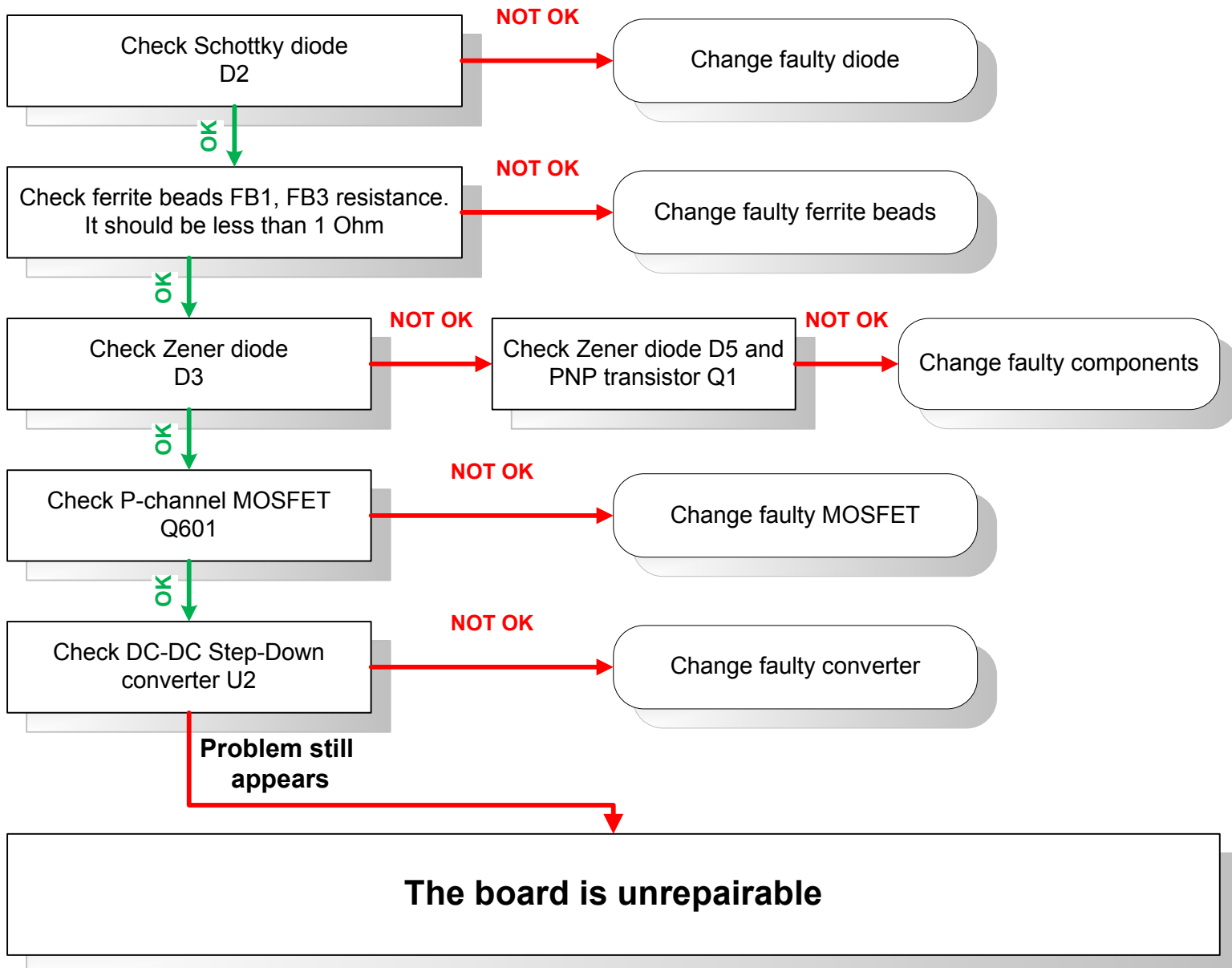


TroubleShooting for RB711GA-5HnD and RB711G-5HnD

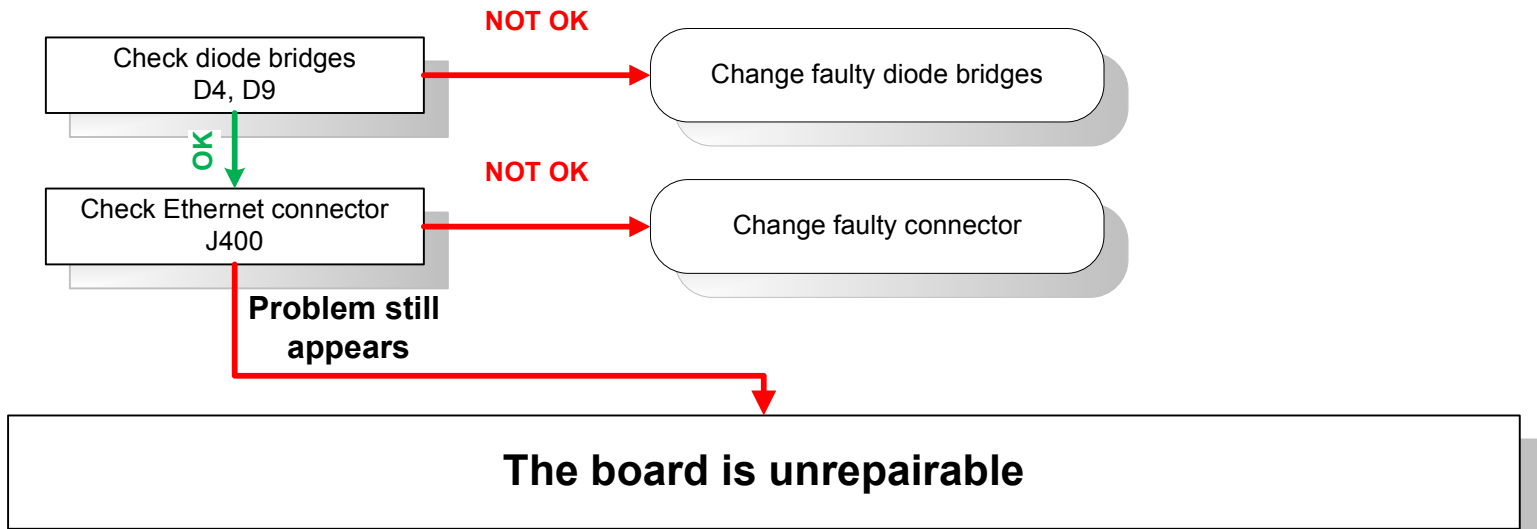
These repair instructions are for NON WARRANTY repairs only!

