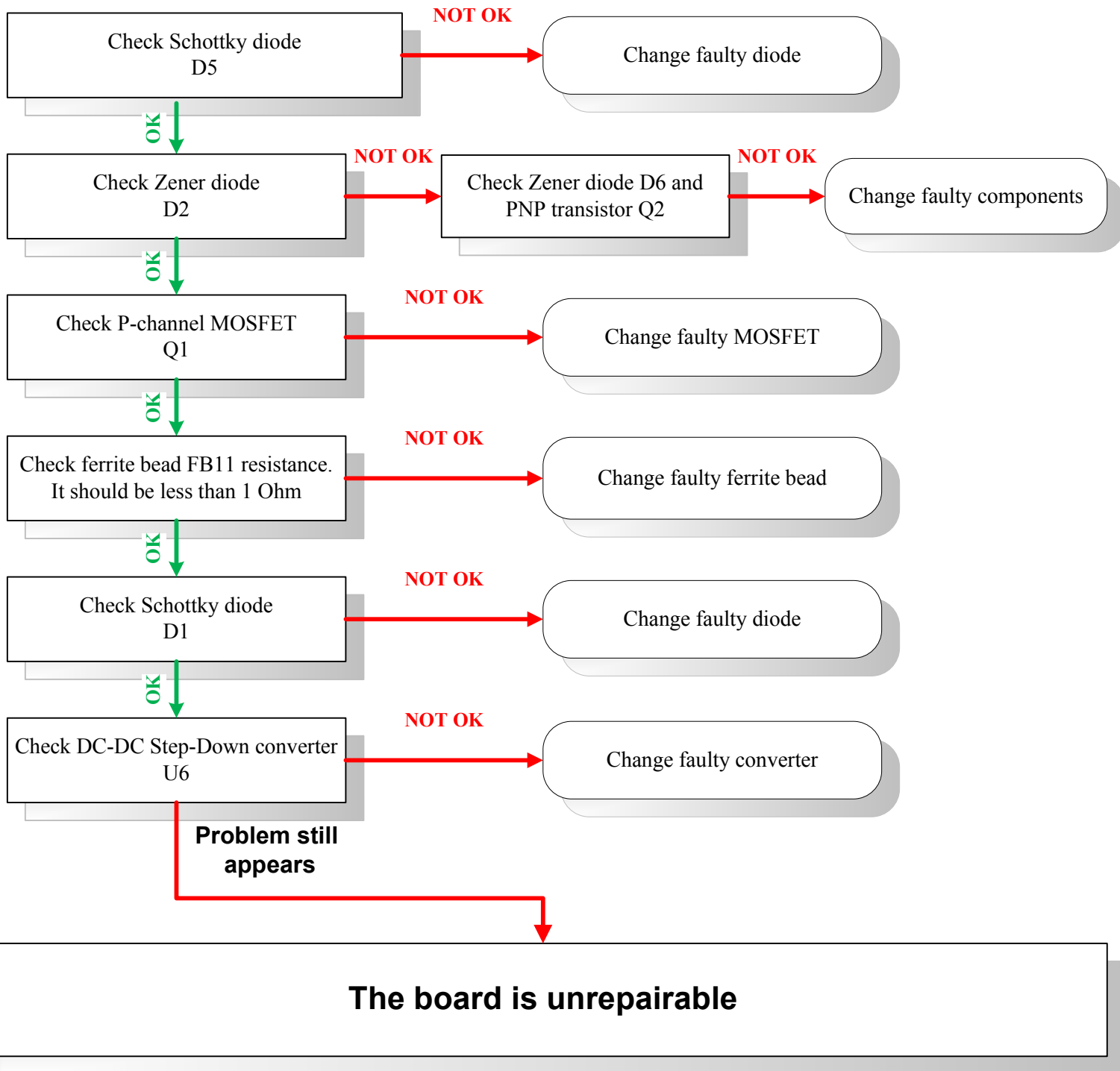


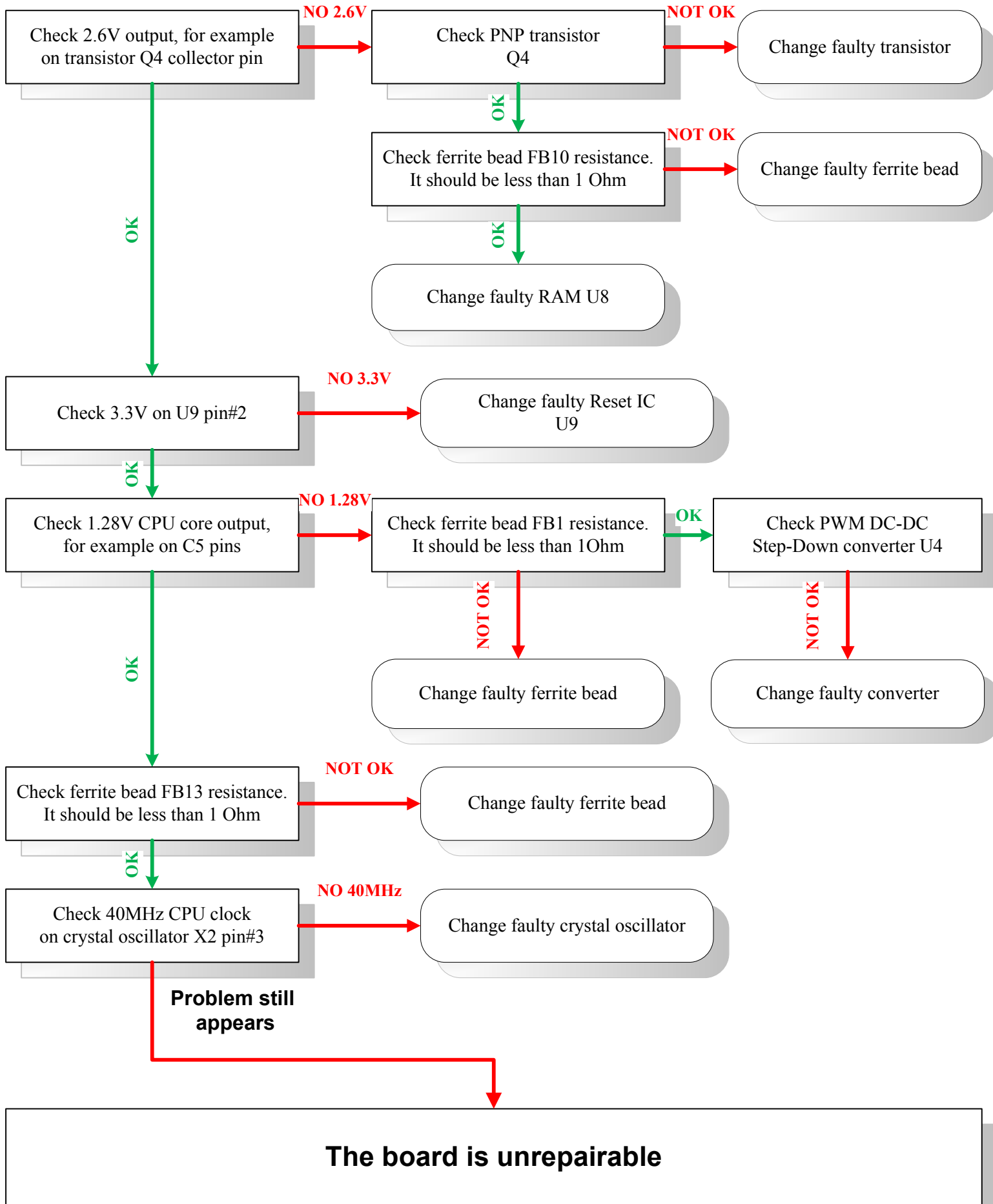
# TroubleShooting for RBOmniTIK U- 5HnD

