



PSMA

Reliability Committee

TIME: Tuesday, 11/9/21, 11-12pm CDT

PLACE: Zoom (669-900-6833 or 408-638-0968), 272 780 335, <https://zoom.us/j/272780335>

MINUTES: https://www.pdma.com/technical-forums/reliability/meeting_minutes

ATTENDEES:

PRESENT?	COMMITTEE MEMBER
X	Brian Zahnstecher, PowerRox – Co-Chair
X	Joe Horzepa, PSMA – PSMA Representation
	Lisa Horzepa, PSMA – PSMA Representation
X	John Horzepa, PSMA – PSMA Representation
X	Ada Cheng, AdaClock – Member
	Rick Fishbune, IBM – Member
X	Patrick Le Fèvre, Powerbox – Member
	Tim McDonald, Infineon – Member
	Steve Miller, SL Power (<i>RETIRED</i>) – Member
	Kevin Parmenter, Taiwan Semi – Member
	Shane Callanan, AEI – Member
	Greg Miller, Silanna – Member
	Mike Seeman, Eta One Power – Member
	Ed Massey, Ed Massey Consulting – Member
X	Eric Swenson, IBM – Member
	Bill Mallory, SL Power – Member
	Shobhana Punjabi, Cisco – Member
	Hamish Laird, ELMG Digital Power – Member
	Francesco Carobolante, IoTissimo – Member
	Nitish Agarwal, SL Power – Member
X	Manish Bhardwaj, TI – Member
	Denis Downey, Cisco – Member
	Dinesh Kithany, Wired & Wireless Technologies – Member

* Attending APEC

GREEN = NEW MEMBER, 1st MEETING (i.e. – introduce yourself)

RED = REMOVING MEMBER, NO ATTENDANCE AND/OR RESPONSE FOR LONG TIME, PURGING

ACTIONS (w/OWNER) HIGHLIGHTED BELOW

ACTION COMPLETED

AGENDA:

IF ANYONE IS INTERESTED IN CO-CHAIR ROLE, THEN PLEASE REACH OUT TO BZ RIGHT AWAY.

- **New Comm Introductions / Membership**

- Elevator pitch intros, roundtable.
 - NEW MEMBERS =
- New Member Recruiting
 - .

- **Comm Website / Purpose Statement**

- Comm website up and running on PSMA.com ADA REPORTS FULL PSMA WEBSITE REVAMP UP BY END-JAN

- Lisa mentions good opportunity to reorg (esp. “Links & Resources” page). ADD SIMPLE CATEGORIES OF **ORGANIZATIONS, STANDARDS, TOOLS, PAPERS/TALKS/ARTICLES**. **BZ WILL REQUEST CHANGES.**
- **COMM = IF HAVE ANY GOOD RESOURCES, LINKS, PAPERS, ETC. TO POST ON WEBSITE (REMINDER, OPEN TO PUBLIC), THEN PLEASE SEND TO BZ FOR POSTING VIA LISA.**

