







Title

RF AMPLIFIER 900MHz 10W

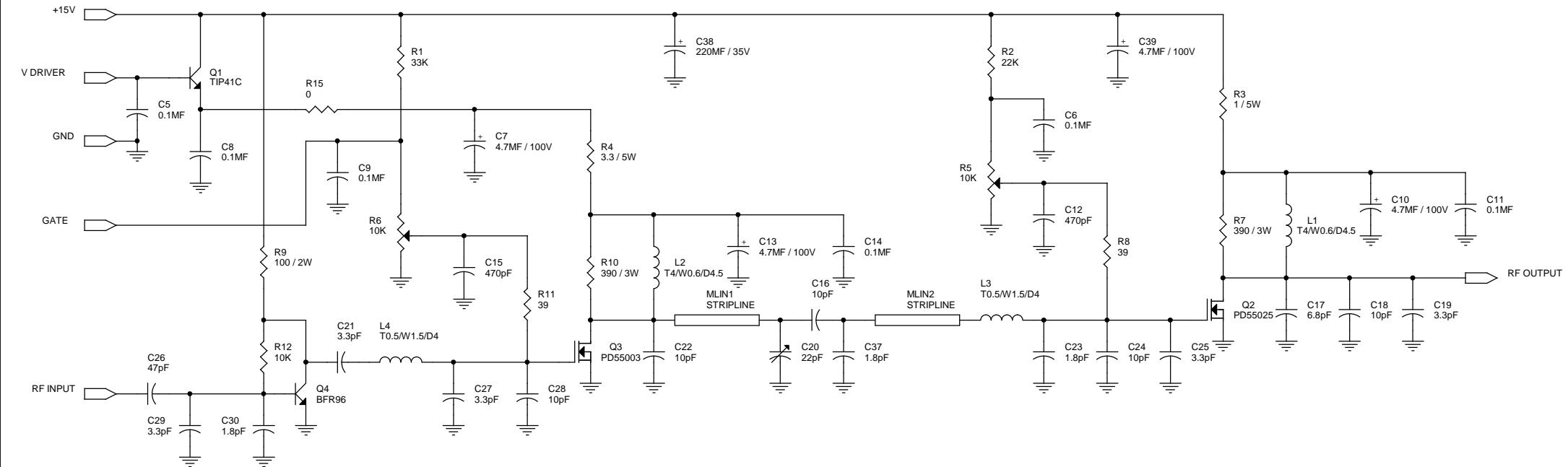
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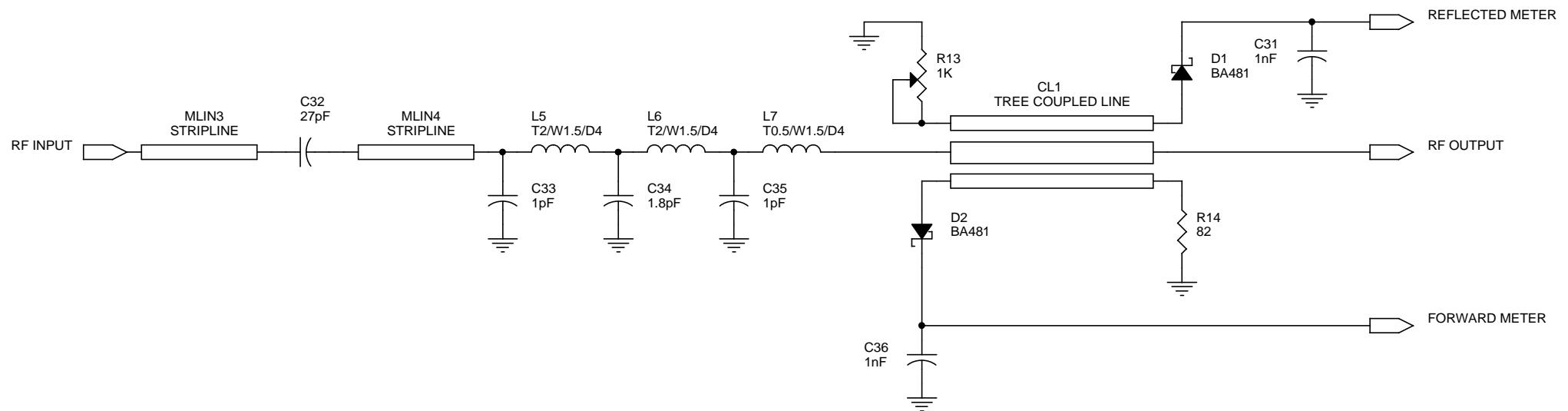
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FILTER & METER

