



Repair instruction

RBSXT-2nDr2

Published July 10, 2015

These repair instructions are for NON WARRANTY repairs only!
Please make visual inspection for signs of corrosion
or mechanical damages before starting.

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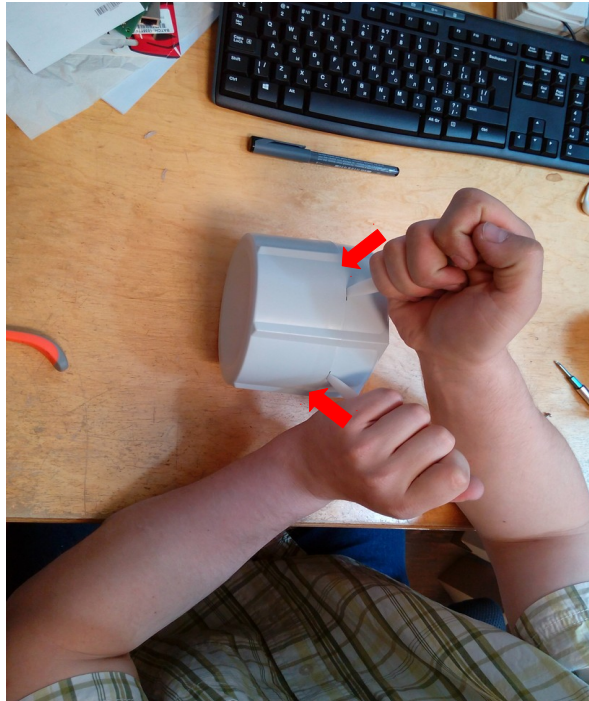
List of RouterBoard SXT Lite2 series

SXT Lite2

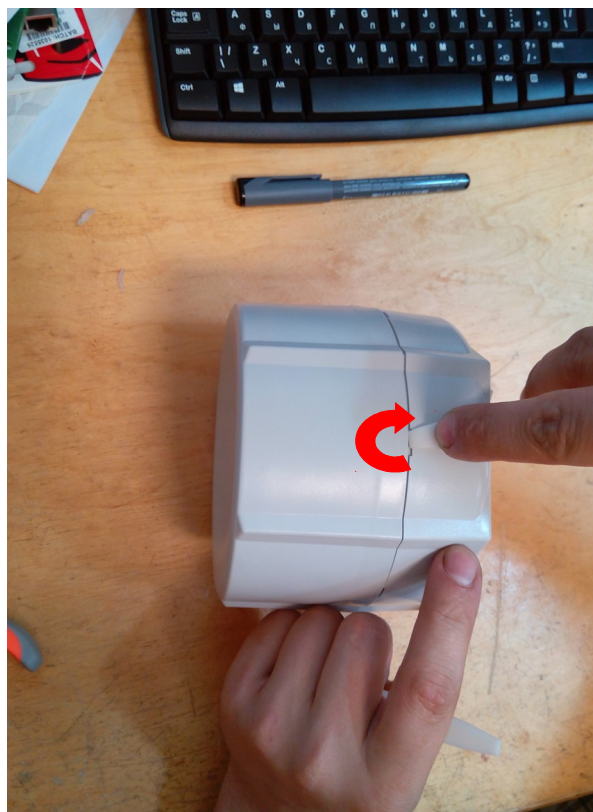


Disassembling information

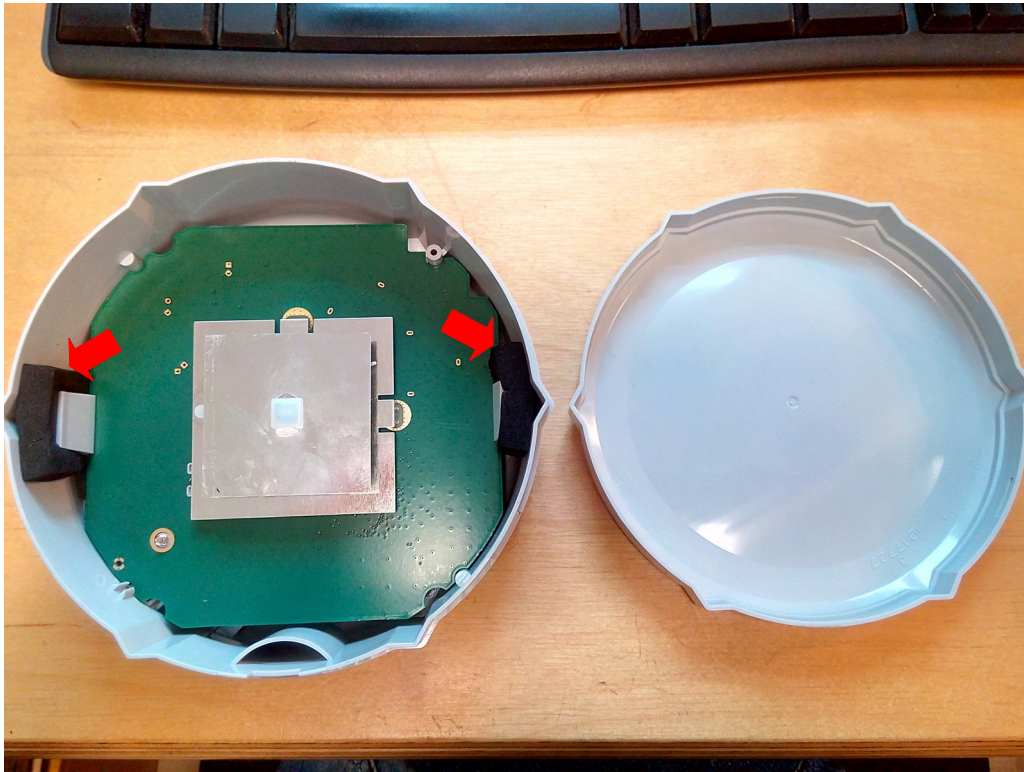
1. Use two “-” screwdrivers. Push screwdrivers in case cavities.