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

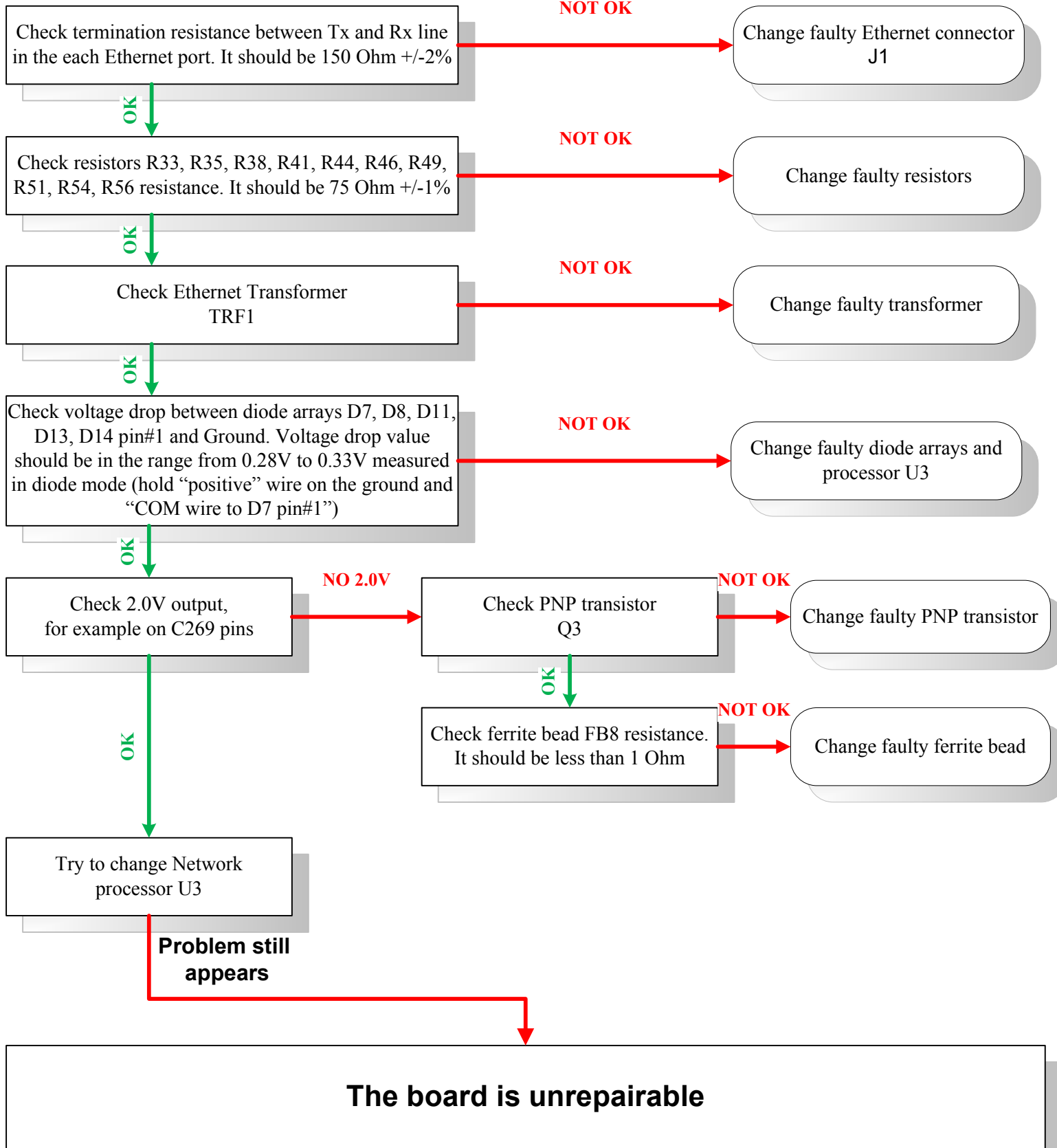
## No power, green LED LD2 does not shine



