

Minutes of the Joint ECA Soldering Technology Committee (STC)

Wednesday, October 8, 2008

Red Lion Hotel

Salt Lake City, Utah

The scope of the Soldering Technology Committee (STC): The STC encompasses soldering practices (soldering iron-mass reflow techniques) and associated soldering materials (solders, pastes and adhesives, and flux / cleaning agnets). However, the Committee will focus on solderability test method development for printed through-hole (PTH) and surface mountable components. One of the major functions is to promote commonality and standardization of soldering test methodology within the EIA sectors.

This meeting was called to order at 1:30 p.m. by STC Committee Chairman, Doug Romm

Name	PI		Organization	Telephone	E-mail	F08	S08	F07	S07
V	T								
Attendees									
Cannon, Mike	M	P	TDK	847-390-4317	mcannon@tdkca.com	Y	N	N	Y
Carter Berrios, Mary	M	P	KEMET Corporation	864-901-0157	marycarterberrios@kemet.com	Y	Y	Y	Y
Carter, Scott	G	P	Tek Pak	630-406-0560	carter@tepak.com	Y	N	N	N
Connell, Jim	M	P	Vishay	610-969-8240	jim.connell@vishay.com	Y	N	N	N
Lauri, Mike	M	U	IBM	845-892-0442	laurim@us.ibm.com	Y	Y	Y	Y
Macomber, Laird	M	P	Cornell Dubilier	864-843-2277	lmacomber@cde.com	Y	Y	Y	Y
McHargue, Lanney	M	P	Murata	770- 319-5159	lmchargue@murata.com	Y	Y	N	N
Richardson, Dave	M	P	Vishay	770-887-2021	Dave.richardson@vishay.com	Y	Y	Y	N
Romm, Doug	M	P	Texas Instruments	903 870-0973	doug@ti.com	Y	N	Y	Y
Young, Jayson	M	P	KEMET Corporation	864-967-6859	jaysonyoung@kemet.com	Y	Y	Y	Y
Absent									
Biernacki, Joe	M	P	Stackpole	915-790-2449	j.biernacki@seielect.com	N	Y	Y	Y
Cambron, Ron	G	P	Bourns, Inc.	480-820-8662	Ron.cambron@bourns.com	N	N	N	Y
Cantrell, Wil	G	P	Bourns, Inc.	951-781-5558	Wil.cantrell@bourns.com	N	N	N	Y
Coler, Ted	M	P	Vishay	402-563-6417	Ted.coler@vishay.com	N	N	Y	N
Crawford, Jack	G	G	IPC	847-597-2893	crawja@ipc.org	N	N	N	N
Hillman, Dave	M	U	Rockwell-Collins	319-295-1615	ddhillma@rockwellcollins.com	N	N	N	N
Kolbe, Jerry	M	P	Murata	814-238-8437	jkolbe@murata.com	N	N	N	N
Kummeri, Steven	M	P	Texas Instruments, Inc.	214-480-1509	s-kummeri2@ti.com	N	N	Y	N
Lindquist, Carl	M	P	SOC America, Inc.	908-218-8899	fuseman@attglobal.net	N	Y	Y	Y
Masui, Jim	M	P	Murata	770-436-1300	jmasui@murata.com	N	N	Y	N
McCullen, Jack	G	P	Intel	480-554-5354	Jack.t.mccullen@intel.com	N	N	N	Y
Motoki, Tom	M	P	Murata	770-433-7613	tmotoki@murata.com	N	N	N	N
Offner, Arnold	M	P	Phoenix Contact	717-948-3469	aoffner@phoenixcon.com	N	Y	N	N
Piscitelli, Brian	M	P	KOA Speer		bpiscitelli@koaspeer.com	N	Y	N	N
Reynolds, Chris	M	P	AVX	843-444-2868	creynolds@avx.com	N	Y	N	Y
Russell, Bill	M	U	Raytheon	972-205-6188	wrussell@raytheon.com	N	N	Y	N
Wang, Liwu	M	P	AEM	858-481-0210	lwang@aem-usa.com	N	N	N	Y
Nonvoting Members Present									
Justus, Ralph	S	G	ECA	703-907-8023	rjustus@ecaus.org	Y	Y	Y	N
Willis, Bob	S	G	ECA	703-907-7436	rwillis@ecaus.org	Y	Y	N	N

*PI = Participant Identification: V = voting status, M = member, G = guest, S = staff, T = participant type, P = producer, U = user, G = participant

62350:11/08

1. Introductions and Roster Modifications

2. Old Business

- 2.1. Spring 2008 meeting minutes approval – The committee approved the minutes from the April 2008 STC meeting in Louisville, KY.

3. New Business

3.1. IPC / EIA J-STD-002C

- 3.1.1. The committee reviewed status of the Amendment to IPC / EIA J-STD-002C. Responses to the amendment have been received and forwarded to IPC. From the STC committee we had 6 approve, unanimously, with no comments.
- 3.1.2. Round robin for steam preconditioning: Dip-and-look testing is complete. Wetting balance testing is in progress now. Assembly testing is also in testing now. Auger work is done. Goal is to have data analyzed and available for review by next committee meetings.
- 3.1.3. Plans for industry standards alignment: The committee reviewed a ppt file provided by Mr. Dave Hillman. This summary highlighted major differences between J-STD-002 and JEDEC B102. The main areas are:
 - Steam condition options
 - Test temperatures
 - Solder alloys
 - Test flux
 - Inspection criteria

The STC committee was in favor of the proposals discussed. A big issue for the committee was solder alloy with range of Sn and Ag content. Committee members are concerned about differences in surface tension between the different alloys. The committee agreed that they want to work with JEDEC to align the standards using data driven proposals. STC supports using a “default” with “other options to be agreed between user and supplier”. The committee also suggested a technical paper summarizing the steam precondition replacement data.

- 3.2. IEC Test Method 60068-2-83: Doug Romm mentioned IEC Test Method 60068-2-83. Dave Hillman and the IPC 6-23 Committee have provided this document for review. This is not a ballot, only a test method for review and comment. ECA staff will forward it to STC members.

3.3. Gauge R&R for Wetting Balance test

- 3.3.1. The wetting balance test method is currently listed in ANSI/J-STD-002 under the section “Tests without Established Accept / Reject Criterion”. The STC has agreed to undertake evaluation of either validating or removing the wetting balance test as an accepted method. Plans and timing for this future work is tabled until 2009.

4. Next Meeting

The next meeting is scheduled to be held in conjunction with the ECA Spring 2008 ECA Engineering Summit. The ECA Engineering Summit will be held at the Chateau Sonesta Hotel in New Orleans, LA during the week of April 27 – 30, 2009.

5. Adjournment

The committee moved, seconded, and unanimously agreed to adjourn at approximately noon. The meeting was conducted in accordance with the EIA legal guidelines and the EIA manual of organization and procedure.

Respectfully submitted:
Doug Romm
Chairman, STC