7 **Iphone4s wifi ic replacement (343s0694)**

**Removal**

1 remove the motherboard completely from the phone

2 secure the MB using a vice or other tool and protect the surrounding parts from excess heat by covering with kapton tape or metal shielding

3 use hot air set to 200deg low air flow and using a sharp needle or tweezers heat any black glue around the edges of the ic and remove completely take as much time as possible for best results.

4 put flux on top and around the edges of the ic to aid heat absorbtion then using a 4/6mm nozzle and hot air at 380deg (air flow set to max) apply heat to the ic in a circular fashion for around 20secs testing with a metal pick constantly until the chip is freely moving then remove it from the pcb.

5 remove any traces of solder and clean the pads on the MB using flux and any one of the many methods currently demonstrated on the web I personally use braid impregnated with extra flux be extremely careful not to detach any of the pads on the pcb

**Refitting**

1 apply flux to the pads on the motherboard and a very small amount on top of the ic

2 if possible preheat the underside of the motherboard for about 3 minutes to 200 degs

3 place the ic into position on the pads of the motherboard the ic must be correctly oriented at this point

4 using a 4/6mm nozzle set to 230/240deg and max air flow place the hot air gun directly above the ic at a distance of around 5 to 10mm, the external components must be protected from any heat at all times reflow time is 30 sces (see notes below)

5 remove the heat and allow the MB to cool for approx. 5mins without moving

Important notes

Use caution there are many variables involved in hot air soldering

MB =motherboard IC = integrated circuit

All temps and durations are based on a fully functioning hot air bga reflowing system

most of the bga systems on the market retailing for less than £399 have wide tolerances ie the indicator may say 200deg but tolerance could be ><15% therefore the heat produced may actually be anything from 170deg to 230deg .in this case it is vital to calibrate your device first.

Ambient temperature is also vitally important make sure the ambient temp of the room you are using is within the range of 19deg to 21deg

The above instructions are for guidance only and computabench accepts no liability for breakdown or damage to components caused by untrained personnel

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