# RB does not boot

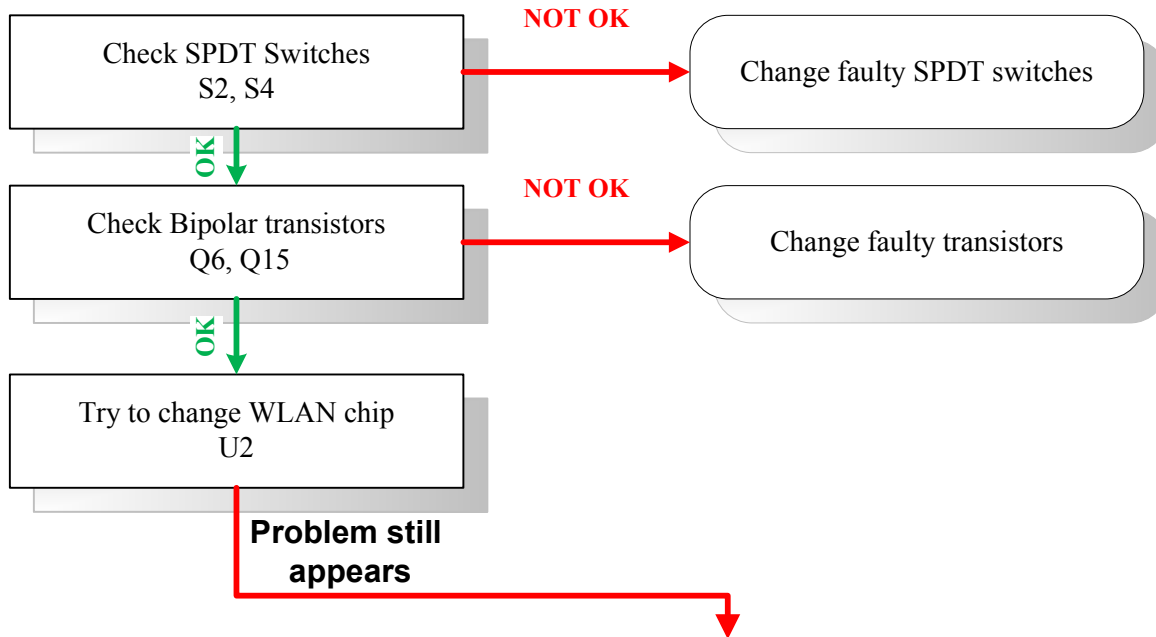


# Ethernet ports 1-5 (J1) do not work, drops ping packets



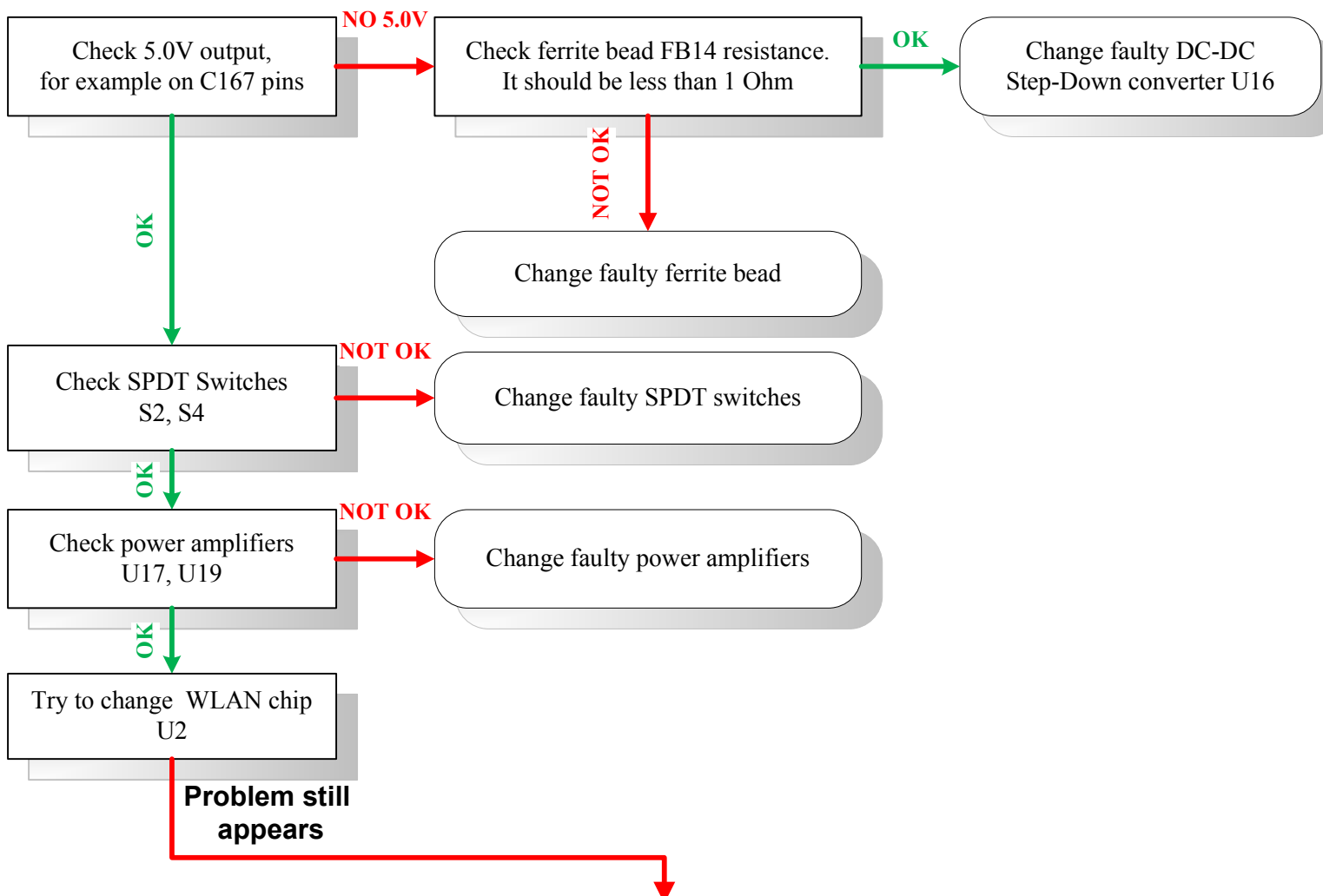
# RADIO PART

## Receive does not work



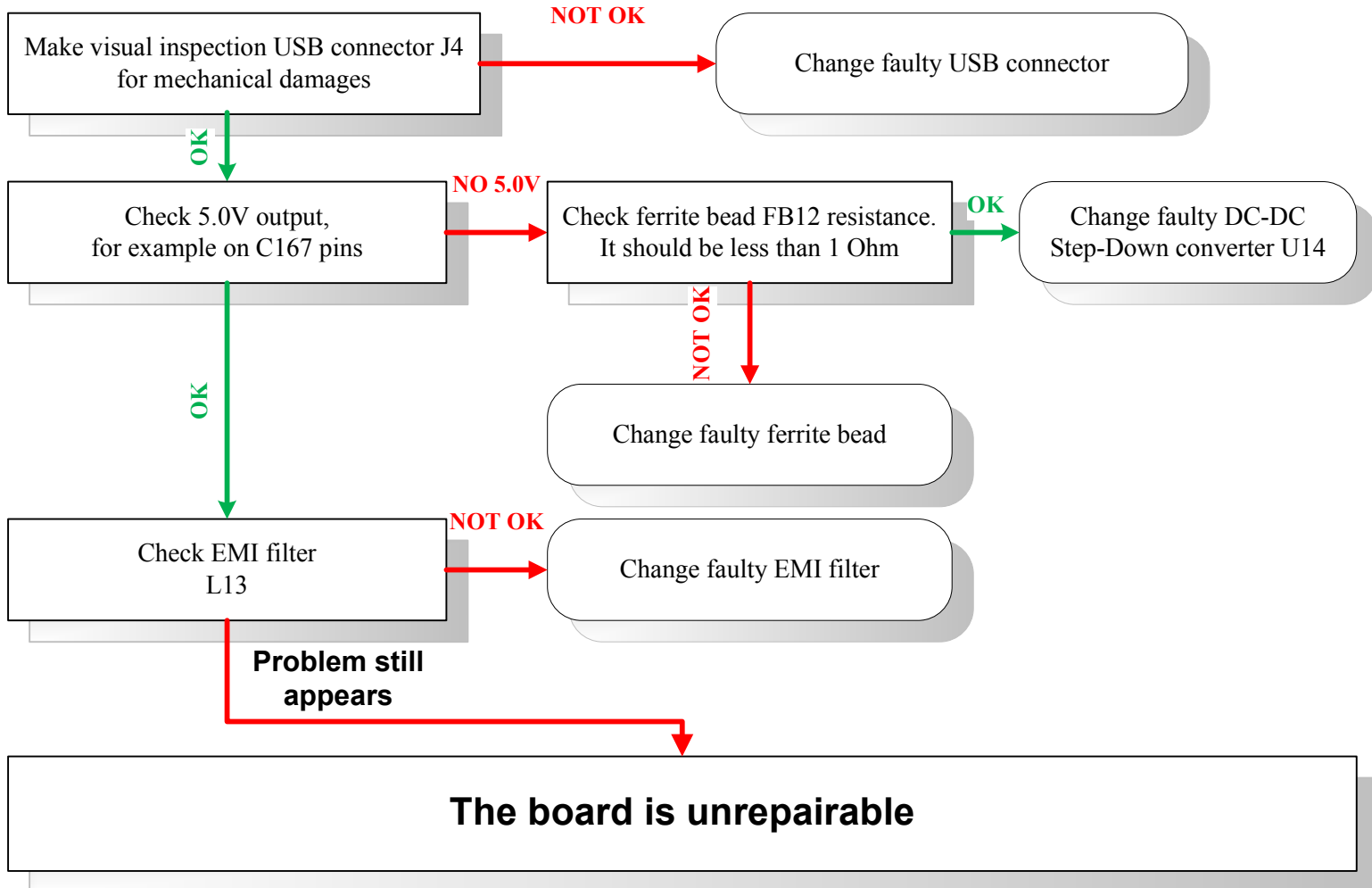
**The board is unrepairable**

## Transmit does not work

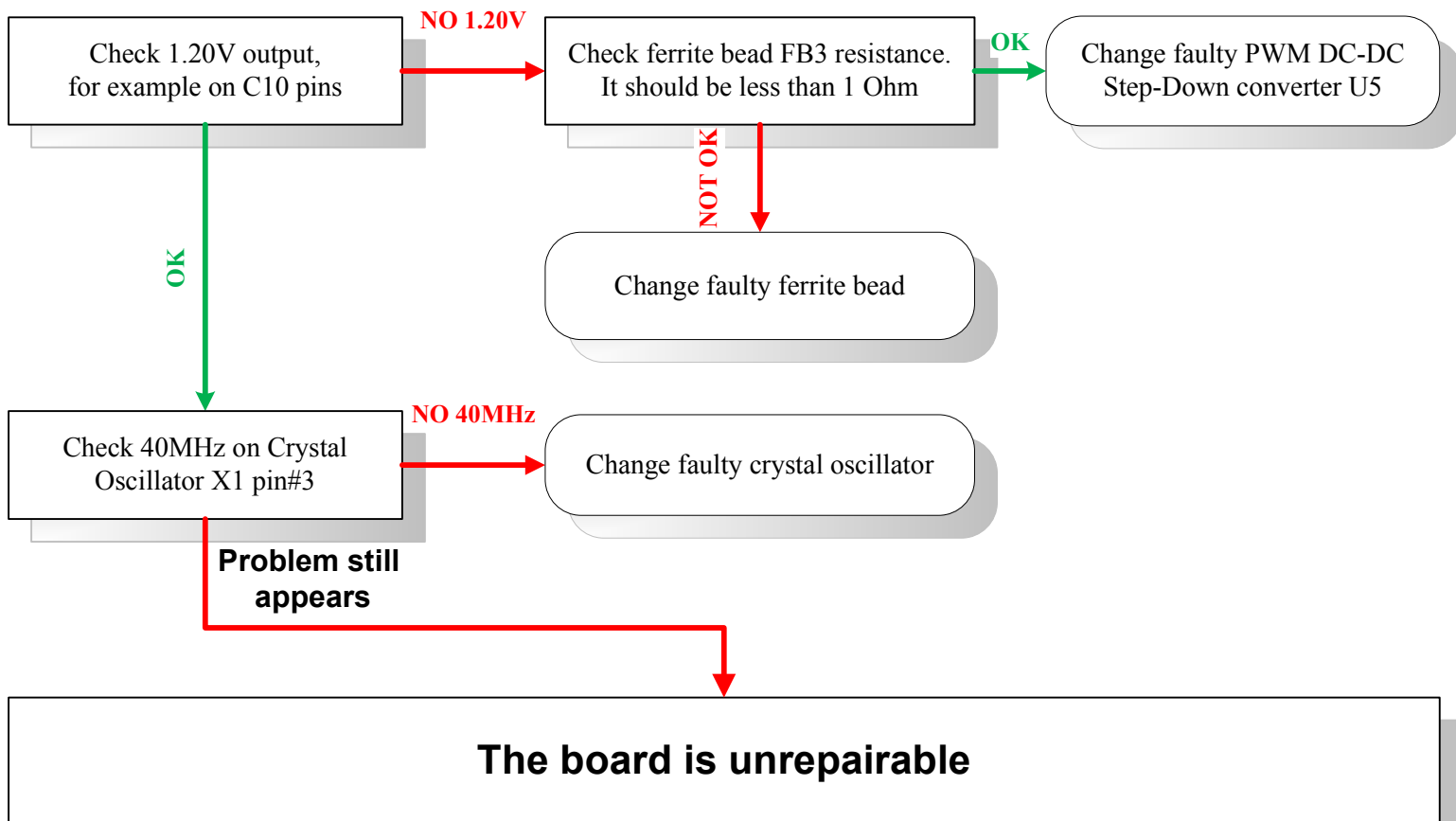


**The board is unrepairable**

# USB does not work



# Network WLAN chip AR9280 does not show in the interface menu



Reference number	Part Number	Manufacturer	Description
D1	SR210-T3-LF	Won-Top Electronics Co., Ltd.	Diode Schottky 100V 2A SMA
