

Universal Power Adapter for Mobile Devices (UPAMD) Working Group

Start Time: 18 January 2011 5:00 P.M. PST UTC-7 (0100GMT/Zulu 19 Jan 2011)
<http://www.timeanddate.com/worldclock/fixedtime.html?month=1&day=18&year=2011&hour=17&min=0&sec=0&p1=900>

Dial-in Number: (866) 349-5441

World Wide Local Dial in telephone numbers see Intercall's [list](#)

International (706) 643-0747(if needed)

Participant Access Code: 4088571273

This will be a WebEx meeting. For this meeting:

1. Go to <https://intercall.webex.com/intercall/j.php?ED=151542182&UID=1195262487&RT=MiMO>
2. Enter your name and affiliation and email address. (NO Password)
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Unapproved Minutes

Call to Order UPAMD Working Group meeting - Bob Davis 0100Z 19 January 2011

- I. Introductions/Attendance
- II. Approval of Agenda M- Leonard Tsai S- Vern Brethour: Approved as written
- III. Approval of Minutes from 04 January 2011 meeting see [Minutes](#) – M – Leonard Tsai S – Paul Panepinto: Approved as written
- IV. IEEE Patent slides presented. See <https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf>
- V. Communications Goals – Edgar Brown
 - a. Discussion continues on different Communications protocols including;
 - i. Two wire CAN bus implementation most robust and future proof
 - ii. Single wire CAN with single communications pin – slightly longer connector
 - iii. “1-Wire”/MicroLan Dallas/Maxim Link as used in Dell products
 - iv. Single Resistor to set power from source (2/3-wires) – HP proposed style
 - b. Communications messages and protocol under discussion at [Communications](#) website
 - c. Two requirements are connection detection and flexible power communications
 - d. Join the sub-committee for continued discussion. Upamd-comms@ieee.org
- VI. Power Goals – Paul Panepinto
 - a. Discussion continues of the various power options including:
 - i. What is a low-energy (safety) power level and when is it a concern. – need low energy power level on connecting and disconnecting from device. How is this connectivity detected and used?
 - ii. Low Power for dumb devices (those not needing higher power) at 20W level. Still needs to connect and disconnect at lower power levels. Two methods under discussion.
 - iii. Main mode with 20V delivered to load at up to 6.5A. Low power connect and disconnect apply.
 - iv. Main mode with voltage negotiable for supplying higher voltage to printers and work stations. Low power connect and disconnect still apply.
 - v. Simple two wire mode with resistive power set point. Low power turn on and full power disconnect.
 - b. Concerns with meeting US and World Wide safety standards: What is the safe power level to avoid accidental ignition of hazardous gasses? Probably should be called the low-energy level. A request has been sent for a UL engineer to help guide us through the various levels of UL, and related ISO/IEC, documents with respect to the low energy initial power and how the UL standards address this issue. UPAMD’s goal, currently, is to be as safe as possible when a dangerous environment is accidentally forced upon a user. The currently proposed safe (low energy) mode appears to be well within standards being examined.

- c. LT spice model on website <http://grouper.ieee.org/groups/msc/upamd/power/> to play with.
 - d. Join the sub-committee for continued discussion. Upamd-power@ieee.org
- VII. Connector Goals – Mark Anderson
- a. Discussion centered around the connector proposal shown in the drawings on the web page <http://grouper.ieee.org/groups/msc/upamd/connect/>. This connector has not been tested as none exist. This design approach is the most favored. Questions concerning the reliability of the spring-pin connectors continue. For progress on this connector we need to get the funding to build a prototype and test the latches, etc.
 - b. A test regiment is needed to determine fast disconnect, tripping persons, fast runner snagging cord, etc. to determine the physics and timing of the separation of communications pins with respect to pull angle for all connector styles. What breaks when and where in the connector and device.
 - c. Lee Atkinson will propose the HP style connector as an option for two and three wire connections. Drawing of the connectors are on the connect page.
 - d. No other proposals have been forwarded.
 - e. An agreed upon decision is that there will be only ONE power cable specified. That will include the one or two communications wires depending on the final definition.
 - f. Power Cable specifications are needed for 1-10 meter cables to determine cable inductance and capacitance definitions for the low-energy specifications.
 - g. Join the subcommittee for detailed discussion upamd-connect@ieee.org
- VIII. Conformity/Certification Goals – Jody Leber – No Report
- a. Review Subcommittee Chair presentation and subcommittee progress.
- IX. New Business
- a. Mr. Jae-Young Lee will be attending the sub-committee meeting as liaison from IEC/TC-100/PT62700 committee.
- X. UPAMD Working Group Meeting Schedule:
- a. 1 February 2011 at the 7am Pacific time slot
 - b. 15 February 2011 at the 5pm Pacific time slot
 - c. 1 March 2011 at the 7am Pacific time slot
 - d. 15 March 2011 at the 5pm Pacific time slot
 - e. 29 March 2011 at the 7am Pacific time slot
 - f. 12 April 2011 at the 5pm Pacific time slot
- XI. Other concerns of the group
- a. Subcommittee meetings are schedule in the week between the main meetings.
- XII. Adjournment. M Vern Brethour 1855 PST

Please send any changes or additions to Bob Davis bobd@scsi.com.