Size

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1.0

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Part List Schematic : RF AMPLIFIER 900MHz 10W

Rif.	Value	Remarks	Description	Code
C1	0.1MF		Ceramic Lead Through Capacitor	
C2	0.1MF		Ceramic Lead Through Capacitor	
C3	0.1MF		Ceramic Lead Through Capacitor	
C4	0.1MF		Ceramic Lead Through Capacitor	
C5	0.1MF		SMD Multilayer Ceramic Capacitor	
C6	0.1MF		SMD Multilayer Ceramic Capacitor	
C7	4.7MF	100V	Aluminium Electrolytic Capacitor	
C8	0.1MF		SMD Multilayer Ceramic Capacitor	
C9	0.1MF		SMD Multilayer Ceramic Capacitor	
C10	4.7MF	100V	Aluminium Electrolytic Capacitor	
C11	0.1MF		SMD Multilayer Ceramic Capacitor	
C12	470pF		SMD Multilayer Ceramic Capacitor	
C13	4.7MF	100V	Aluminium Electrolytic Capacitor	
C14	0.1MF		SMD Multilayer Ceramic Capacitor	
C15	470pF		SMD Multilayer Ceramic Capacitor	
C16	10pF		Ceramic ATC Capacitor	
C17	6.8pF		Ceramic Disc Capacitor NPO	
C18	10pF		Ceramic ATC Capacitor	
C20	22pF		Trimmer Polyethylene Film Capacitor	
C21	3.3pF		Ceramic Disc Capacitor NPO	
C22	10pF		Ceramic ATC Capacitor	
C23	1.8pF		Ceramic Disc Capacitor NPO	
C24	10pF		Ceramic ATC Capacitor	
C25	3.3pF		Ceramic Disc Capacitor NPO	
C26	47pF		SMD Multilayer Ceramic Capacitor	
C27	3.3pF		Ceramic Disc Capacitor NPO	
C28	10pF		Ceramic ATC Capacitor	
C29	3.3pF		Ceramic Disc Capacitor NPO	
C30	1.8pF		Ceramic Disc Capacitor NPO	
C31	1nF		SMD Multilayer Ceramic Capacitor	
C32	27pF		Ceramic ATC Capacitor	
C33	1pF		Ceramic Disc Capacitor NPO	
C34	1.8pF		Ceramic Disc Capacitor NPO	
C35	1pF		Ceramic Disc Capacitor NPO	
C36	1nF		SMD Multilayer Ceramic Capacitor	
C37	1.8pF		Ceramic Disc Capacitor NPO	
C38	220MF	35V	Aluminium Electrolytic Capacitor	
C39	4.7MF	100V		
L1	T4/W0.6/D4.5		Tinned Copper Wire	
L2	T4/W0.6/D4.5		Tinned Copper Wire	
L3	T0.5/W1.5/D4		Tinned Copper Wire	
L4	T0.5/W1.5/D4		Tinned Copper Wire	
L5	T2/W1.5/D4		Tinned Copper Wire	
L6	T2/W1.5/D4		Tinned Copper Wire	
L7	T0.5/W1.5/D4		Tinned Copper Wire	

