

Soldering ics less than 20 balls or 40um thickness

The smaller the ic requires the less heat for the shortest possible time the following profile is used in our workshop with excellent results If possible always preheat the pcb from beneath to around 180/200deg slowly raising the temp over approx. 15mins

This will bring the solder to just below melting point

And means that you can apply the necessary heat for the least amount of time with minimum airflow (between 15 and 30 secs) where possible use the manufacturers recommended heat settings but if they are not available then test the solder that you are using and mark the melting point of the solder on any components around the area of the ic when they start flowing apply heat to the chip for a further 10 secs remember fresh solder will flow more easily than old solder and leaded solder will flow more readily than unleaded solder

So to summarise when the pcb has reached 180deg apply heat from above for around 15 to 30 seconds 320deg for leaded or 340deg for leaded (or use the temp that you noted when testing the surrounding components)