D2	BZX84C10-T1-LF	Won-Top Electronics Co., Ltd.	Diode Zener BZX84C 10V 5% 225mW SOT23
D5	SR36-GP	SINYORK CO., LTD.	Rectifier 3.0A,60V, Schottky DO-214AA
D6	BZX84-B30,215	NXP Semiconductors	Diode Zener BZX84B 30V 2% 250mW SOT23
D7, D8, D11, D13, D14	AOZ8000CIL	Alpha & Omega	IC TVS ARRAY LOW-CAP SOT23-6
FB1, FB3, FB8, FB10-FB13	BLM18PG331SN1D	Murata manufacturing Co.	Ferr Chip Beads 330 Om 1200mA, 0603
J1	8208C-B055	Powerway Electronics CO.,LTD	RJ45x5 with shield w/o LEDs
J4	USBAFDIP-605	Dragon Well Electronics Co.,Ltd.	USB Female connector, type A, DIP Right angle
L13	WCM-2012-900T	King Core Electronic Inc	USB 2.0 EMI Filter, ACM2012
Q1	AO4441	Alpha & Omega	P-Ch MOSFET -60V -4A 100mOhm SO-8
Q2	BC856B,215	NXP Semiconductors	Transistor PNP -65V -100mA 250mW Hfe=220-470 SOT-23
Q3, Q4	KTA1663-Y-RTF/P	KEC Corporation, LTD	PNP transistor Ic= -1.5A, Vce= -30V, SOT-89
Q6, Q15	BFR740L3RHE6327	Infineon Technologies Taiwan Co Ltd	SiGe Heterostructure Bipolar Transistor, DC-6GHz
R33, R35, R38, R41, R44, R46, R49, R51, R54, R56	CRCW040275R0FKTDBC	Vishay Intertechnology, Inc.	Resistor 75R 1% 0402
S2, S4	UPG2163T5N-E2-A	NEC Electronics	GaAs MMIC SPDT Switch, 2.4GHz&6GHz, 2.5-5.3V
TRF1	H7201DG	Mentech Electronics Co.,Ltd.	10/100 5 port Ethernet transformer
U2	AR9280-AL1A	Atheros Technology Ltd.	802.11n 2.4/5GHz 2x2 MIMO MAC,BB,Radio WLAN IC, PCIe
U3	AR7241-AH1A	Atheros Technology Ltd.	Network processor 400MHz, DDR1/2, USB2.0 , PCI-E, 5x 10/100 PHY LQFP128-EP
U4, U5	RT8025GJ5	Richtek Technology Corporation	1.25MHz, 400mA (works with 600mA load). PWM Step-Down DC/DC converter TSOT-23-5
U6	LSP5502SAC	Lite-On Semiconductor corporation	DC-DC Step-down converter 4.5-30V input 2A output, SO8
U8	NT5DS16M16CS-5T	NANYA TECHNOLOGY CORPORATION	DDR SDRAM 256Mbit DDR400 16Mx16bit TSOP-66 0
U9	RT9819D-29PV	Richtek Technology Corporation	Reset IC 450ms, SOT-23

