

SMT mounting of IQRF TR modules

Application Note

AN010



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Rules and recommendations for SMT mounting of IQRF TR modules

All IQRF TR modules are lead-free. For proper assembly of surface mount TR modules and avoiding damage during solder reflow the following rules must be observed:

Base PCB

Base PCB pads should be designed in accordance with PCB layout recommended in datasheet of given TR module.

Baking

The TR modules must be baked dry according to IPC/JEDEC J-STD-033C, Moisture Sensitivity Level 4 before reflow soldering.

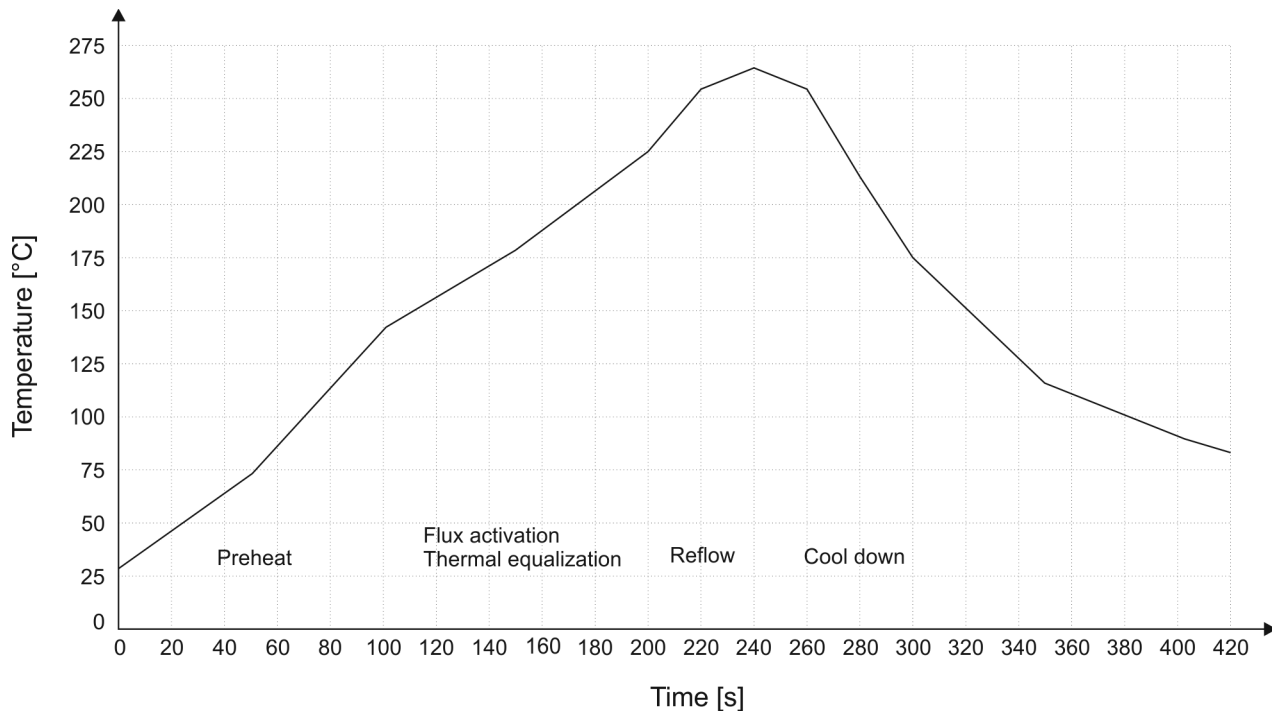
Assembly

The TR modules must be assembled according to the IPC/JEDEC J-STD-020C standard. Only one reflow cycle with thermal profile specified below is allowed.

Reflow profile

Recommended Pb-free thermal reflow profile for TR modules is shown in the diagram below. The actual reflow profile can depend on specific factors such as given solder reflow equipment, technology process, base PCB footprint etc. Thus, the proper reflow profile should always be optimized and verified for given conditions.

Sn/Pb reflow with lower temperature profile is also allowed.



Document history

- 121001 First release

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