Universal Power Adapter for Mobile Devices
IEEE P1823 UPAMD
Communications Subcommittee

Start Time:
19 October 7:00 a.m., PDT UTC-7 (1400GMT/Zulu)

In attendance: Bob Davis, Paul Penepinto, Tom Hildner, Anand Mohandas, Ignatius Lee, Gary Tomlins, Andy Keates, Edgar Brown (Chair)

Meeting Minutes

Call to Order, UPAMD Communications Subcommittee meeting - Edgar Brown 1410Z 19 October 2010

I. Approval of Agenda
   No objections.

II. Approval of Minutes from 21 September 2010 meeting
   No objections

III. Approval of Minutes from 5 October 2010 meeting
    No objections

    A discussion about what is allowed under the IEEE guidelines followed, as this was a concern raised on the power subgroup. It is acknowledged that IEEE allows, and explicitly encourages, discussion regarding relative cost of implementation of the different elements of the standard. Relative costs, besides the more important purely technical considerations, will serve to guide the discussion towards reducing adoption barriers.

V. Unique device/adapter identifier vs. model/version identifier
   Model, make, firmware version, should all be required as it allows for easier support tracking and providing information to the user. But a unique identifier for each device would simplify tracking of standards compliance, product recalls, and future uses. On a multi-port adapter each port should probably have its own identifier.

VI. Physical wiring requirements (please follow-up on the reflector with specific proposals)
   A. DC-coupled 2-wire vs. DC-coupled 1-wire
      1. Future expansion
      2. Reliability
      3. Cost

      Two wires provide more room for future expansion in communications speed and compatibility with a wider range of existing physical standards. However, such expansibility might be unnecessary for a power adapter. Although one wire would be limited to slower data rates, it would have a lower cost and would allow for more flexible cabling than a twisted pair.

      It has been pointed out that the additional wires for communications reduce adapter reliability, as this tends to be the weakest point in the adapter. Allowing the cable to
be removable could eliminate this problem, but would introduce two more connectors in the cost of the adapter.

B. Other alternatives.

VII. Communications requirements
   A. Minimum and maximum communications speed
   B. Discussion of speed tolerance, implications, cost, and alternatives
      Support for resonators and internal RC oscillators is preferable.
   C. Fixed (and small) package payload size
   D. Future expansibility
      1. Reserved code space for new message classes and speed negotiation

VIII. New Business

IX. Next meeting: 2 Nov. 2010 at the 5:00PM PDT (0000Z) time slot. (Note time change in Europe.)
   [DST in the US lasts until “First Sunday in November,” that is Nov. 7, 2010.]

X. Adjournment.
Motion - Bob Davis. Meeting adjourned 1536Z

As a reminder: if you are not able to attend the phone/online meeting, your participation by e-mail regarding this meeting agenda can be used to keep your voting status.

IEEE P1823 UPAMD website.

Please send any changes or additions to Edgar Brown ebrown@axionbio.com.