



Asus P320 Troubleshooting Manual

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Troubleshooting

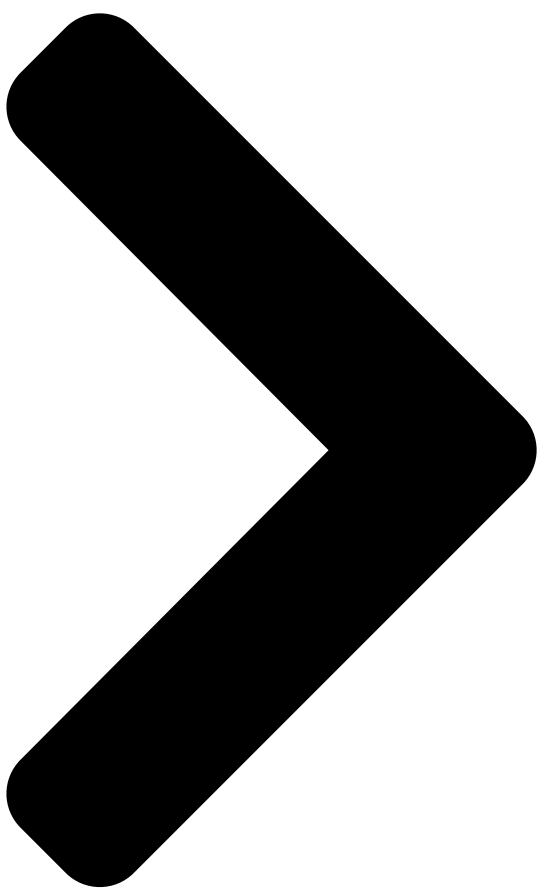
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GTC



Service Manual

ASUS P320 Level 3 4 Trouble shooting Guide

Ver 1.0

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ASUS Proprietary

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(33 pages)

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diagram ystem block diagram ystem block diagram Figure 1. System Block Diagram ASUS
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Power Domain Block Block Figure 2. Power Block Diagram ASUS Proprietary...

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J2ME (CLDC 1.1 + MIDP2.0) OMA 1.0 (optional) PIM & Utilities Contacts, Notes, Calendar, Tasks,
Alarm, Calculator, File Manager, and MSN Ringtone 128-ch Polyphonic ringer & MP3 Others
ASUS Today, Profile Manager, Theme Manager, UrTime , Newstation, ASUS Backup, etc. ASUS
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Camera Key Switch 22. BT/ WiFi Combo Module 23. BT/ WiFi Chip Antenna 24. Reset Key Switch
25. Mini USB Connector 26. Microphone ASUS Proprietary...

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[Page 15: Can T Power On](#)

U1 and U5. 5 Remove the Memory U5, Re-download Image and Remount U5. Note 2: 1 Don't
provide Power to PCB, and measure the impedance of all power domain on the device. Note 3: 1

Re-download image. ASUS Proprietary...

[Page 16: Display Failed](#)

1. Check LCD connector (CON9) => assembly, soldering issue 2. Replace LCD to golden sample => component issue 3. Check power supplied (R233, R232), LCM_RST# (R195), LCM_PWR_EN (R240) => soldering issue 4. Check communicated components between LCD and CPU (EMI1~5) => soldering issue. ASUS Proprietary...

[Page 17: Touch Panel Failed](#)

1. Check LCD connector (CON9) => Assembly, Soldering issue 2. Replace LCD to golden sample => Component issue 3. Check if the Hold Key is locked => Assemble issue 4. Check U15. C184~C187 => Assembly, Soldering issue 5. Check Power R91=> Soldering issue ASUS Proprietary...

[Page 18: Battery Connector Defectives](#)

Battery Battery connector connector defectives defectives 1. Check the Battery connect (CON7) => Soldering issue 2. Check signal, BAT HDQ (R102), U18 (Charger IC) => Soldering issue The Charger IC can get the current via CON7. ASUS Proprietary...

[Page 19: Sim Card Failed](#)

1. Check Wireless-manager on the WM6, Phone function must be ON => Operation notice 2. Check antenna cover => Assembly issue 3. Check SIM socket (CON1) and peripherals => Soldering issue 4. Check E-Syren (U17) and peripherals => Soldering issue ASUS Proprietary...

