

# Minutes of the High-Performance Embedded Computing Software Initiative (HPEC-SI) Meeting

Lincoln Laboratory, Lexington, MA, 10-11 January 2007

## Attending:

Jules Bergmann	CodeSourcery (via phone)
Nadya Bliss	Lincoln Laboratory
Robert Bond	Lincoln Laboratory
John Brown	Pentum
Ken Cain	Mercury
Dan Campbell	GTRI
Dennis Cottel	SPAWAR
Susan Emeny	AFRL
Christopher Hulbert	Information Systems Lab (via phone)
Randy Judd	STA
Jeremy Kepner	Lincoln Laboratory
Hahn Kim	Lincoln Laboratory
Karen Lauro	Parametric Imaging
James Lebak	MathWorks
Miriam Leeser	Northeastern
Richard Lethin	Reservoir
Richard Linderman	AFRL
Bill Lundgren	GEDAE
Sanjeev Mohindra	Lincoln Laboratory
Nicholas Moore	Northeastern
Rick Pancoast	Lockheed Martin
Debbie Pierce	MITRE
Eddie Rutledge	Lincoln Laboratory
Guna Seetharaman	AFIT (via phone)
Sharon Sacco	Lincoln Laboratory
Glenn Schrader	Lincoln Laboratory
Stefan Seefeld	CodeSourcery (via phone)
Henk Spaanenburg	Advanced Principles Group
Brian Sroka	MITRE
John Watson	Mercury

## Action Items

1. Briefings were given according to agenda.
2. Richard Linderman encouraged everyone to evangelize and demonstrate VSIPL++ actively.
3. Everyone will think about present our body of work in a broader scope/context, not just specific to traditional VSIPL areas.
4. CodeSourcery will report on their Cell-VSIPL++ work to Richard Linderman.
5. CodeSourcery will continue to work on the Reference Implementation and release it as soon as possible.
6. Richard Linderman encouraged consideration of Publish/Subscribe paradigm extension for VSIPL.
7. Everyone should supply some example code for the User's Guide.
8. Existing User's Guide authors will check their code in the User's Guide for correctness.
9. Schrader will seek out a high performance, scalable pub/sub based corner turn implementation.
10. Schrader will lead investigation of Quality of Service beyond just fault-tolerance.
11. Group will get a dynamic publish/subscribe corner turn application built and deployed onto PASTEC.
12. Leeser will work on a proposed spec for FPGA API.
13. Leeser will work on a contribution for the User's Guide.
14. Seetharaman will develop a concrete list of proposed functions.
15. Subgroup will decide on data structures to support proposed functions.
16. Group will read and comment to Leeser on fixed point proposal.
17. Sroka will write a proposed spec for variable length FFT for VSIPL.
18. Group will look over proposed VSIPL sort functions and make sure that we aren't ignoring anything major from standard body of CS knowledge.
19. Judd will revisit the necessity of early binding for the proposed interpolation functions for VSIPL.