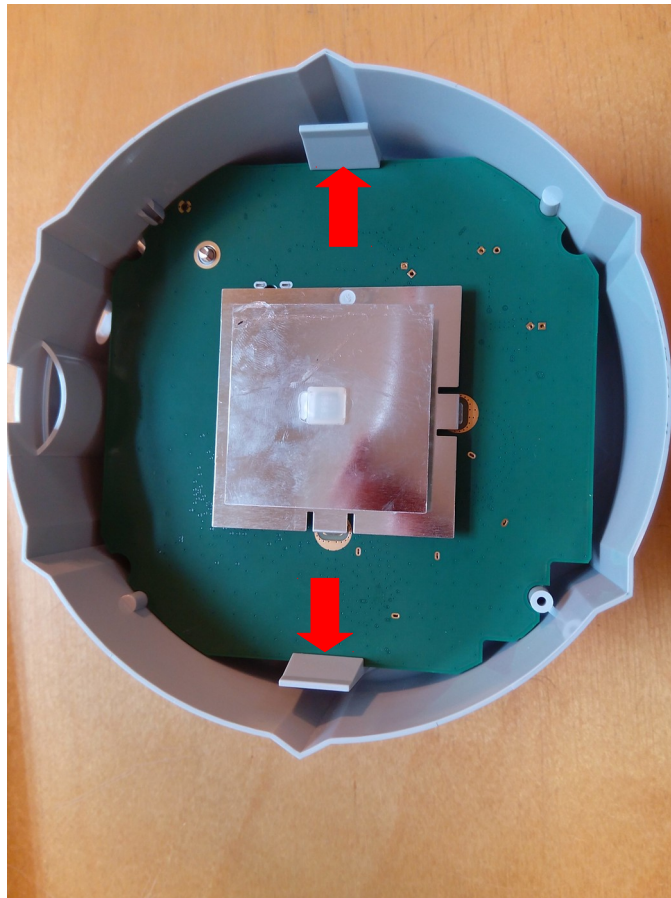
2. Rotate screwdriver and pull both case parts.



