OCP Server Working Group meeting, 4/22/2015

Attendees:
Mark Shaw, Microsoft (co-chair)
Bob Ogrey, AMD
Erwin C
Fred Worley, Samsung
Kenneth Ma
Mark P.
Martin Goldstein, Microsoft
Paul Hartke
Philip Marconi [sp?], Penguin Computing
Rick Ballantyne
Benoit Ganne (Kalray)
others

Agenda:
- Status of specs that have been sent to the Incubation Committee
- Feedback on outstanding specifications
  - OCS Power Supply
  - OCS Solid State Drive – Does this need to be a general spec?
  - OCP 1S Server Design
  - Panther+ Micro-Server
  - AMD Seattle Micro-Server
  - Facebook next gen Intel motherboard
  - Intel decathlete
  - Panther+ collateral submission (TBD)

ACTION ITEMS:
1. [none recorded]

Meeting Summary:
- Review of specs sent to incubation committee:
  - Two specs brought to the incubation committee so far this year
    - Open Network Linux Version 0.2
    - Accton ORSA-1UR (rack adapter)

- o There is an incubation committee meeting on 4/23/15
    - Server WG not bringing anything new forward
- Proposal from Penguin Computing
    - o Penguin has a proposal for a 1OU sever design that can support multiple sled types
        - Compatible with Open Rack
        - Provides more width than the standard 3-wide 2-high OpenRack design
        - Supports up to 3 servers per OU
            - Supports up to 96 Haswell nodes in a rack
            - Can support up to 48KW/rack
        - Sled types:
            - Storage sled with 4-5 hard drives
            - Compute sled with dual socket support
        - Every sled has its own connection to the power bus bar same as the original Facebook design
            - Don't need mating adapters and mating PCBs
        - Penguin discussed 1OU design with other OCP users and sees interest from community
    - o Penguin proposes to provide the STEP file that OCP users can send to sheet metal vendors
        - Individual consumers can design appropriate standoffs within the enclosures for their applications
        - Penguin will maintain a set of proprietary standoffs
    - o Discussion of what is required to submit an Implementation Specification
        - Suggestion to provide an implementation outline spec in addition to the STEP files
        - Server WG co-chairs Mark and John are working on a proposal for an Implementation Base Spec template
            - See Specification Template [here](#):
    - o Process for Server WG review of Penguin submittal
        - Penguin proposal and files will be posted to the [Specifications and Documents under review](#) section of the web page
        - Initial review will be through posting of the spec to the web page and email discussion
        - Will be discussed in some form in the Server Working Group before the next meeting of the committee
- Current documents under review:
    - o Brief discussion of each active project in meeting – short summaries below
    - o OCS Power Supply
        - Looking at addendum specs for sign-off
    - o OCS Solid State Drive

- Noted that the M.2 SSD specification proposed by Microsoft is not limited to OCS; could be deployed in any OCP platform
  - OCP 1S Server Design
    - Current proposals:
      - Yosemite design shown at OCP Summit
      - AMD Seattle Micro-Server
      - Panther Plus Intel Avaton-based microserver
        - Quanta donated full collateral for this design to OCP in 3/2015
    - Collateral donated to date can provide insight into developing application-specific microserver designs for other OCP members
- IBM's Open Power initiative
  - Some email in background on Barrel Eye submission from IBM
  - Expect that to be coming to committee for review
- Additional discussion
  - Discussion that there needs to be a more rapid / fast track way to address addendums to accepted specs
  - Discussion of management interfaces and testing for microsevers in general
    - Common Management interface issues still not addressed / resolved
    - Need to ensure that any card design with any CPU product can talk the same management language
    - Need to provide a mechanism for vendors to test and certify their microserver card designs
      - Some common backplane interface for testing/validation needs to exist to enable the ecosystem
      - Facebook has not yet submitted their backplane specification – their specification would help tremendously
    - The microserver management interface cannot be proprietary to any one ODM
      - Proprietary management is not in keeping with the OCP philosophy
    - Some standard will need to be developed to enable common management for the microserver ecosystem