Please make visual inspection for signs of corrosion or mechanical damages before starting.

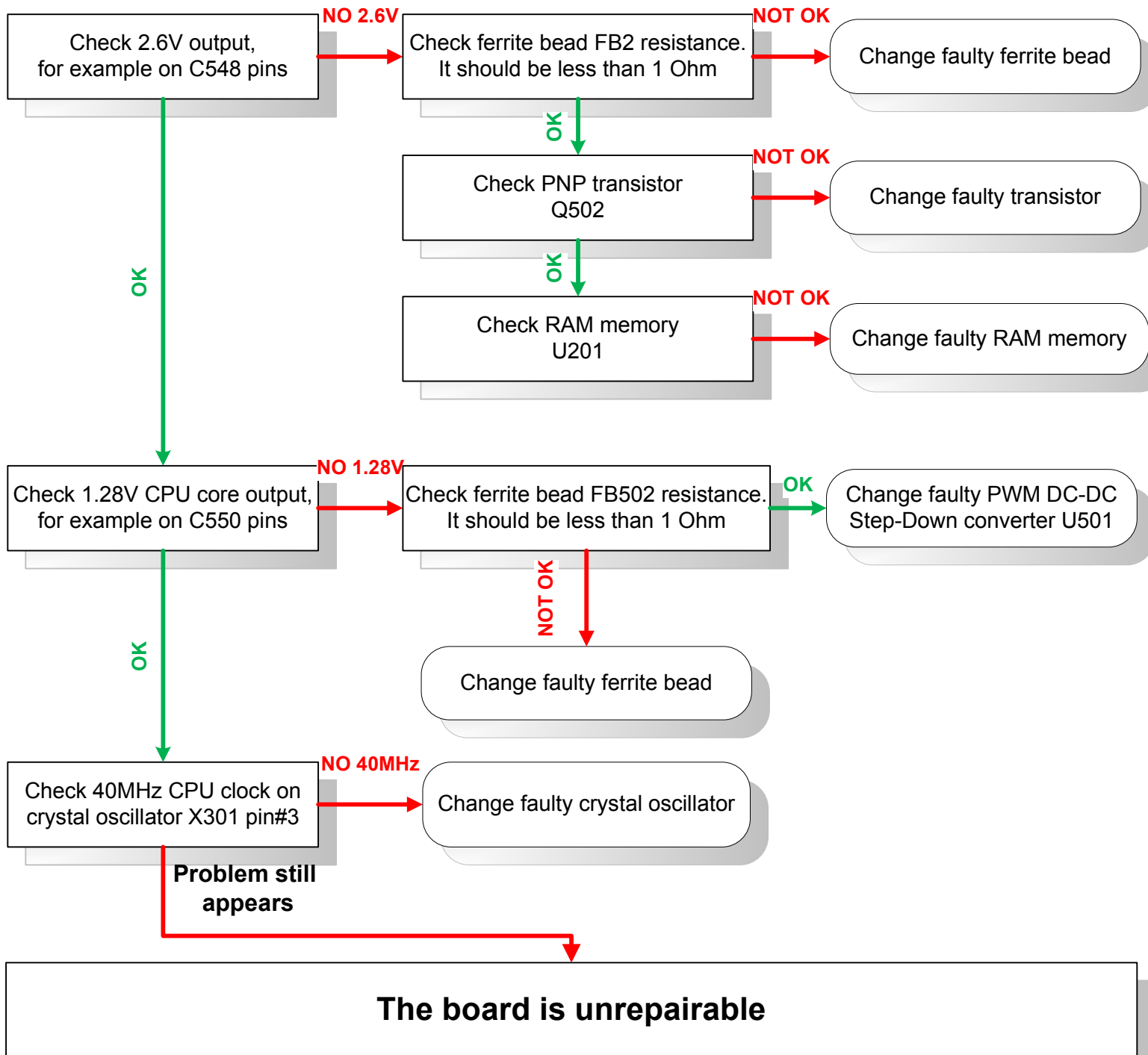
Routerboard does not powered up



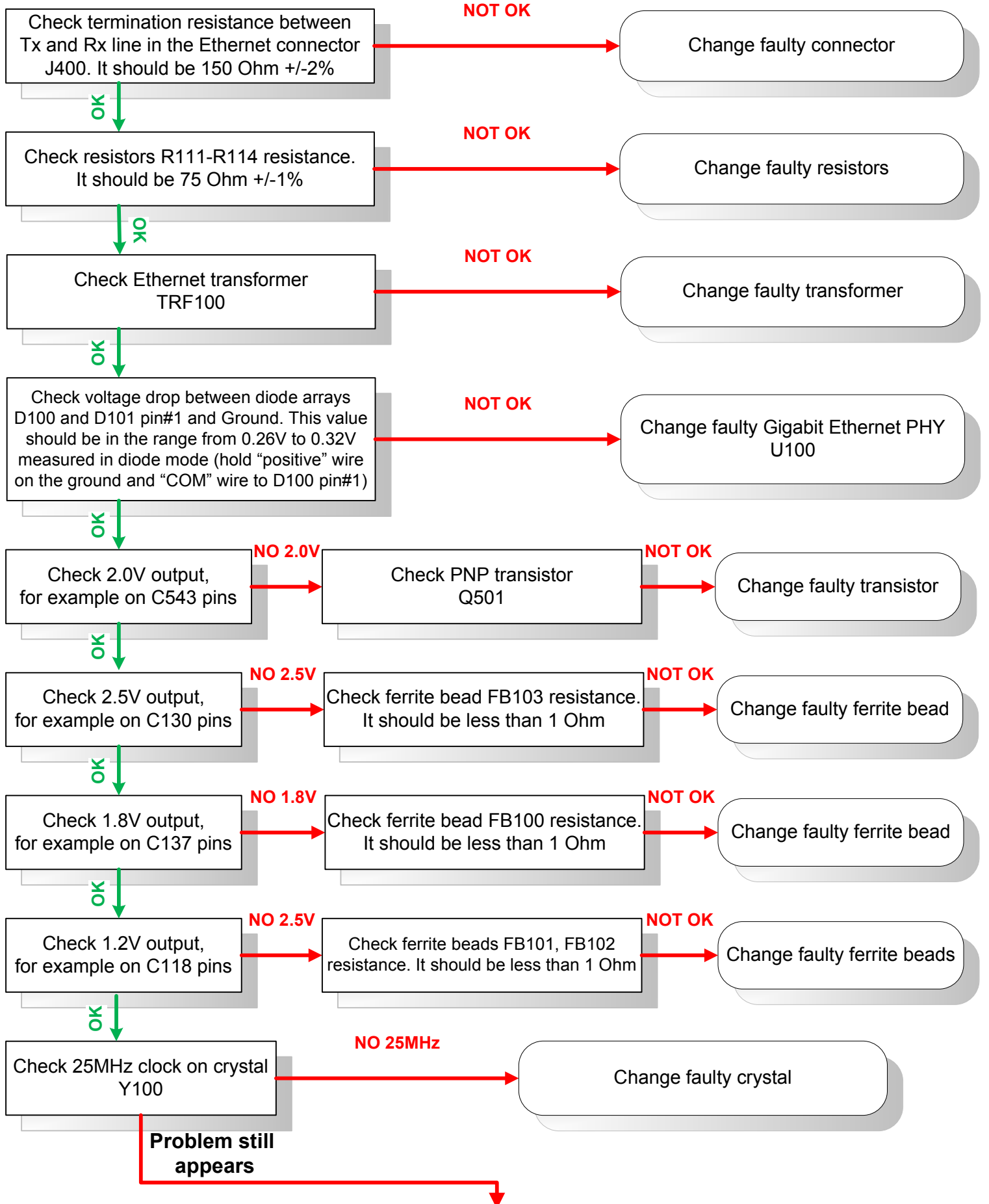
PoE does not work



Routerboard does not boot

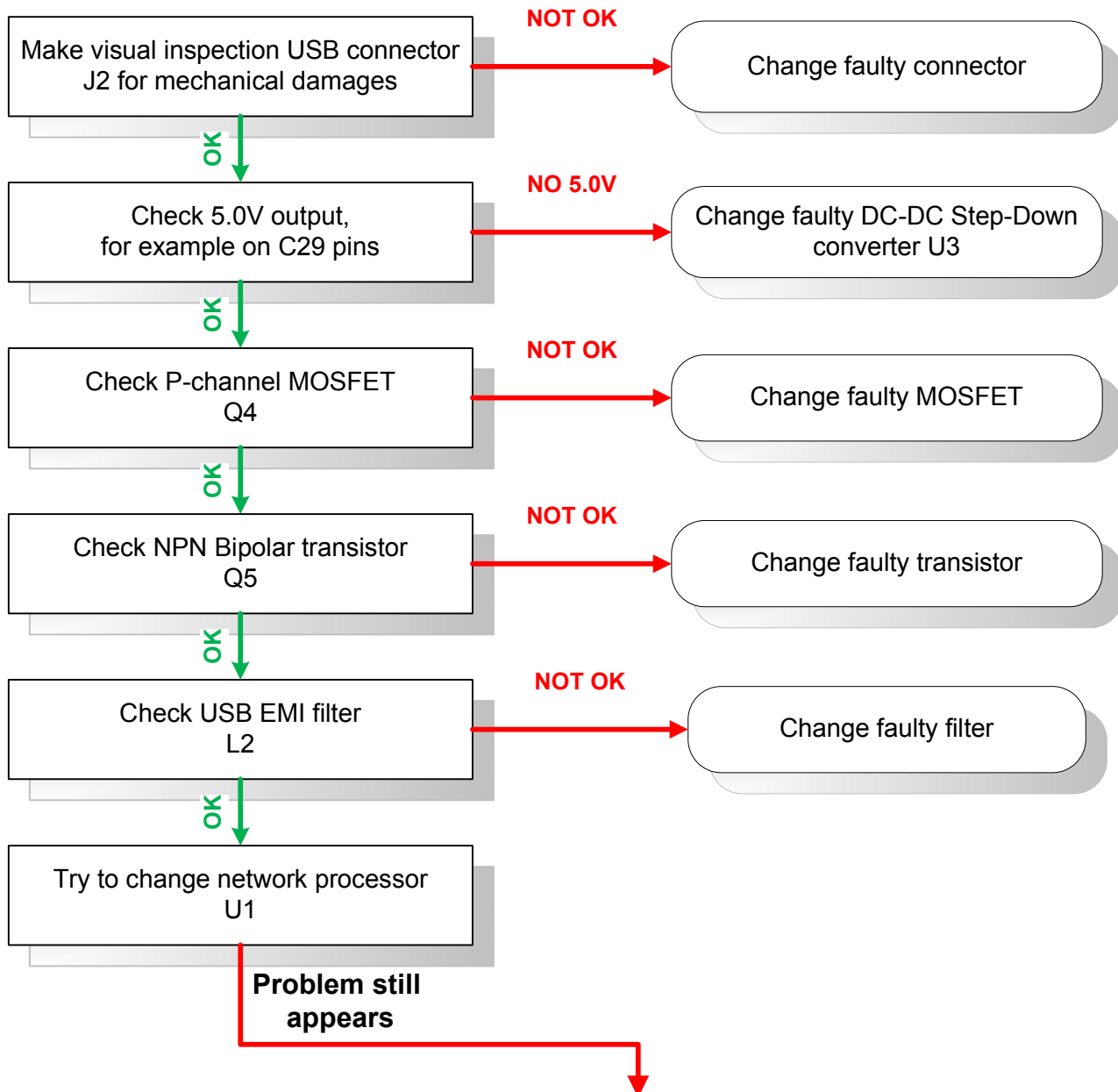


Ethernet port does not work, drop ping packets



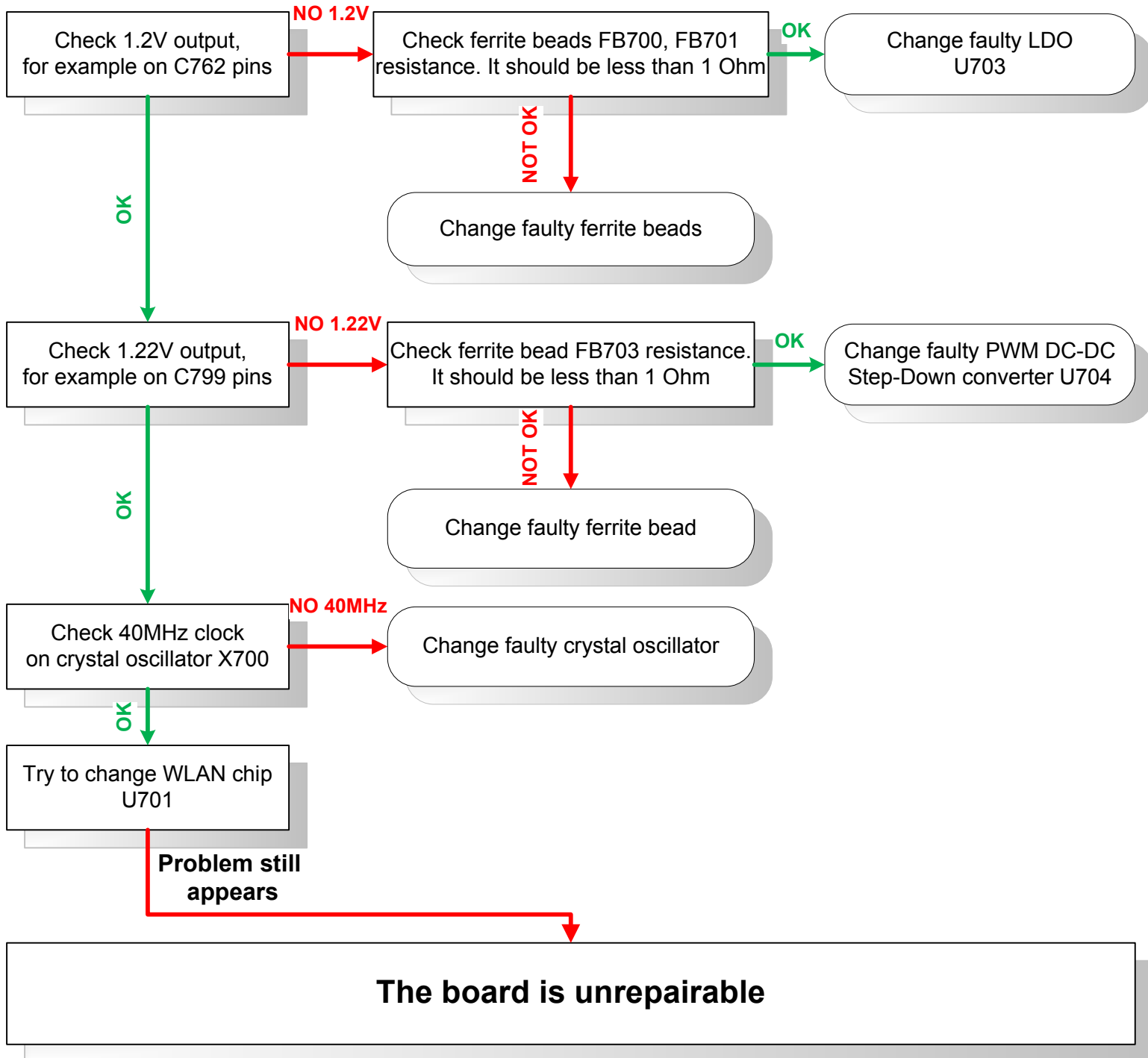
The board is unrepairable

USB does not work



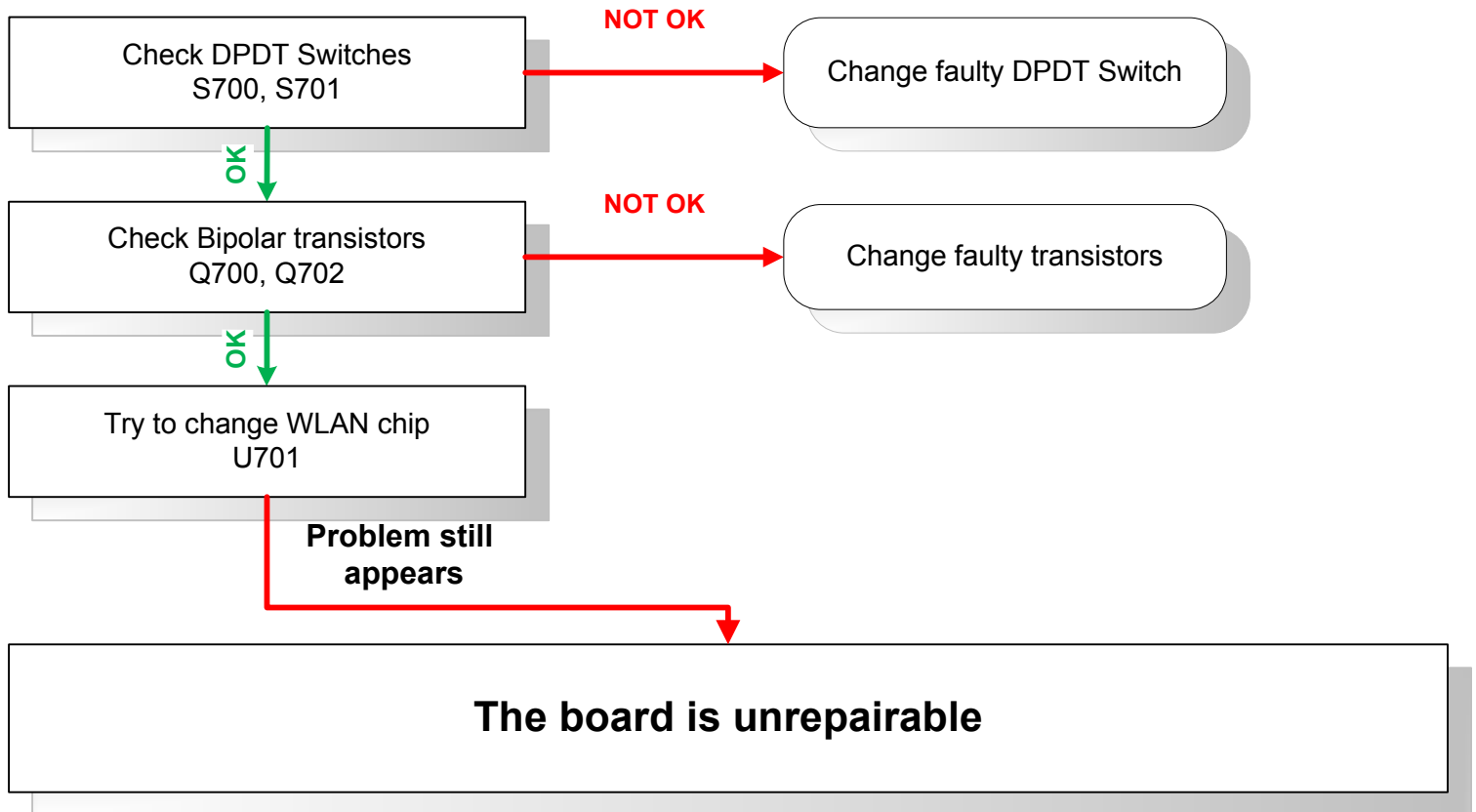
The board is unreparable

Network WLAN chip AR9280 does not show in the interface menu