3. Remove rubber bushing



4. Push back Plastic PCB holders and take out the board.

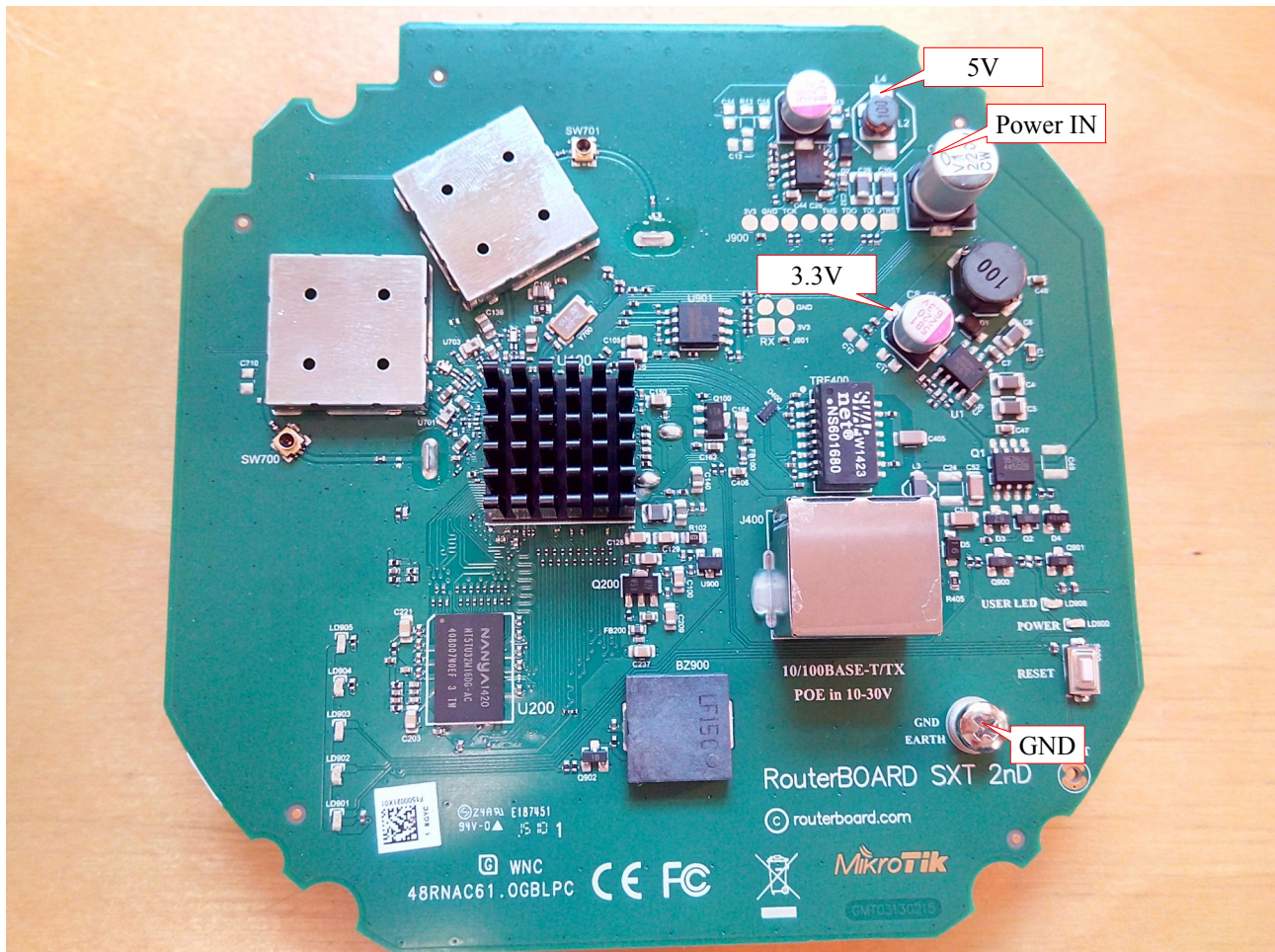


Routerboard does not power on

There no signs of any LED, LCD or buzzer activity

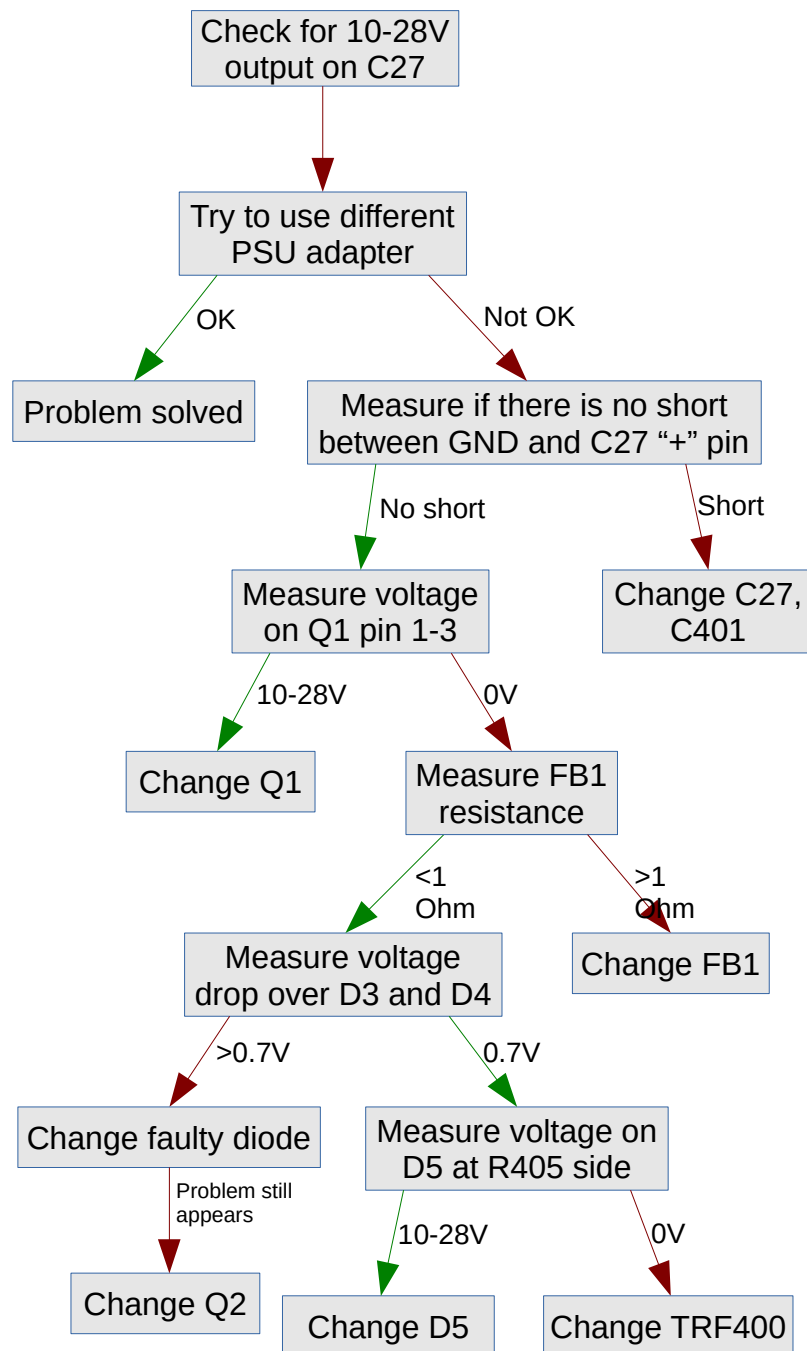
Find potential problem area

RouterBOARD does not turn on when one of the power is disconnected. Check Which voltage is switched off, Power IN (10 – 28V), 3.3V or 5V.

