

Repair Map - Audio

Signal Path Key

Red signal path represents
Transmit Audio

Blue signal path represents
Receive Audio

(1) If there is just no audio from unit check:
● Microphone
● J802
● Discretes around Mic.
All for dry joints, open circuits etc.

(2) If there is just no audio from PHFA headset then check:
● J940 for dry joints, open circuit.
● U946 amplifier and associated components for missing, dry joints etc.

(3) If missing, check that MIC_BIAS (2.25V) is being supplied from U601 pin 27 and replace U601 if missing. If MIC_BIAS is OK check R602 and R608 for dry joints etc.

(4) If missing, check for dry joints on U601. Check U601 is receiving DCLK (512KHz square wave) from U700. Also check R610 and C609 for dry joints, damage etc.

(5) If missing check:
● J940
● L941
● R944
● C941
For dry joints and open circuits

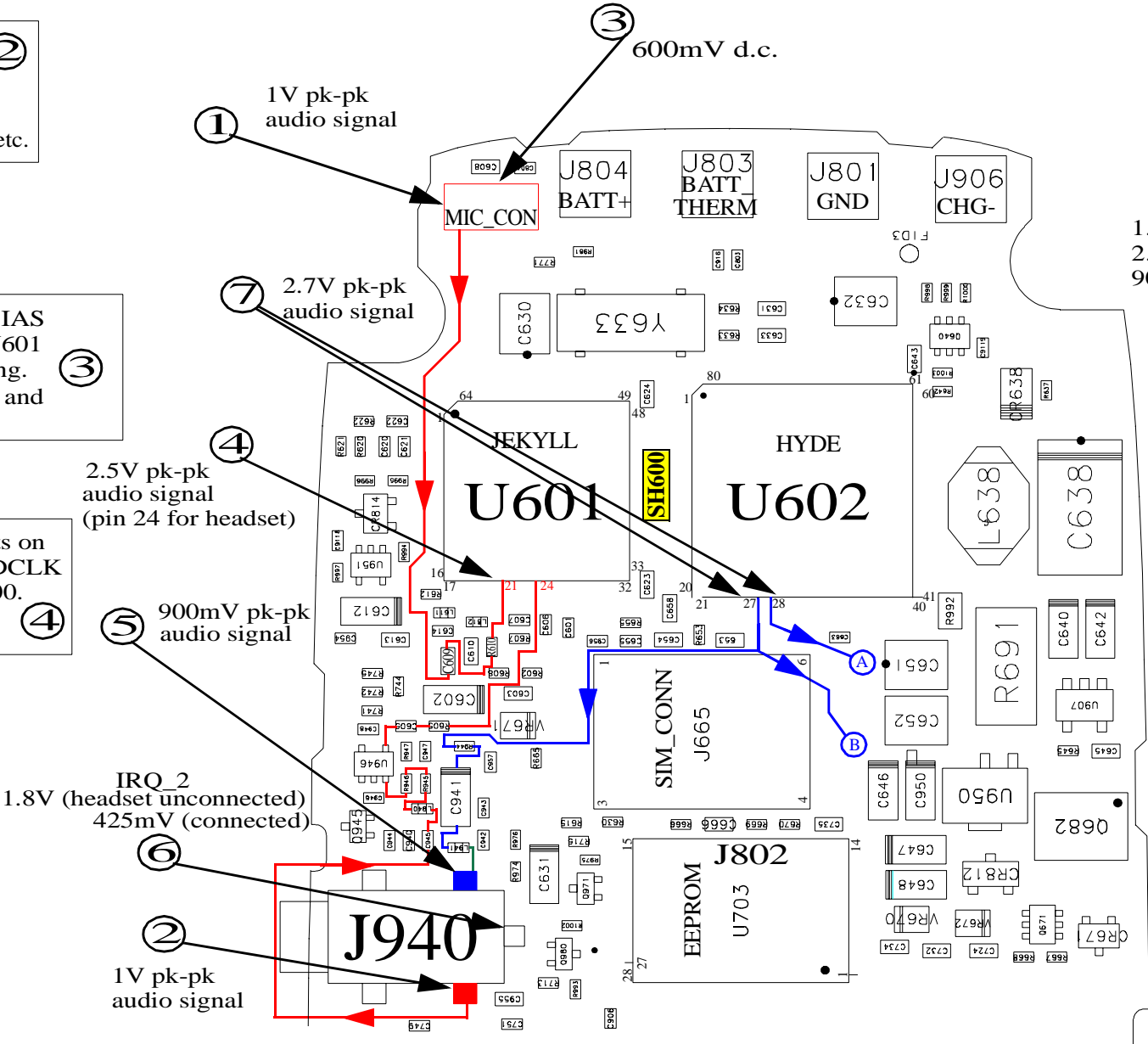
(6) If missing, reflow U700 and if this does not work then replace U700.

(7) If missing, check:
● U602 for dry joints
● C658
● R655 and other discretes at Pins 25 and 26 U602 for dry joints, open circuits, damage etc.

(8) If missing, check:
● VR501 ● L903
● VR502 ● L907
● C902 ● R907
● C903 ● R903
All for dry joints, open circuits, damage etc. If all OK replace Speaker.

(9) If you cannot find any audio signal at any point, then this could be a data fault, check for:
● DIG_AUDIO on pins 14 and 15 U601 (8KHz, 3V square wave with data).
● DCLK on Pin 13 U601 (512KHz clock)
If missing U700 or U601 may be corrupt.

MAIN SIDE OF PCB



KEYPAD SIDE OF PCB

1.3V d.c.
2.7V pk-pk audio signals
90 degrees out of phase