- Initiatives

- **Webinars (NEED NEW CHAMPION SPEARHEADS):**
 - Topics? Speakers? Schedule? **FOR ANY WEBINAR, DECIDE IF PROPOSE TO PTR OR IF RELIAB COMM INDEPENDENT EVENT.**
 - **COMM ACTION: WEBINAR TOPICS, PERHAPS FROM WITHIN COMM.**
 - EPSMA Secretariat, Paul Lee (big thanks to Patrick for reestablishing this relationship!)
 - Webinar based on EPSMA “Lifetime Prediction Of Power Supplies” white paper. **BZ CAN SHARE WHITE PAPER UPON REQUEST, BUT NOT FOR DISTRIBUTION.**
 - May also cultivate into APEC IS talk if satisfied with standalone webinar.
 - Captured Comm feedback/suggestion requests, which are mostly focused on content additions/enhancements to the existing white paper (Patrick notes the white paper is considered a finished product and EPSMA likely lacks the resources to update further). **BZ WILL PASS ALONG TO PAUL TODAY FOR GENERAL (NOT PTR) WEBINAR PROPOSAL**, hoping to enable a response from Paul prior to Fri’s BoD call. **BZ WILL SEND PING, PATRICK TO HELP FACILITATE RESPONSE.** Paul sent last update on 11/3 to inform they have requested the original white paper author to generate an abstract/PPT with TBD delivery date. **PATRICK TO CONTINUE LOBBYING PAUL (CALL 11/10).**
 - **Doug Kirkpatrick, CEO, Eridan Communications**
 - “System Reliability for Small Cells Enable 5G”
 - **Consider for PTR webinar? BZ TO REACH OUT. GIVING COMP TIME TO WORK OUT LOGISTICAL ISSUES FIRST, REVISIT IN EARLY ‘22.**
- **IPC/PSMA Collaborative New IPC Standard (ERIC S. SPEARHEADS):**
 - New standard in-process, negotiating MOU amongst appropriate Leadership Team reps, Co-chaired by Eric S. from PSMA (IBM), Jerry S. from IPC (ABB) to support new group (assuming enough content to support full, new standard as opposed to appending existing one such as IPC-9592). Not starting until Q3/4 CY21, 24-36 month full process. Comm set to kickoff with “Think Tank” meeting ~~11/9/21, 12-2 pm~~ 11/18/21, 11:30-12:30 pm EST (then monthly virtual 1-hr calls, but most work done in subcomms offline that meet at their own pace) and target draft completion by Nov. ’22 with at least one F2F at IPC APEX Expo (San Diego, CA, 1/24/22, add day). Please reach out to Eric/Brian if interested. Eric reports IPC has ported the legacy PSMA report into an IPC-formatted template though it is understood it needs a lot of work for reorganizing/enhancing to be more standard-like. Hamish has officially been recruited for IPC Comm, BZ working on HPE/Cisco/PAN/AEI. **Brian confirms Cisco and HPE now recruited. Manish checking internally to understand TI’s IPC membership and/or requirements for enabling participation. EXCERPT FROM IPC PROJECT OVERVIEW AS FOLLOWS –**

DOCUMENT/PROJECT TITLE:

Specification for Firmware Design and Test Requirements for Power Subsystem Assemblies (development of the new standard and creation of new committee for the development)

SCOPE, SUMMARY OR ABSTRACT OF DOCUMENT/PROJECT:

- Firmware design requirements including basic function, error handling, reliability, performance, etc. This will cover basic architecture and design around that architecture as well as upgradeability. A section to be included on understanding intended application environment.
- Firmware test/qualification requirements to verify that the design elements are operating at minimum level. Sections would include testing to verify all critical design and application requirements. It will address exerciser code, unit test and integration topics.
- Firmware security for protecting against internal threats and external attack. Sections to include library verification, access to source code, physical security, plugging into the IT/OT network, user logging and tracking, virus mitigation, external access security, update/upgrade security, etc.

Project Need: Currently there is no industry standard for firmware design, test, security for power subsystems. Presently firmware is driving more defects than hardware.

- **General**

- 1 pg. “How To” Overview / Webinar / White Paper / Etc. – Potential topics as follows –
 - Selecting uC / Memory Best Practices (i.e. – tech node independent)
 - SW Design Review Process Execution
 - Generating a List of Specs/Support Docs for a Project
 - Architecting SW/FW for Validation Methodology
 - Power Supply Security (PATRICK TO THINK ABOUT THIS)
 - Smart Manufacturing / Industry 4.0 Impacts to Power Manufacturing (better webinar target)
 - Inclusion of IoT/IIoT/EH/WSNs impacts?
 - 8D / 5 Why FA Process

- **Next Meeting**

- Tue 12/14/21, 10 am CST
- Regular Schedule = 2nd Tue (NOW, MOVING FWD) of each month, 10 am – 11 am CST