
IEEE P1394b Low Power Task Group Hyatt Regency Woodfield Schaumburg, Illinois September 11, 1998

Minutes:

1. Introductions
2. Accept volunteer to write minutes - John Fuller
3. Previous Meeting Minutes - none to review.
Steve Bard reviewed events of last meeting which was, essentially, a presentation given by David Wooten outlining the need and parameters of a low-power state between full-power (active) and suspend.

4. Presentations

- 4.1 "D1" Low Power State – Steve Bard (follow-up of David Wooten's slides from previous meeting). Discussion: Should an external leaf node be allowed to be put into this low power state? Conclusion: yes, unless we find a reason it can't be.

Steve Bard presented the definition of some terms to be used in further discussion of this low power state. NOTE: These terms are specific to the discussion within the B-Low Power task group and are not to be misconstrued to be the same as similar terms used outside this group. Context for use of these terms should always be stated when discussing B-Low power subject matter.

"D0" - the subject being discussed consumes the maximum power allocated to it - it is in a fully active power state.

"D1" - the subject being discussed is in a lower power consumption state than "D0" and is NOT in an active state. It is incapable of processing transactions. Latency to return to a "D0" state is shorter than that required when returning to a "D0" state from a "D2" state. A bus reset does not occur when moving between "D0" → "D1" → "D0". Previous operational context is not lost.

"D2" - a low power state defined by IEEE P1394a Draft 2.0 as "suspend"

"D3" - the subject being discussed is not consuming any power. The power plane may have been removed. User intervention may be required to return to "D0". Alternatively, through independent mechanisms, software/firmware may be used to return to "D0". All previous operational context is lost.

The group agreed to use these terms as the foundation for discussion within this group. "Proper" terms will be adopted once the work of the B-Low power group has been deemed to be complete.

The focus of the B-Low Power group will be to define and create mechanisms for a "D1" state to be supported in "B" silicon.

5. Discussion

Several good comments were offered by the group as to what and what should not occur upon entering into and returning from the "D1" state. All agreed that a reset will never occur going into and coming out of "D1". The parent PHY connected to the object in "D1" will always serve as the proxy for the object when the object is in "D1". When restoring to "D0" the parent will always present a PHY packet to the object. The packet will always take the form of a "self-Id" packet of the object and will always contain the objects Node-ID. The object must always use the Node-ID

in the PHY packet as its node-ID and, if the object has a different node-ID than that supplied in the PHY packet, the object will update its node-ID to match that of the one in the PHY packet.

Additional work and thought must be applied toward entering into a "D1" state - perhaps a PHY packet to enter "D1" would be appropriate. More material along these lines will be presented at the next meeting.

6. Review AR's
Steve Bard took an AR to incorporate the items discussed into a more formal presentation and begin discussion of the items on the reflector.
7. Opens
No opens.
8. Adjourn

IEEE P1394b B-Low Power Task Group
ATTENDANCE LIST: September 11th, 1998, Schaumburg, Illinois

Note: A "✓" indicates the named individual was in attendance.