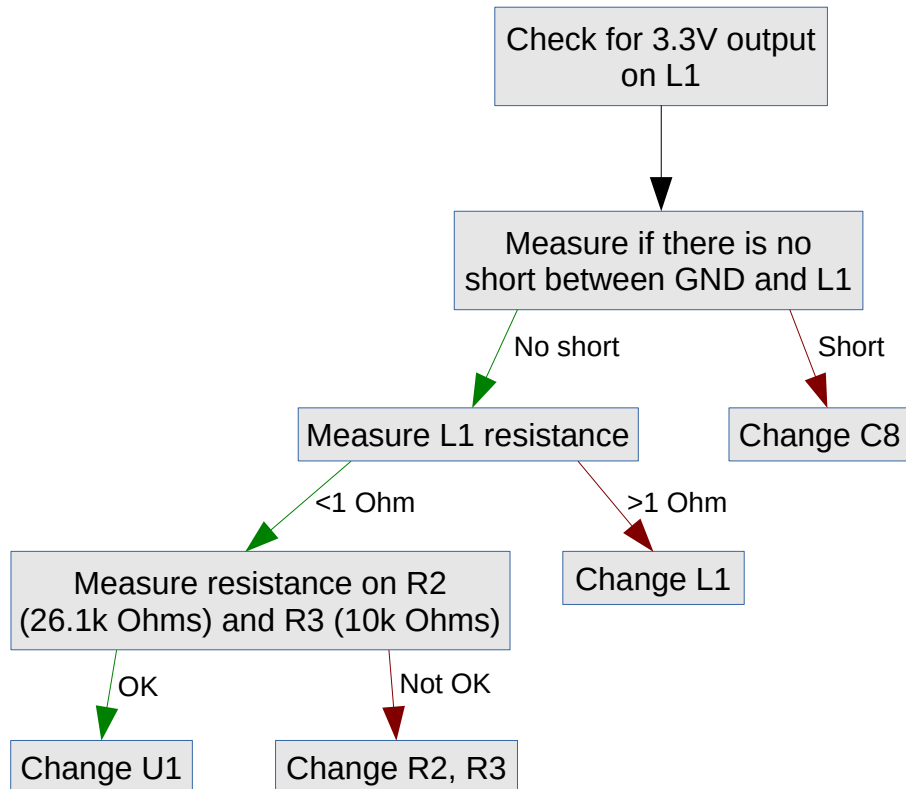


If Power_IN Failed

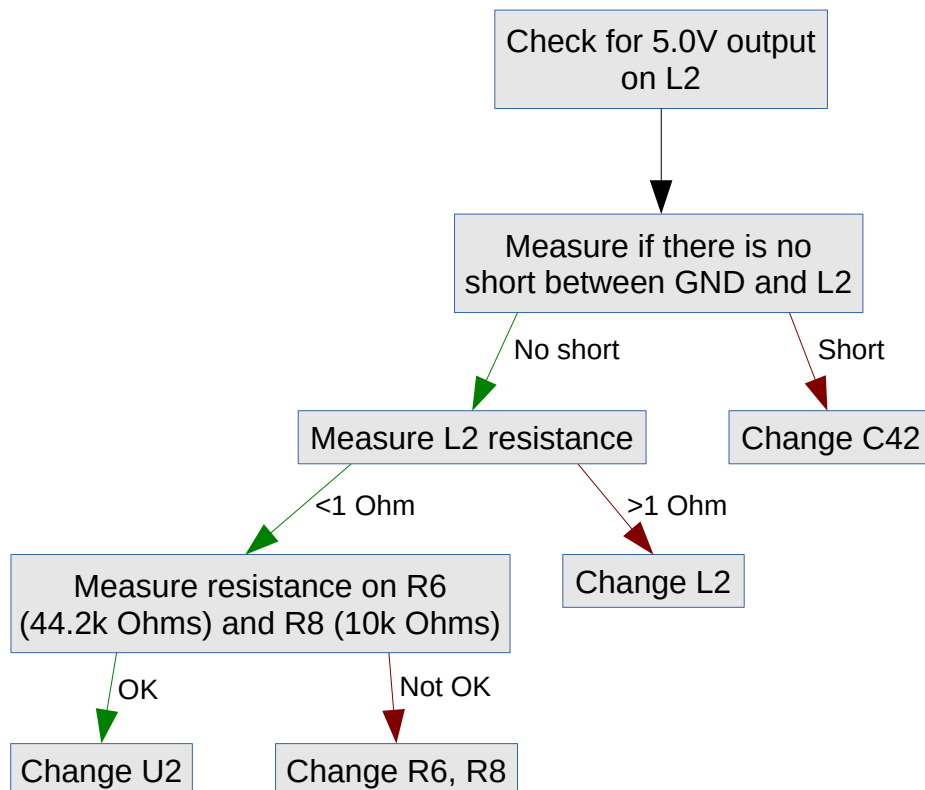
1. No power on 10-28V input



2. No Voltage on 3.3V output

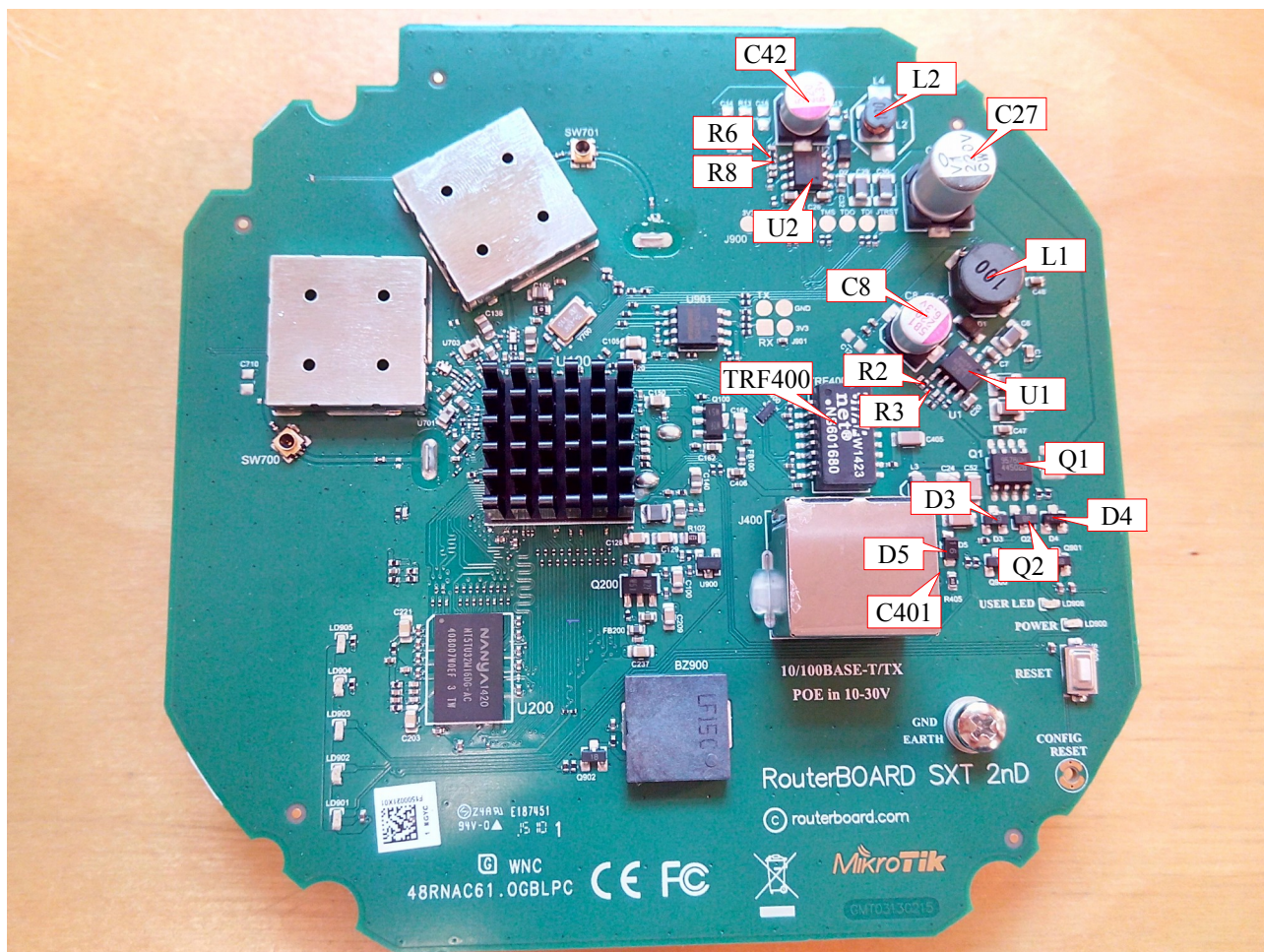


3. No Voltage on 5V output



Is still board does not power up, please send it to RMA.

