

AGENDA

SOLDERING TECHNOLOGY COMMITTEE (STC)

APRIL 20, 2004

1) Introductions and Roster modifications

2) October meeting minutes approval

2 Old business

2.1 Review/status of ANSI J/STD-001-C

ANSI J/STD-001-C was published March 2000. New revision activity kicked off in New Orleans last November. A working draft has been prepared for ballot/comments. The Chairman will forward the draft to committee members for review.

3 New business

3.1 Review of ANSI J/STD-002-B

3.1.1 J-STD-002B Status

Dave Hillman updated the team on revision activity for J-STD-002 "Solderability Tests for Component Leads, Terminations, Lugs, Terminals and Wires". A key item to be included in the next revision of the J-STD-002 is to include options for testing to lead-free temperatures. Dave Hillman and Bill Russell have drafted a DOE to encompass soldering temperatures, times, flux, and component finishes for comparison to board mounted units. We will review the DOE and discuss test plans. The STC will perform the solderability testing while the IPC members will be in charge of performing board mount and evaluation of board mounted components. The team will review status of supply of components for testing:

<u>Name</u>	<u>Components to supply</u>
Doug Romm	NiPdAu finished IC packages
Jeff Cannis	SnPb, Matte Sn, SnBi, and NiPdAu finished IC packages
Matt Joiner	0603 100% Sn plated fuses
Sue Barkal	0805 matte Sn tantalum capacitors
Dave Toomey	0805 matte Sn tantalum capacitors
Yumi Aihara	0805 capacitors
Michael Cannon	0603 capacitors

The wetting balance test method is currently listed in ANSI/J-STD-002 under the section "Tests without Established Accept/Reject Criterion". Mr. Hillman reported that there is interest in the IPC committee in either updating the status of wetting balance test method as an "accepted" method or eliminating it from the J-STD-002. The team will discuss current activity on the wetting balance test method and any plans to change it's status.

3.1.2 Possible replacements for steam pre-conditioning

Both the IPC and STC committees are interested in investigating possible replacements for steam pre-conditioning. At the last meeting, Mr. Hillman presented a summary of his work on steam pre-conditioning. Summary of inputs are:

- Steam creates oxide conditions that do not match natural aging conditions.
- The IPC committee is agreeable to defining a different set of conditions.
- Mr. Hillman is leaning towards using 125C or 150C dry bake for a period of time, not yet determined.

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- There is no active work going on with a replacement for steam pre-conditioning right now. It's up to the STC to generate the data.

STC will discuss options to address steam pre-conditioning.

3.1.3 Other needed additions to J-STD-002

At our last meeting, STC members discussed packages which exist now but are not included in the pass/fail criteria listed in J-STD-002. The team agreed pass/fail criteria needs to be included for QFN, Exposed Pad, and BGA-type packages. The team will review and determine a schedule to have package drawings and pass/failure criteria submitted.

3.1.4 STC Priorities for 2004

Previously, it was agreed that the order of priority for team activities in 2004 will be:

1. Define/complete the Pb-free DOE; update J-STD-002.
2. Investigate replacement for steam pre-condition.
3. Perform gauge R&R for wetting balance method.

4 Next meeting

Define next meeting location, date/time.

5 Adjournment