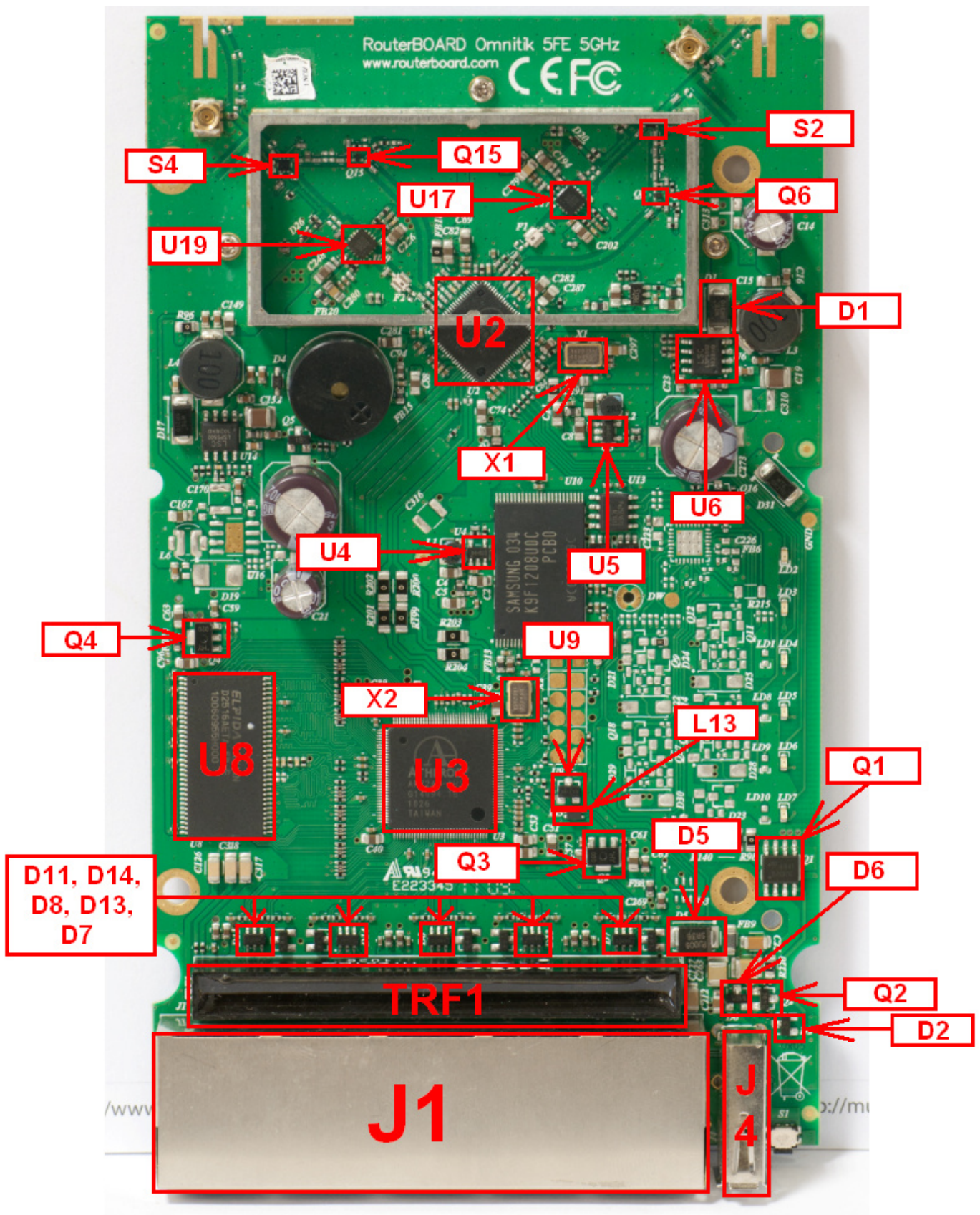
**When you order components for repairing boards from our sales, please, write components reference number not a part number**

