OCP HPC Sub Project

Minutes - 07/25/2023

Meeting Transcript :

https://docs.google.com/document/d/1Wd2CbnjyePPtAVtN1vGjjHAoxZLzQTj7/edit?usp=sharing&ouid=111828941482233582910&rtpof=true&sd=true

Attendees

Attendee	Affiliation	07/25/2023
Munir Ahmed	Lattice	x
Kevin Cameron	Lighteligence	x
Allan Cantle	Nallasway	x
ILang Cheng	Lenova	x
Michael Choi	Samsung	x
Greg Compton	iABRA	x
Kevin Keaney	Microsoft	x
Zaid Krisberg	SUNY Downstate Medical Center	x
Alex Lovell-Troy	LANL	x
Nenad Milijkovic	UIUC	x
Bijan Nowroozi	OCP Project	x
Suresh Rajgopal	Micron	x
Mitch Wright	Individual	x
Totals		13

Meeting Objectives

Proposed Agenda for this meeting :

1) Introductions to New Attendees.
2) Presentation from Lattice Semiconductor on their OpenBMC & LibreBMC Solution for HPCM
3) Update from I-ABRA
4) Update on HPCM Development plans

5) Update on Conferences
6) AOB

Meeting Discussion Notes

1) **Introductions to New Attendees.**

Nenad Miljikovic, University of Illinois Urbana Champagne, UIUC. Nenad is the lead researcher on the Conformally coated copper solution for Thermal management purposes.

2) **Presentation from Lattice Semiconductor on their OpenBMC & LibreBMC Solution for HPCM - Munir Ahmad**

See slides : -
https://drive.google.com/file/d/1gV4msnklHUonfH5yKHroH_m-a71toX6J/view?usp=drive_link

3) **Update from I-ABRA**

Building a Skunk works for a new generation for AI enablement. Solve old problems in new ways. Using Neuromorphic technology developed over the last 15 years. They are going to try and solve them in an agile manner. AI is compute heavy and in deployment, especially when there is training at the edge. Transfer confederated learning.

Come to the conclusion to back the HPCM product and help make HPCM a reality for our own use.

Plan to build out a significant cluster. Backed by one of Europe's largest OEMs looking forward to how we can help make this happier. Hit the limits of the x86 Pizza box approach and the Military VPX Approach.

4) **Update on HPCM Development plans**

Nenad Miljikovic from UIUC who invented their Copper Conformal coating for Thermal management purposes and Roger Beeston from Progranalog are going to collaborate using Nenad's research funds and researchers to build an Power and thermal test HPCM. Progranalog will make a load slammer adaptor based on the AMD Versal FPGA Package that we will be using for our first HPCM.

5) **Conference submissions update**

Allan has been invited to host a “Meet the Experts” table on the topic of “CXL Applications / CXL for HPC” where he will show attendees our HPCM and Wall of Compute Concepts and recruit new collaborators.

6) **AOB**

Tracking Actions

1.

Useful Links

Link to HPCM Specification - Working Document : https://docs.google.com/document/d/1rsfMXx_ZPk489H28mmYmdVIpRx9EZQBgMjJ4wB3mx28/edit?usp=sharing