Component to Component Minimum Spacing Checklist

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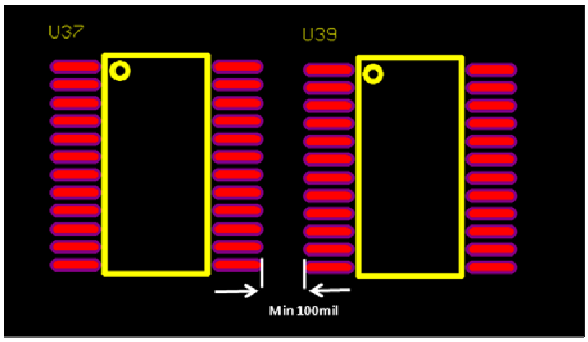
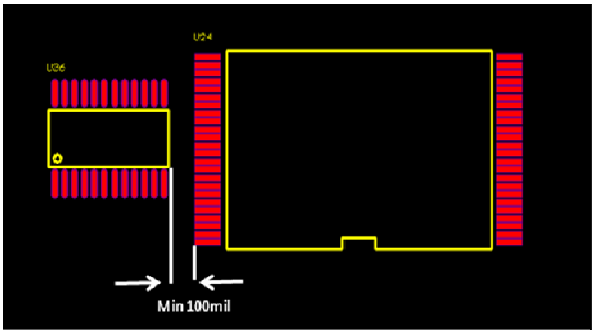
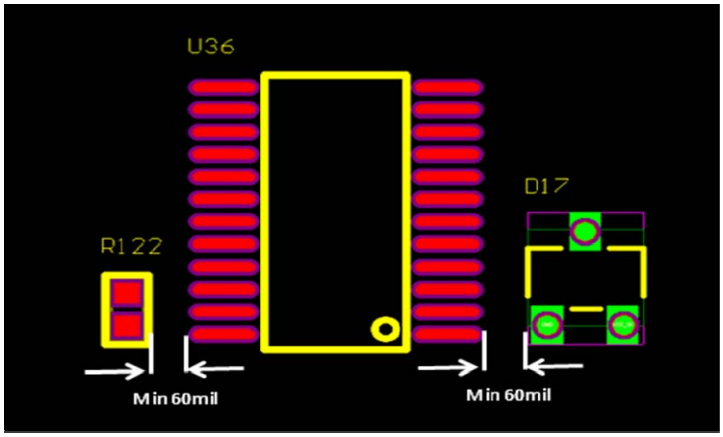
Details

1. Keep at lease 2.5mm (100mil) between QFP or SOP components.

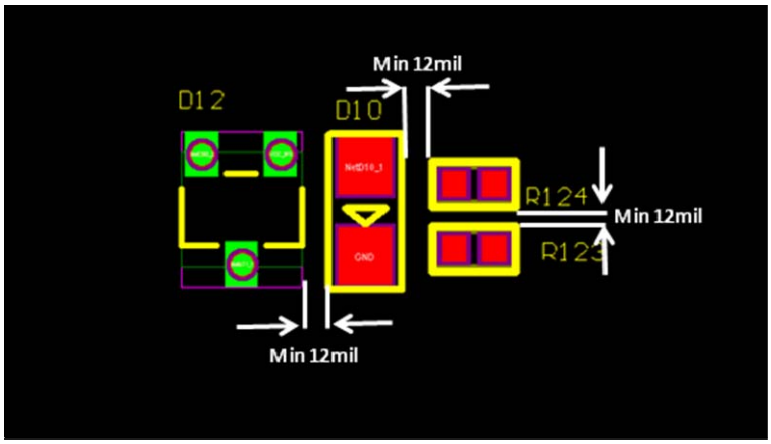




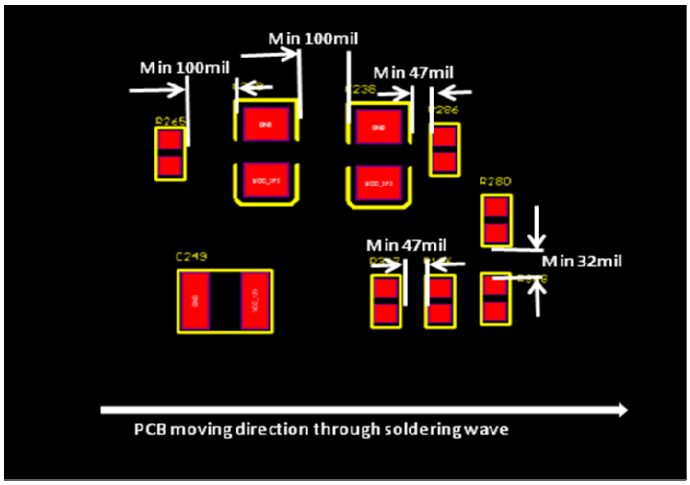
2. Keep at least 1.5mm (60mil) between QFP or SOP components to chip, DIP or SOT components.



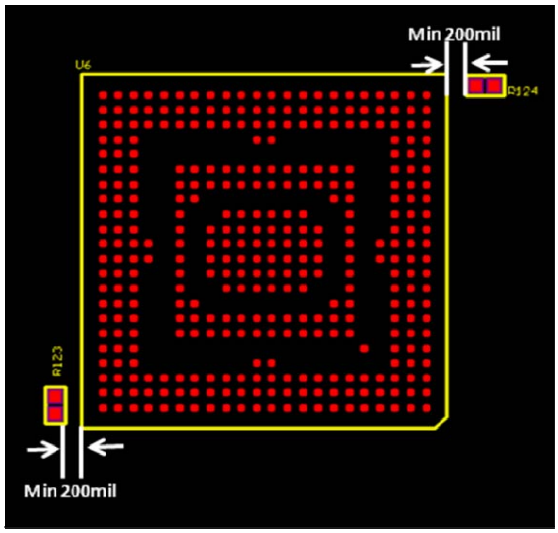
3. For these re-flow solder PCB design, please keep at lease 0.3mm (12mil) between chip, DIP or SOT components.



