

SIAM and PUCK Design Review Notes

MRC 11/17/03

PUCK Review

1. If no puck is seen on a scan puck command, what further diagnostic steps can be taken? How do you isolate the failure to either the scan function not working properly, the communications link hardware, or the puck itself?
2. On embedded pucks, what about using existing instrument system memory to store the JAR file?
3. How do you handle USB and Ethernet instrument interfaces (Ken Johnson).

Misc. and Discussions

1. Satlantic has just installed cabled observatory using Java objects. Checkout website.
2. Why use isolated converter on simple puck Vs low power linear regulator and put micro in sleep mode? (Jeff Burch and John Backes)
3. Can you program puck from shore?
4. Can you run instrument manufacture's application software and communicate to instrument through SIAM?
5. Jeff Burch recommends splitting standards definitions into smaller pieces, especially separating hardware and software areas.
6. The 1451.2 standard extends the 1588 timing standard down to the sensor level (Jeff Burch).
7. Discussion of reference design, generally thought that a good simple software and possibly hardware reference design that could go to instrument designers would help get the puck standard adopted widely. Such a documented system should also allow graduate students and laboratory technicians to write instrument applications and load in pucks.