4. Supply voltage components location on RouterBOARD



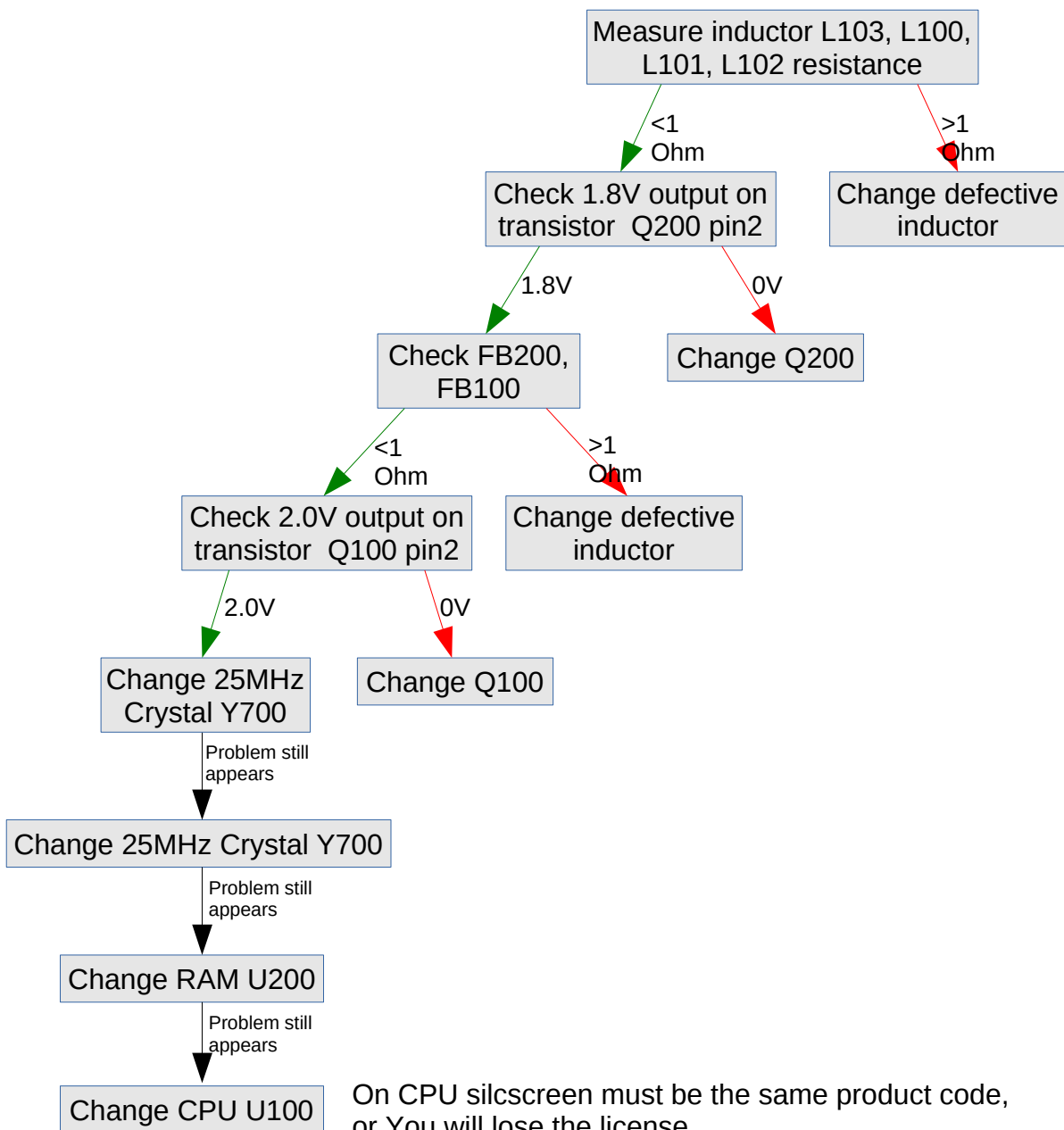
5. Supply voltage Components table

Reference	Manufacturer code	Description	Manufacturer
C27	EMZE350ADA221MHA0G	Capacitor elec 220uF 20% 35V 8x10 SMD 8000h 600mA 0.22Ohm MZE-series	NIPPON CHEMI-CON CORPORATION
C8, C42	VL006M221E06PKKKV00R	Capacitor PolymerAl 220uF 20% 6.3V 6.3x6mm SMD 5000h 2.8A 22mOhm VL-series	KUAN KUN ELECTRONIC ENTERPRISE CO., LTD. (Su-scon)
C401, C428	CL21B104KCFSFNG	Capacitor 0.1uF 10% 100V X7R 0805	Samsung Semiconductor Europe GmbH
D3	BZX84C10-7-F	Diode Zener BZX84C 10V 5% 300mW SOT23	Diodes Zetex Limited
D4	BZX84B30-AU_R1_000A1	Diode Zener BZX84B 30V 2% 400mW SOT23	PanJit International Inc.
D5	SS1060FL-T1-LF	Diode Schottky 60V 1A SOD123	Won-Top Electronics Co., Ltd.
FB1	CB04YTYH800	Ferrite Bead 80 Ohm 3A 1204	Viking Tech Corporation
L1	BCRH8D43-100N-NL	Inductor 10uH 30% 3.6A 8.3x8.3x4.7 34mOhm RoHS T&R	Bao Cheng Electronics Co.,Ltd.,