[Page 20: Micro Sd Card Failed](#)

1. Check Micro-SD socket (J5) => soldering issue. 2. Check communicated components between Micro-SD (J5) and CPU (U1), U346, U347 peripherals => Soldering . 3. Measure power supplied U21 and R209 => Solder issue. 4. Measure clock signal SDMMC_CLK (R159) => Check U1 and peripherals ASUS Proprietary...

[Page 21: Audio Headphone Failed](#)

■ Service Manual 4.7 Audio Headphone Failed Audio Headphone Failed Audio Headphone Failed Audio Headphone Failed 1. Check Mini USB Connector (J6) => SMT issue 2. Check switch (U33), Amplifier (U13), E-Syren (U17) and peripherals => SMT issue. ASUS Proprietary...

[Page 22: Board Microphone Failed](#)

□ □ □ ■ Service Manual 4.8 Board Microphone Failed Board Microphone Failed Board Microphone Failed Board Microphone Failed 1. Check assembly rubber => Assembly issue. 2. Check Board Microphone (M1), E-Syren (U17) and peripherals => SMT issue. ASUS Proprietary...

[Page 23: Speaker Failed](#)

4.9 Speaker Failed Speaker Failed Speaker Failed Speaker Failed 1. Check Speaker Entity and Spring => Assembly, SMT 2. Replace to golden sample => Component issue. 3. Check Power amplifier (U12), E-Syren (U17) and peripherals => SMT issue. ASUS Proprietary...

[Page 24: Receiver Failed](#)

Receiver Failed Receiver Failed 1. Check Receiver Entity and Spring => Assembly, SMT 2. Replace to golden sample => Component issue 3. Check Receiver Pad (REC1) , E-Syren (U17) and peripherals => SMT issue. Figure 21. WiFi circuit ASUS Proprietary...

[Page 25: Rf Repair Requirement](#)

High Frequency Probe with DC Block (connect with a 0603 1μF capacitor) 5.3 Equipment Equipment Equipment Equipment □ Test Fixture /PC Cable + Open COM port tool Oscilloscope Communication tester□Agilent 8960, CMU200 or Anritsu 8820 Digital Multi Meter Power Supply Spectrum Analyzer (up to 3.0 GHz) ASUS Proprietary...

[Page 26: Rf Block Diagram](#)

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[Page 27: Rf Pcb Location](#)

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[Page 30: Gsm Trouble Shooting](#)

1. Calibration log file 2. Using debug tool AFC Frequency calibration AGC RX gain calibration APC TX power calibration (GSM & EDGE) Debug Tool 8.2 RF Debug Tool 1. Double click the tool Build COM port and try to enter Test mode! ASUS Proprietary...

[Page 31](#) Service Manual 2. choose the IC -> Infineon SmartPM for P320 radio process type. 3. Transmit function and Receiver function group AFC Utility For GSM frequency test AGC Utility Auto Gain control for RX TX Utility1 APC test item...

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[Page 33: Afc Fail](#)

Service Manual 8.2 AFC Fail AFC Fail AFC Fail AFC Fail 1. Check RF connector firstly. 2. Check calibration log file. -AGC fail----check U1806 (Re-heat on U1808). -APC pass----check OMAP850 (U1). -APC fail----check E-SYREN (U17). connector U1808 ASUS Proprietary...

[Page 34: Apc Fail \(Tx\)](#)

Service Manual 8.3 APC Fail (TX) APC Fail (TX) APC Fail (TX) APC Fail (TX) Check RF connector firstly Checking which band fail Using debug tool -Check U1806 (re-heat U1809) -Check TX trace connector U1806 U1809 U1808 ASUS Proprietary...

[Page 35: Agc Fail \(Rx\)](#)

AGC Fail (RX) AGC Fail (RX) AGC Fail (RX) Check RF connector firstly Read the g-magic value (200-212) -Too high: Check instrument setting -Too low: Using debug tool Check the U1806 (re-head) Check the RX trace connector U1806 U1809 U1808 ASUS Proprietary...

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1. Compare to golden samples 2. Pass: check passive port 3. Fail: check GPS trace -Checking the CN value in passive port 1. Compare to golden samples 2. Pass ----check antenna pad 3. Fail-----check GPS trace Active port ASUS Proprietary...