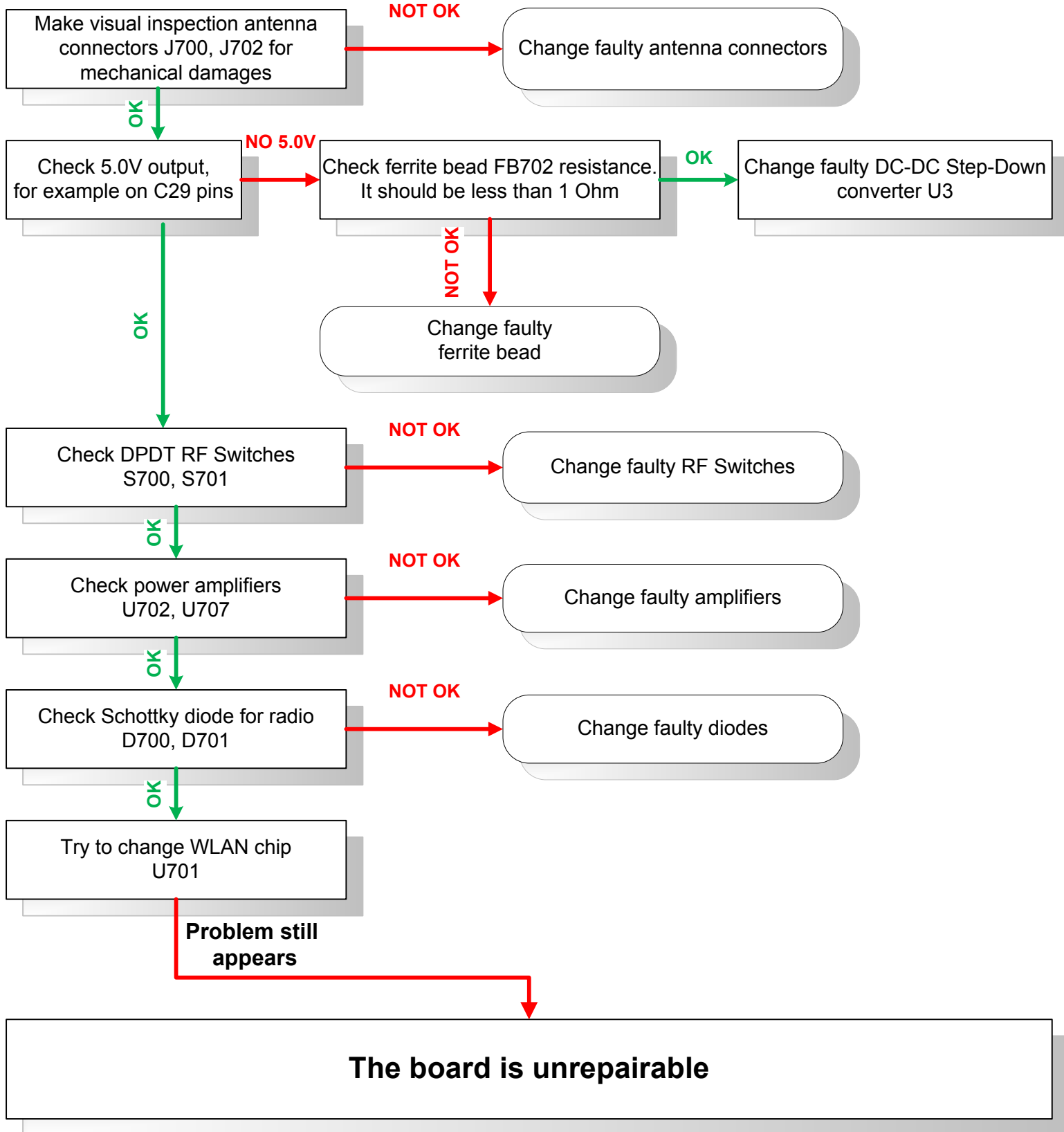


Radio part

Receive does not work



Transmit does not work



Reference number	Part Number	Manufacturer	Description
D2	SR210-T3-LF	Won-Top Electronics Co., Ltd.	Diode Schottky 100V 2A SMA
D3	BZX84C10-T1-LF	Won-Top Electronics Co., Ltd.	Diode Zener BZX84C 10V 5% 225mW SOT23
D4, D9	MB6S	SINYORK CO., LTD.	Diode bridge 600V 0.8A MBS
D5	BZX84-B30,215	NXP Semiconductors	Diode Zener BZX84B 30V 2% 250mW SOT23
D100, D101	AOZ8000CIL	Alpha & Omega	IC TVS ARRAY LOW-CAP SOT23-6