L2	BC43-100K	Inductor 10uH 10% 1.25A 4.3x4.8x3.5 RoHS	Bao Cheng Electronics Co.,Ltd.,
Q1	AO4441	Transistor MOSFET P-Ch -60V -4A 100mOhm 3W SO-8	Alpha & Omega
Q2	BC856B,215	Transistor PNP -65V -100mA 250mW Hfe=220-470 SOT-23 RoHS	NXP Semiconductors
R2	RC0402FR-0726K1L	Resistor 26.1k 1% 0402	Yageo Corporation
R3, R8	RC0402FR-0710KL	Resistor 10k 1% 0402	Yageo Corporation
R6	RC0402FR-0744K2L	Resistor 44.2k 1% 0402	Yageo Corporation
TRF400	NS601680	10/100 Single Ethernet transformer SMD 16pin RoHS T&R	Feei Chemg Enterprise CO., LTD.
U1, U2	LSP5526-S8A	DC-DC Step-down converter 4.5-30V input 2A output Sync SO8, RoHS	Lite-On Semiconductor corporation

Routerboard does not boot

If Netinstall can see the board, but can not install it

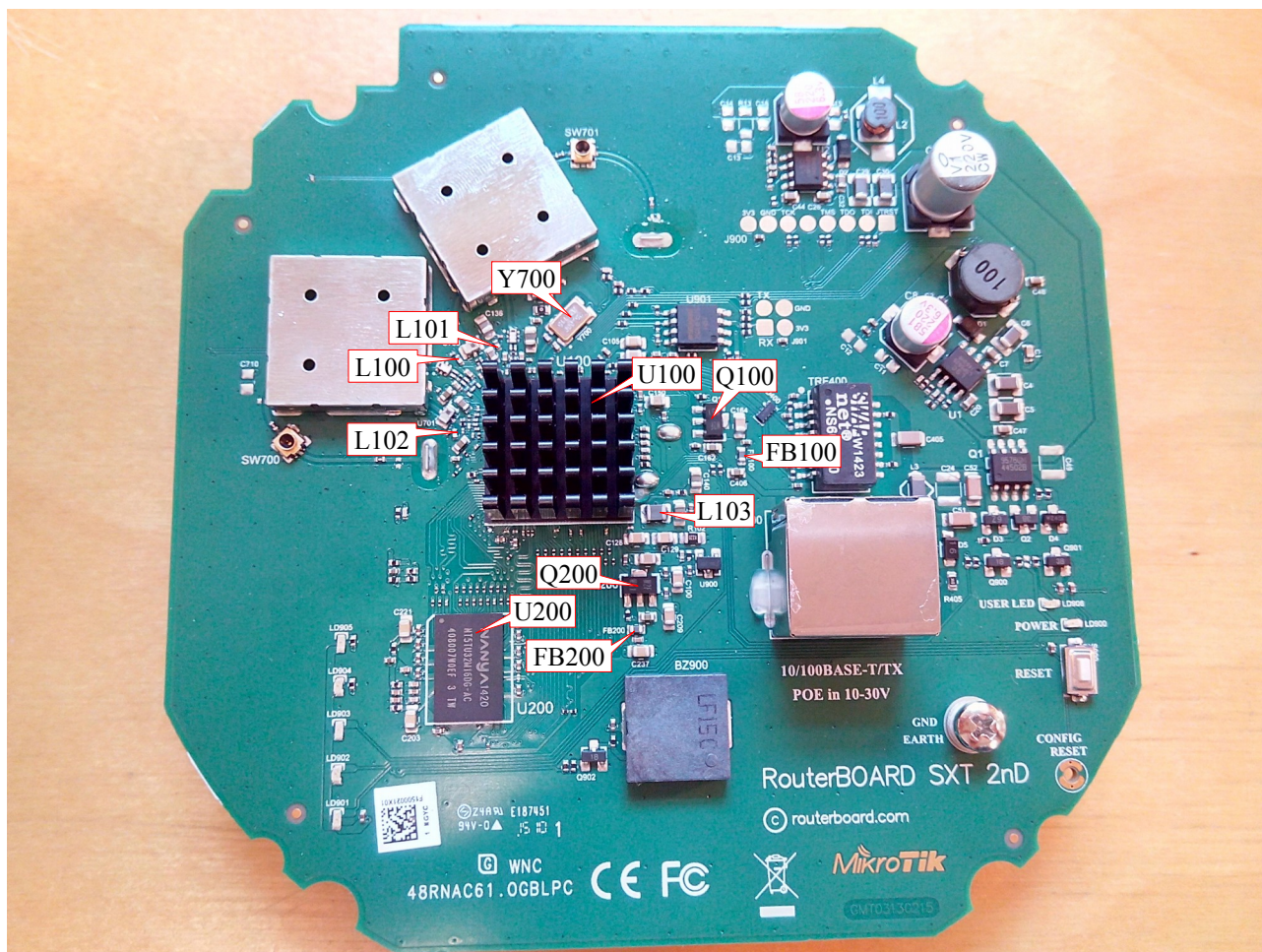
1. Troubleshooting flow chart



On CPU silkscreen must be the same product code,
or You will lose the license.
License may also lose if changes U901

If you still can't install Board, please send it to RMA.

