New Project Proposal: Pluggable Multi-Purpose Module (PMM)

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Presenter: Anant Thakar, Cisco Systems
New Project Proposal: Pluggable Multi-Purpose Module (PMM)

- Goal is to define the mechanicals of a module form factor with the connector on the narrow side. Form factor defined to support applications that require higher power and a larger volumetric. Basic tenants:
  - Bigger than E3
    - Needs to support up to ~400W
    - Needs to support xPUs with DIMMs oriented vertically and network connectors on front (e.g., QSFP)
  - Needs to support SFF-TA-1002/SFF-TA-1020 variant (up to 32 diff pairs + advanced NIC sidebands)
  - Leverages elements of 1009 (e.g., pinout, electricals).
    - Ability to plug a 1009 device into the connector (e.g., E3 NVMe device into an PMM host).

- Editor: Anant Thakar, Anthony Constantine

- Sponsors:
  1. Cisco Systems
  2. HPE
  3. Intel
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IP Declaration (if applicable):

- N/A

Request for an Ad Hoc meeting

- Will need some sort of consistent group discussion so request a separate meeting time/bridge until this project is ready for approval ballot.
Backup
What is PMM?

- **Working LZ:**
  - SFF-TA-1002 like (32 lanes, NIC sidebands, extra power)
  - Power support up to ~400W
  - Thickness: can fit in 1U horizontal
  - Length: DIMMs + other components driven
  - Width: xPU + DIMMs driven
Use cases

1. sNIC/DPU compute/Accelerators
2. High TDP GPU’s 300W+
3. Memory Cassette (Large memory pool)
4. Modular Edge compute/Multi Node (CPU +DIMM +Front IO)