Pros and Cons of Integrating a Modular BMC Design (DC-SCM Card) into a Server
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Agenda

• Wiwynn’s DC-SCM Development Experience
• Pros of Integrating into DC-SCM
• Cons of Integrating into DC-SCM
• Future Improvements for DC-SCM
Wiwynn’s DC-SCM Development Experience

- AMD-Milan Project
- Gen9 Projects: both Intel and AMD Platforms
- Open BMC FW
Pros of Integrating into DC-SCM

- Cost-saving
- Easy to repair
- Multiple HPM boards
- Standard front panel

HPM vs MB

- HPM smaller size
- SCM cheaper material
- Modularized
Cons of Integrating into DC-SCM

- Longer signal trace to HPM
- Crowded layout
- Non-flexible DC-SCI pin define

✓ Longer signal trace could be a concern especially for sensitive signals like eSPI, SPI
Future Improvements for DC-SCM

- Different form factors to support different layout needs
- Standard DC-SCI with flexible DC-SCM card shape
- Using LVDS interface to spare more DC-SCI pins → OCP DC-SCM v2.0
Call to Action

• Join OCP Hardware Management Project/Hardware Management/Hardware Management Module Sub-Project to share feedbacks

• Project Wiki with latest specification:
  https://www.opencompute.org/wiki/Hardware_Management/Hardware_Management_Module
Thank you!