2. Components location on RouterBOARD



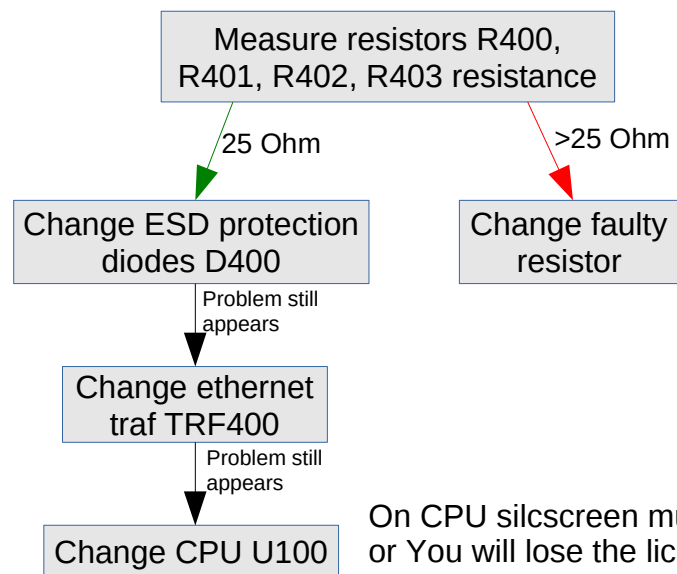
3. Components table

Reference	Manufacturer code	Description	Manufacturer
L100-L102	HLMA-100505-18NJT	Multilayer INDUCTOR 18nH +-5% 0.23 Ohm 200mA SFR-2 0402	King Core Electronics Inc.
L103	MLH08MT2R2	Inductor Chip 2.2uH 20% 1300mA 1008 RoHS Tape&Reel	Viking Tech Corporation
FB100, FB200	CB03YTYH330	Ferrite Bead 33 Ohm 3A 0603	Viking Tech Corporation
Q100, Q200	DXT2907A-13	Transistor PNP -60V -600mA 0.5W Hfe=100-300 SOT89 RoHS	Diodes Incorporated
U100	AR9344-BC2A	SOC BGA 2x2 11n 5FE	Qualcomm Atheros Technology Ltd.
U200	W9751G6KB-25	DDR2 SDRAM 512Mbit DDR2-800 32Mx16bit BGA-84 0+85C T&R	Winbond Electronics Corp.
Y700	NXK25.000AE18F-KAB6-2	Crystal 25MHz 20ppm 18pF -20+70 3.2x2.5	NSK Jenjaan Quatek Corporation