D700, D701	MADS-002200-12790T	Tyco Electronics(Qingdao) Ltd.	Diode Zerro Bias Schottky Detector up Vb=1.5V Ct=0.25pF SC-79
FB1, FB3, FB701, FB702	PBY321611T-800Y-N	Yageo Corporation	FERRITE 3A 80 OHM 1206 SMD
FB2, FB100, FB101, FB102, FB103, FB502, FB700, FB703	BLM18PG330SN1D	Murata manufacturing Co.	Ferr Chip Bead 33 Om, 3A, 0603
J2	USBAFDIP-605	Dragon Well Electronics Co.,Ltd.	USB Female connector, type A, DIP Right angle
J400	8588D-B11-L2-TR	Powerway Electronics Co., LTD	Single RJ45 w/o shield, w/o LEDs, with grounding springs, SMD
J700, J702	MCI-9605-7	Match Connector Industrial Co. LTD	MMCX connector with short central pin
L2	WCM-2012-900T	King Core Electronic Inc	USB 2.0 EMI Filter, ACM2012
R111, R112, R113, R114	CRCW060375R0FKTA BC	Vishay Intertechnology, Inc.	Resistor 75R 1% 0603
TRF100	G24105MKG	Magtek Technology Inc.	10/100/1000 Ethernet transformer, SMD
Q1	BC856B,215	NXP Semiconductors	Small Sign PNP 250mW SOT-23 Transistor
Q4	AP2311GN-HF	Advanced Power Electronics Corp.	MOSFET, P-channel, 60V, 1.8A, 250mOhm, SOT23 package
Q5	BC846B,215	NXP Semiconductors	Small Sign NPN 250mW SOT-23 Bipolar Transistor
Q501, Q502	KTA1663-Y-RTF/P	KEC Corporation, LTD	PNP transistor Ic= -1.5A, Vce= -30V, SOT-89
Q601	AO4441	Alpha & Omega	P-Ch MOSFET -60V -4A 100mOhm SO-8
Q700, Q702	BFP740E6327	Infineon Technologies Taiwan Co Ltd	SiGe Heterostructure Bipolar Transistor, DC-6GHz SOT-343
S700, S701	UPG2163T5N-E2-A	NEC Electronics	GaAs MMIC SPDT Switch, 2.4GHz&6GHz, 2.5-5.3V
U1	AR7242-AH1A	Atheros Technology Ltd.	SOC RGMII USB2 support
U2, U3	LSP5502SAC	Lite-On Semiconductor corporation	DC-DC Step-down converter 4.5-30V input 2A output Sync SO8
U100	AR8021-AL1E	Atheros Technology Ltd.	Single-port Gigabit Ethernet (GbE) PHY device