Reference number	Part Number	Manufacturer	Description
U14	LSP5502SAC	Lite-On Semiconductor corporation	DC-DC Step-down converter 4.5-30V input 2A output, SO8
U17, U19	LX5530LQ-TR	Microsemi Corporate	InGaP HBT 4.5-6.0 GHz Power Amplifier
X1, X2	FD4000130	PSE Technology Corporation	Crystal Oscillator 40MHz 10ppm 1.8V 15pF -20+75 5x3.2

**When you order components for repairing boards from our sales, please, write components reference number not a part number**

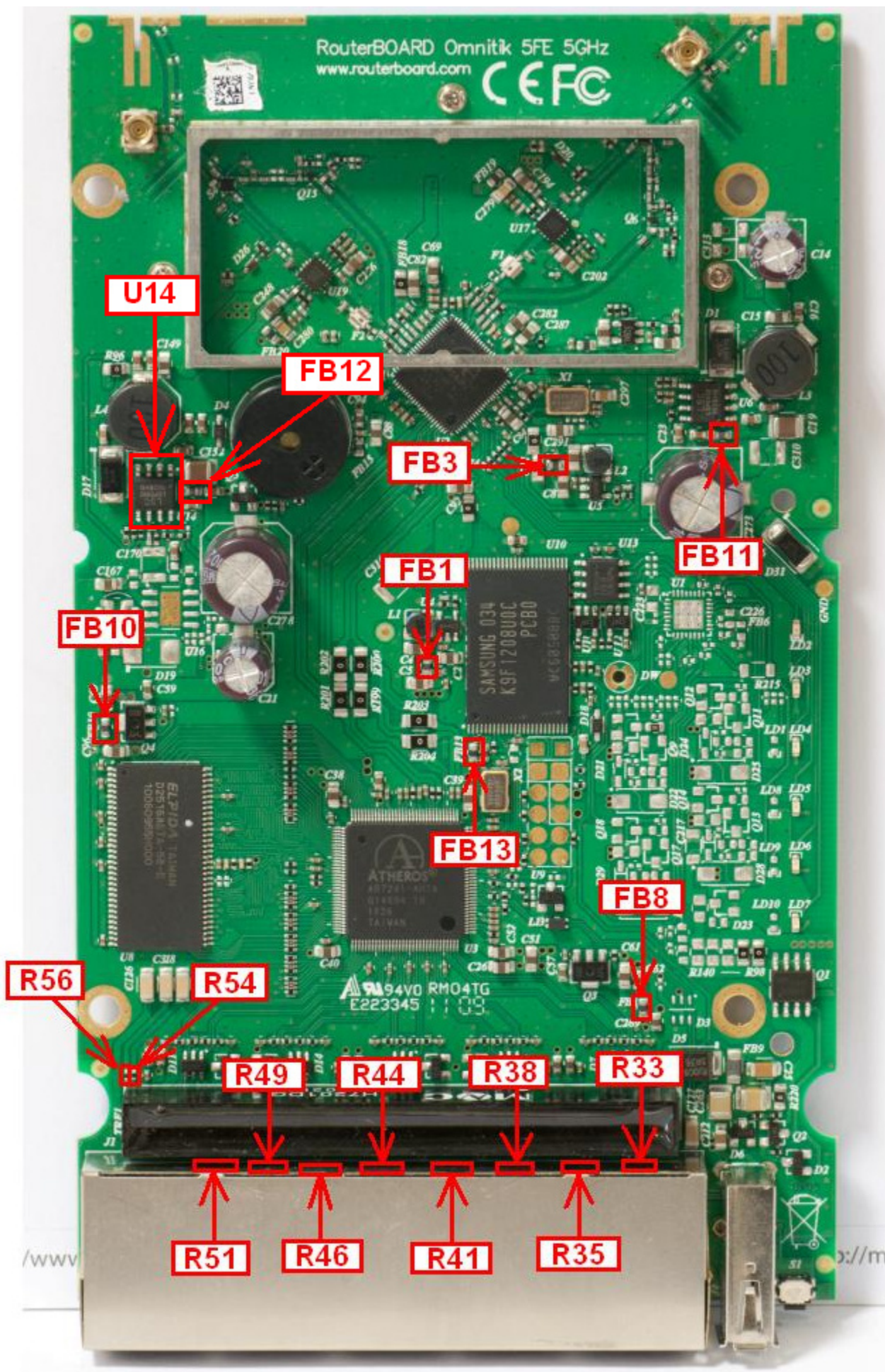


# RBOmniTIK U- 5HnD Reference picture





# RBOmniTIK U- 5HnD Reference picture





# RBOmniTIK U- 5HnD Output Voltage picture

