Solder plus Support

Solder Pot Maintenance

If a solder pot is out of specification, some corrective action generally needs to be taken to ensure compliance with the limits listed in the table below. Please contact AIM Technical Support for more information.

Maximum Limits of Solder Bath Contaminant: According to IPC J-STD-001E Standards

Contaminant	Tinning Maximum Contaminant Weight % Limit Sn/Pb Alloys	Assembly Maximum Contaminant Weight % Limit Sn/Pb Alloys	Tinning & Assembly Maximum Contaminant Weight % Limit Lead-Free Alloys[1]	Tinning & Assembly Maximum Contaminant Weight % Limit SN100C®
Copper, Cu	0.75	0.3	1.1[3]	1.1
Gold, Au	0.5	0.2	0.2	0.2
Cadmium, Cd	0.01	0.005	0.005	0.005
Zinc, Zn	0.008	0.005	0.005	0.005
Aluminum, Al	0.008	0.006	0.006	0.006
Antimony, Sb	0.5	0.5	0.2	0.2
Iron, Fe	0.02	0.02	0.02	0.02
Arsenic, As	0.03	0.03	0.03	0.03
Bismuth, Bi	0.25	0.25	0.25	0.1
Silver[2], Ag	0.75	0.1	4.0	0.1
Nickel, Ni	0.025	0.01	0.05	0.1
Lead, Pb	N/A	N/A	0.1	0.1
Total of Copper, Gold, Cadmium, Zinc, Aluminum Contaminates	N/A	0.4	N/A	N/A

Note 1: Maximum contamination limits are applicable for Sn96.5Ag3.0Cu0.5 (SAC305) per J-STD-006. Other Lead-free solder alloy contamination limits may be used upon agreement between user and vendor.

Note 2: Not applicable for PB36B: limits to be 1.75% to 2.25%.

Note 3: A maximum copper limit of 1.0% may be specified as agreed between user and supplier. Printed circuit assemblies that are characterized as thick and thermally demanding may have potential plated through hole fill and/or solder joint defects due to the impact of copper on solder flow characteristics.