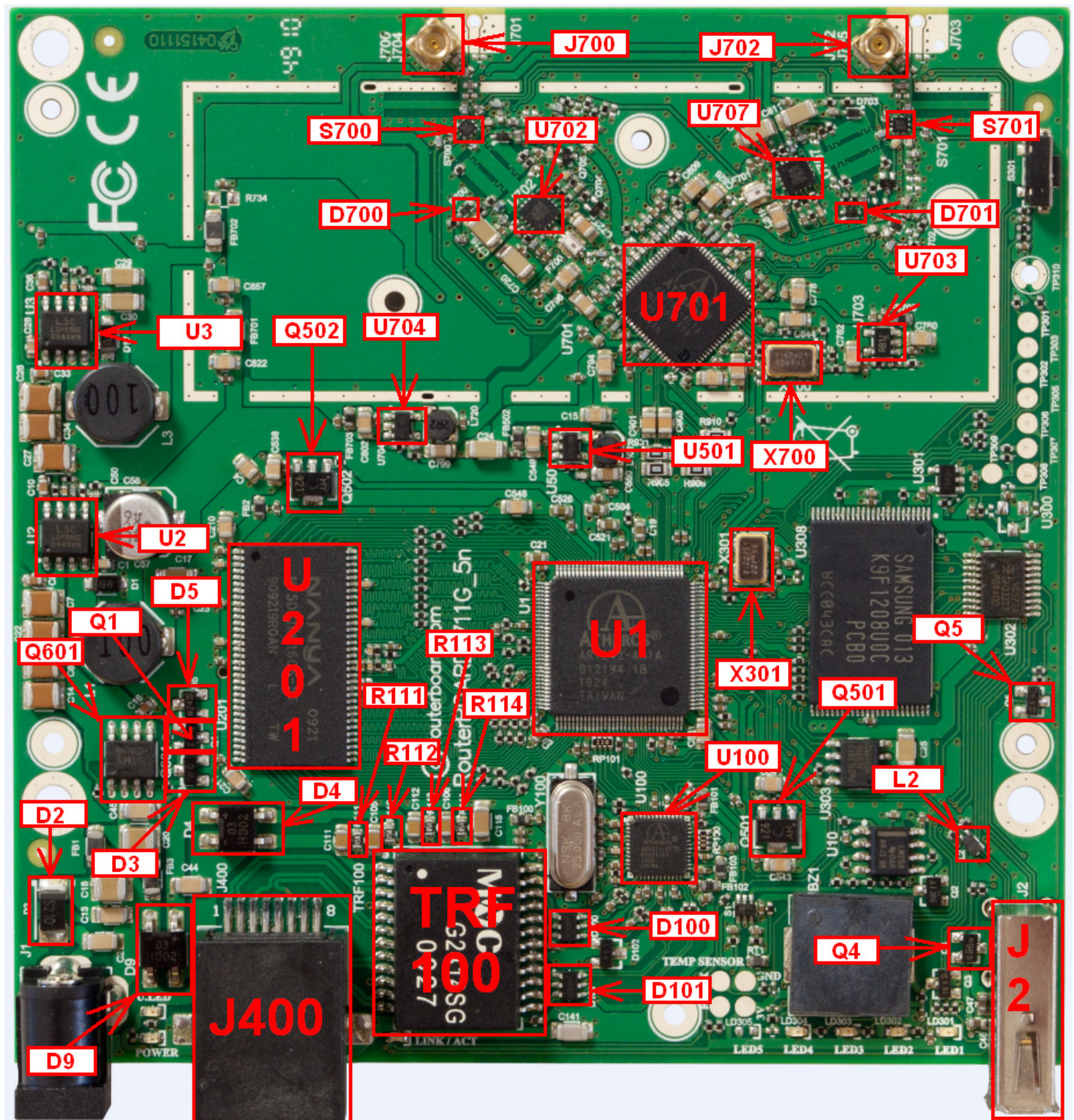
When you order components for repairing boards from our sales, please, write components reference number not a part number