Ethernet port does not work

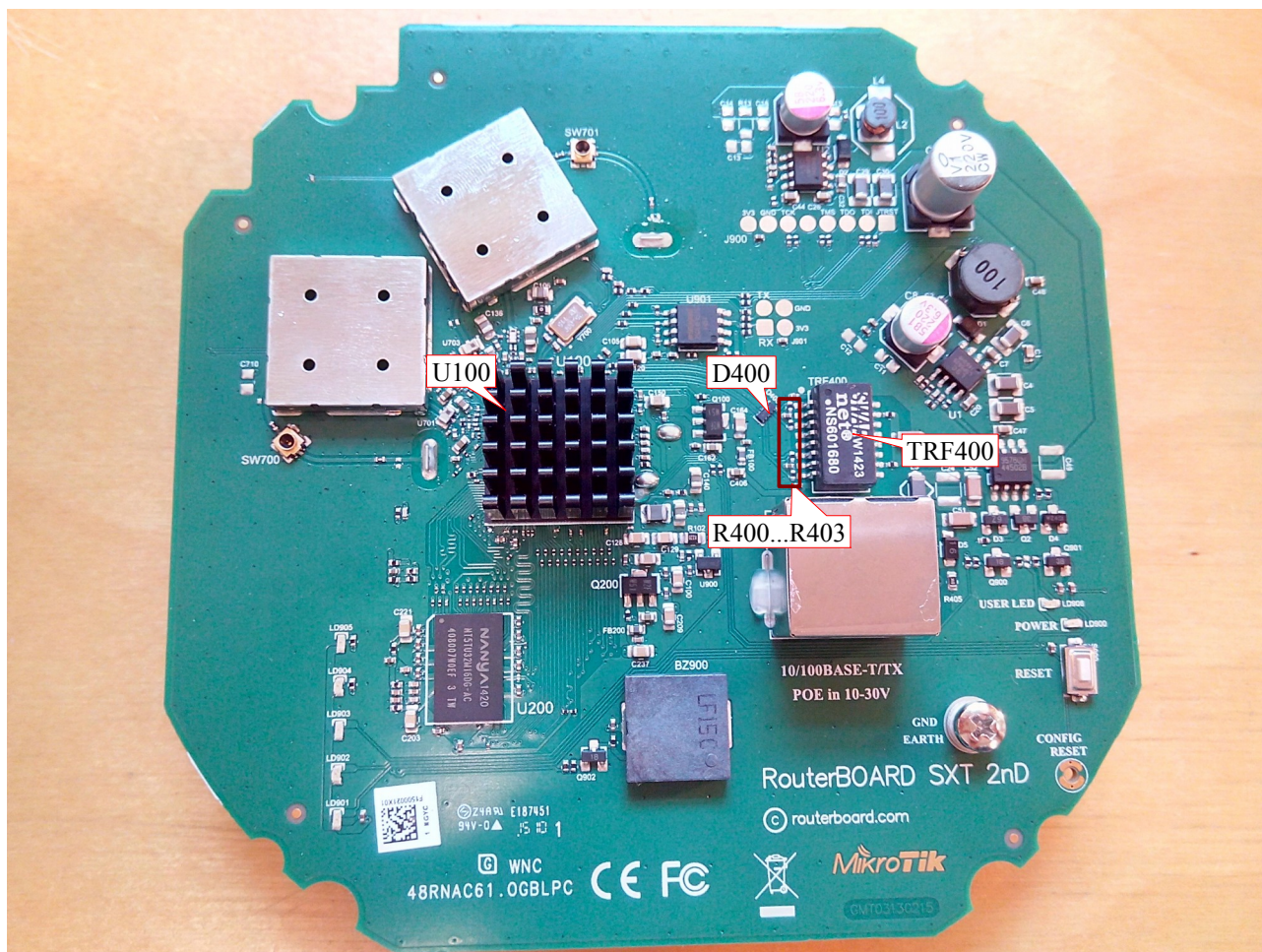
No link on Ethernet port

1. Troubleshooting flow chart



If there is still no link on ethernet port, please send board to RMA.

2. Ethernet port components location on RouterBOARD

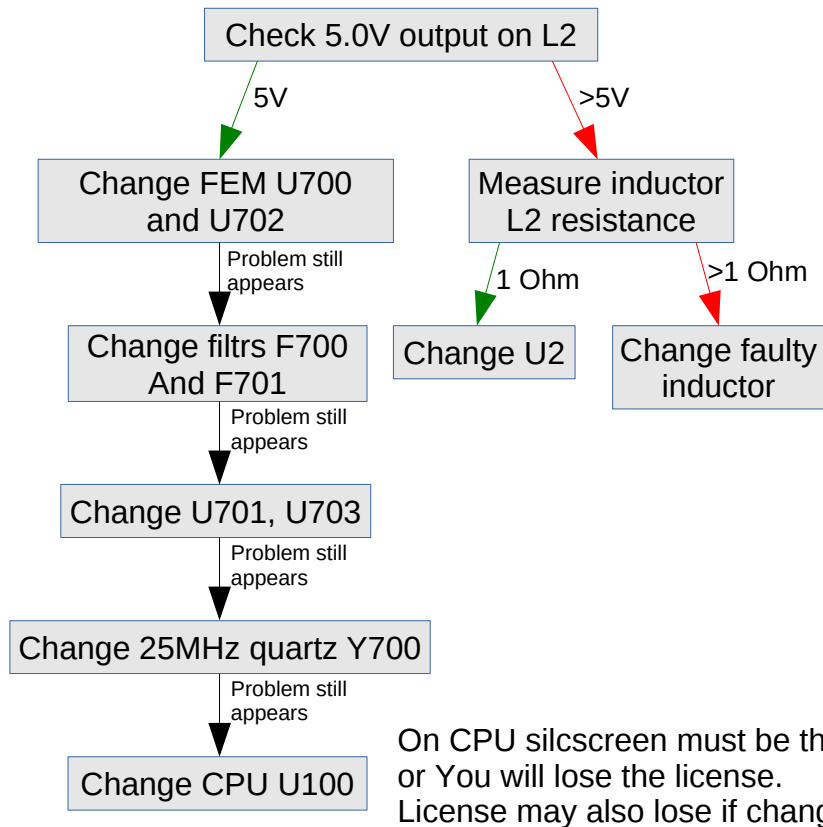


3. Ethernet port components table

Reference	Manufacturer code	Description	Manufacturer
D400	L15ESDL5V0NA-4	Diode Array TVS 150W 4 channel low cap DFN-10	Lite-On Semiconductor corporation
R400...R403	RC0402FR-0749R9L	Resistor 49.9R 1% 0402	Yageo Corporation
TRF400	NS601680	10/100 Single Ethernet transformer SMD 16pin RoHS T&R	Feeli Cherng Enterprise CO., LTD.
U100	AR9344-BC2A	SOC BGA 2x2 11n 5FE	Qualcomm Atheros Technology Ltd.

WiFi does not work

1. Troubleshooting flow chart



If wireless still does not work, please send board to RMA.

2. RF components table

Reference	Manufacturer code	Description	Manufacturer
F700, F701	LTU-1608-2G4S1-A1	Balun 2.45 GHz, 50/100	Mag.Layers Scientific-Technics Co., Ltd.
U2	LSP5523-R8A	DC-DC Step-down converter 4.5-30V input 3A output Sync SO8, RoHS	Lite-On Semiconductor corporation
U100	AR9344-BC2A	SOC BGA 2x2 11n 5FE	Qualcomm Atheros Technology Ltd.
U700, U702	SE2620T-R	2.4 GHz Wireless LAN/BT Front End	SiGe Semiconductor
U701, U703	LTB-2012-2G4H6-A2	Ceramic Bandpass Filter 2.4GHz	Mag.Layers Scientific-Technics Co., Ltd.
Y700	FY2500070	Crystal 25MHz 20ppm 15pF -20+70 CL15pF SMD 5x3.2	PSE Technology Corporation
L2	BC43-100K	Inductor 10uH 10% 1.25A 4.3x4.8x3.5 RoHS	Bao Cheng Electronics Co.,Ltd.,

3. RF components location on RouterBoard