✓	NAME	COMPANY	TELEPHONE	E-MAIL ADDRESS
✓	Bard, Steve	Intel	(503) 264-2923	steve.bard@intel.com
	Bommji, Anuradha	Sand Microelectronics, Inc.	408-321-8200 x24	anuradha@sandmicro.com
	Bowers, Rich	Quality Semi	408-450-4562	rich_bowers@qualitysemi.com
	Brill, Charles	AMP	(717) 810-4642	cebrill@amp.com
	Chen, Dao-Long	Symbios	970-223-5100 x9461	dao-long.chen@symbios.com
	Coles, Alistair	HP	+44 117 922 8750	anc@hplb.hpl.hp.com
✓	Coletta, Mike	Harris	949-707-1143	mcoletta@harris.com
✓	Colegrove, Dan	IBM	(408) 256-1978	colegrov@us.ibm.com
	Domon, Wataru	NEC	+81 44 856 2082	domon@ccm.cl.nec.co.jp
	Farhoomand, Firooz	Panasonic	408-653-4059	farhoomandf@panasonic.com
	Finch, Stephen	Silicon Systems, Inc.	714-573-6808	steve.finch@tus.ssi1.com
✓	Fuller, John	Microsoft	425-703-3863	jfuller@microsoft.com
✓	Hamilton, Thomas	AMD	(512) 602-9658	thomas.hamilton@amd.com
✓	Hannah, Eric	Intel	408-765-4441	ehannah@mipos2.sc.intel.com
	Hauck, Jerry	Macro Designs	510-668-1006	jerry@macrodesigns.com
✓	Heilmann, Keith	IBM	914-892-2413	kheilman@us.ibm.com
	Hiraoka, Daisuke	Sony	+81 3 5448 4603	dai@sm.sony.co.jp
✓	Killeen, Sean	SSL	+353 1 402 5700	sean.killeen@ssl.ie
	Lin, Jinghui	Rocketchips	512-685-4429	jl@rocketchips.com
	Martinez, Steven D.	Honeywell	505-828-5433	steven.martinez@das.honeywell.com
	Nave, James	Texas Instruments	972-480-3468	jim-nave@ti.com
	Northey, Bill	Berg Electronics	717-938-2119	northewa@bergelect.com
	Nyu, Takayuki	NEC	+81 44 856 2082	new@optsys.cl.nec.co.jp
✓	Oktay, Ozay	Canon Information Systems	(949) 856-7180	ozay_aktay@cissc.canon.com
	Pasternak, Jeff	Intel	(503) 677-6753	jeff.pasternak@intel.com
	Polishuk, Paul	Infor. Gatekeepers, Inc.	(617) 738-8088	ngaboska@aol.com (?)
	Prouty, Bill	HP	(916) 785-4631	bprouty@hp.com
✓	Richmand, Mark	Lucent	(610) 712-7456	richman@lucent.com
	Rooke, Matt	Fujitsu (FCPA)	408-894-3826	mrooke@fcpa.fujitsu.com
	Saito, Kyoza	Alps	+81 229 23 5111	kyozo_s@gw3.alps.co.jp
	Saito, Tomoki	NEC	+81 44 856 2082	saito@ccm.cl.nec.co.jp
✓	Saunders, Brad		(714) 221-6513	bradley.saunders@rss.rockwell.com
	Sato, Tetsuya	Sony	+81 3 5448 4603	tetsuya@sm.sony.co.jp
✓	Sessions, D.C.	VLSI	602-752-6545	dc.sessions@vlsi.com
✓	Shariff, Masood	Lucent	(732) 957-5479	mshariff@lucent.com
	Skidmore, Jim	Texas Instruments	972-480-2094	j_skidmore@ti.com
✓	Smith, Michael A.	Control Net	(408) 341-1428	michael@controlnet.com
✓	Smolka, John	Texas Instruments	(507) 253-6290	rows@vnet.ibm.com
✓	Teener, Michael Johas	Zayante	(831) 461-4901	mike@zayante.com
✓	Thompson, David	Lucent	(610) 712-2730	davethompson@lucent.com
	Wall, Duncan	3Com	+44 1442 438197	duncan_wall@3com.com
✓	Whitby-Stevens, Colin	ST Microelectronics	+44 1454 611500	colin.whitby-stevens@st.com
✓	Wooten, David	Compaq	(281) 518-7231	david.wooten@compaq.com
	Wiener, Paul	Raychem	650-361-2341	pwiener@raychem.com
	Yamazaki, Shuntaro	NEC	+81 44 856 2082	yamazaki@ccm.cl.nec.co.jp
✓	Young, Len	Corning	607-974-8676	younglg@corning.com
	Yu, Patrick	NEC	408-588-5436	patrick_yu@el.nec.com
	Zalatimo, David	Filinet	650-968-9711	davidz@filinet.com