Reference number	Part Number	Manufacturer	Description
U201 (for RB711G-5HnD)	NT5DS16M16CS-5T	NANYA TECHNOLOGY CORPORATION	DDR SDRAM 256Mbit DDR400 16Mx16bit TSOP-66 0+70C
U201 (for RB711GA-5HnD)	NT5DS32M16BS-5T	NANYA TECHNOLOGY CORPORATION	DDR SDRAM 512Mbit DDR400 32Mx16bit TSOP-66 0+70C
U501, U704	RT8025GJ5	Richtek Technology Corporation	1.25MHz, 400mA (works with 600mA load). PWM Step-Down DC/DC converter TSOT-23-5
U701	AR9280-AL1A	Atheros Technology Ltd.	802.11n 2.4/5GHz 2x2 MIMO MAC,BB,Radio WLAN IC, PCIe
U702, U707	LX5530LQ-TR	Microsemi Corporate	InGaP HBT 4.5-6.0 GHz Power Amplifier
U703	APU1205Y5-HF	Advanced Power Electronics Corp.	0.3A, ADJ LDO, SOT23-5
X301, X700	FD4000130	PSE Technology Corporation	Crystal Oscillator 40MHz 10ppm 1.8V 15pF -20+75 5x3.2
Y100	NXE25.000AC20F-AHF	NSK Jenjaan Quartek Corporation	Crystal 25MHz 30ppm 20pF -10+70 HC-49 (SMD) H=3.2mm

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

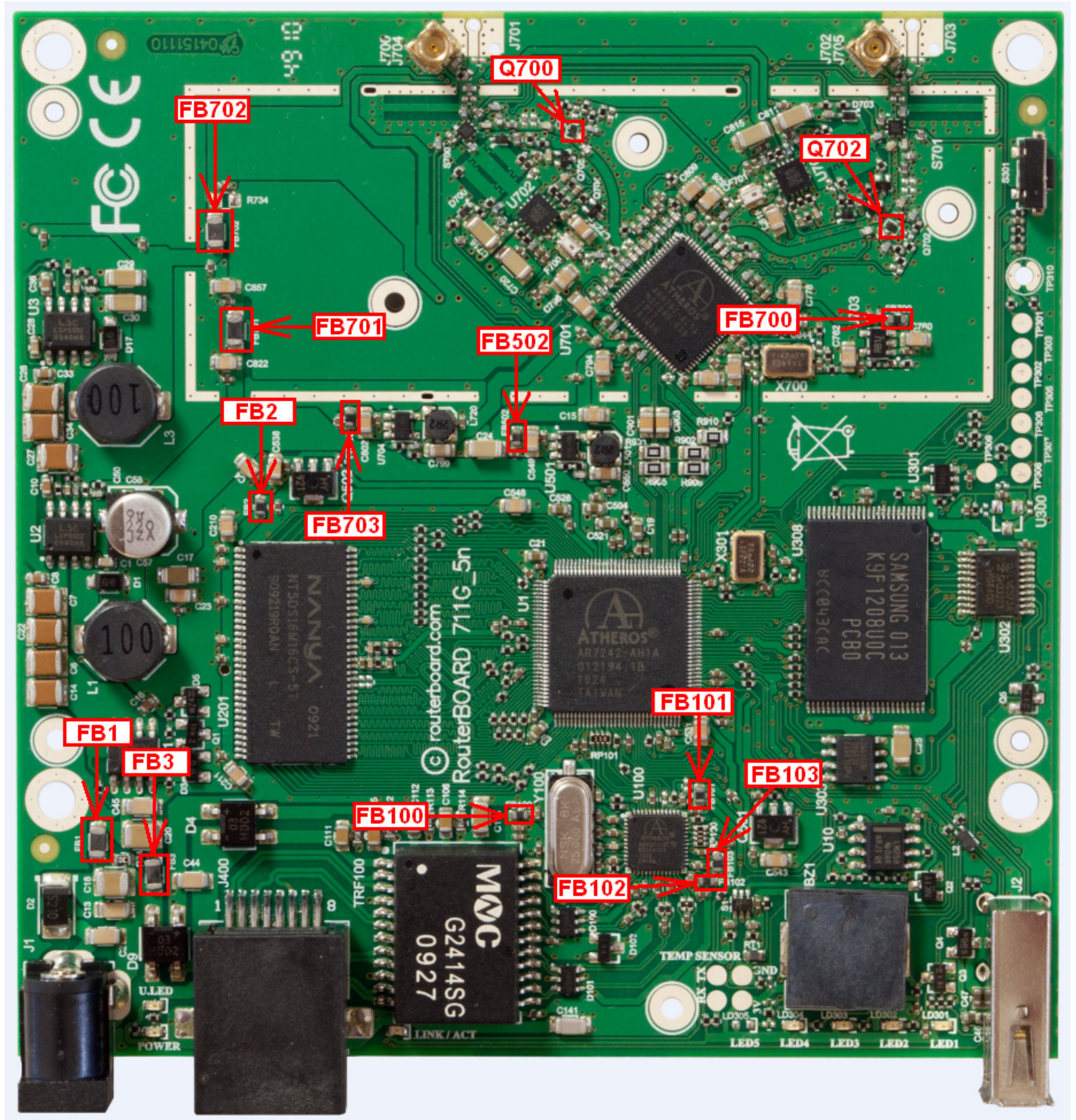
RB711GA-5HnD

Reference picture



RB711GA-5HnD

Reference picture



RB711GA-5HnD

Output Voltage picture