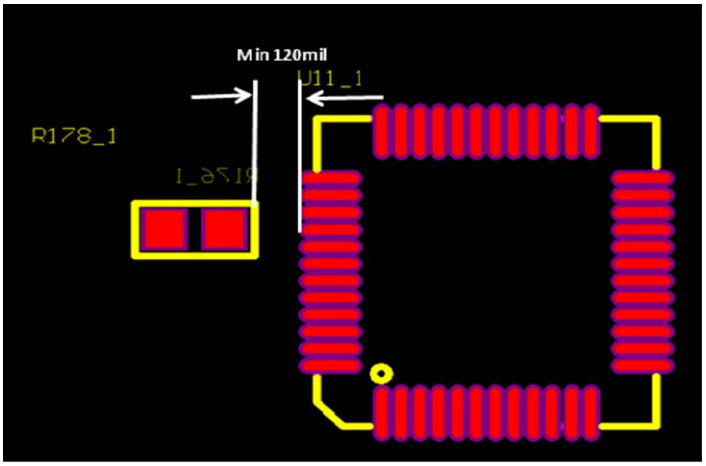
4. For these wave solder PCB design, keep at least 1.2mm (47 mil)(PCB moving axis) and 0.8mm (32 mil)(vertical axis) between chip ,DIP or SOT parts. For high profile chip components (like tantalum capacitor), increase the distance to 2.5mm (100 mil).



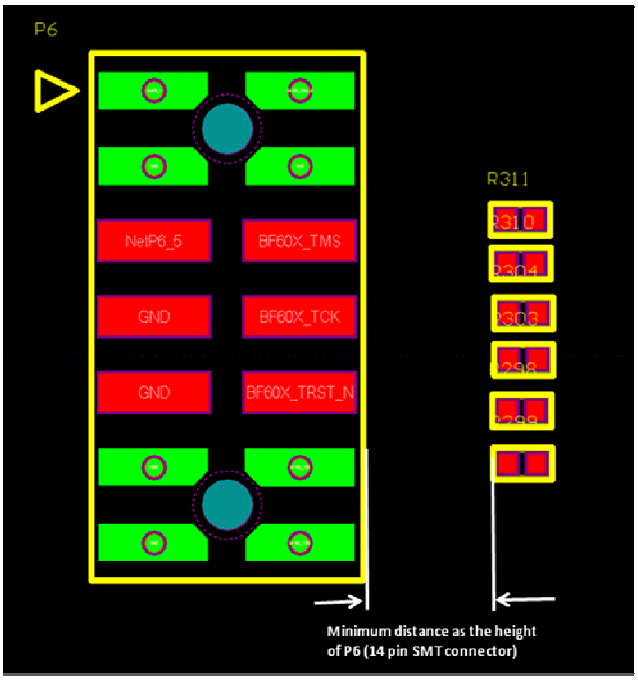
5. Keep at least 5mm (200mil) between BGA and other components. Place decoupling capacitors close on bottom side and keep as much as possible to VCC pin on active components.



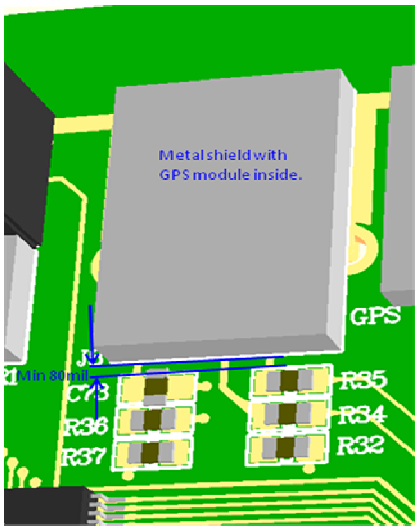
6. Keep at least 3mm (120mil) between PLCC socket and other components. PLCC socket should be always on top side (component side).



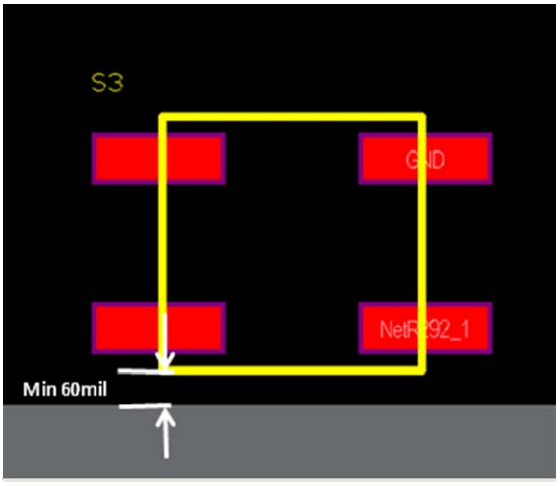
7. For SMT connectors, keep the height of the connector as the minimum clearance to the other components. For example, if the connector is 3.5mm high, then please keep at lease 3.5mm between this connector to adjacent components.



8. Leave at lease 2mm (80 mil) from component to the shield soldering pad (metal shield is quite normal used in wireless product designs).



9. Leave at lease 1.5mm (60mil) from the component to the board edge.



10. Components placed on the solder side (bottom side) should keep at lease 5mm (200mil) away from the leads of PTH components.