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



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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



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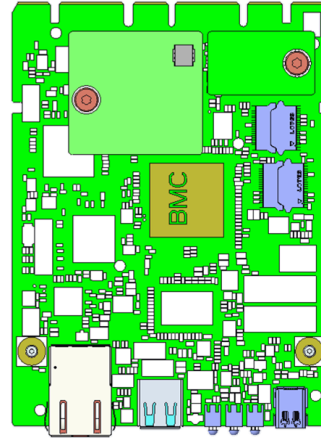
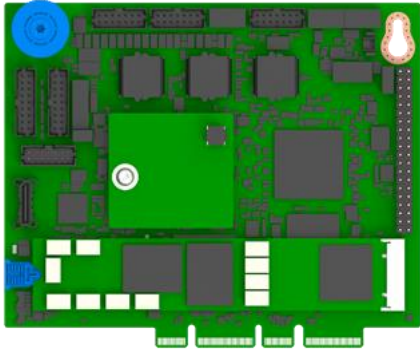


Wiwynn's DC-SCM Development Experience



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- AMD-Milan Project
- Gen9 Projects: both Intel and AMD Platforms
- Open BMC FW

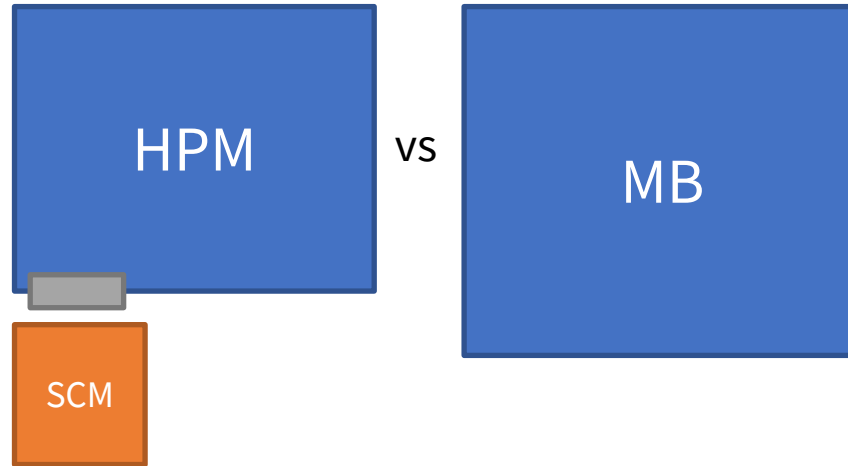


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Pros of Integrating into DC-SCM

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



- ✓ HPM smaller size
- ✓ SCM cheaper material
- ✓ Modularized



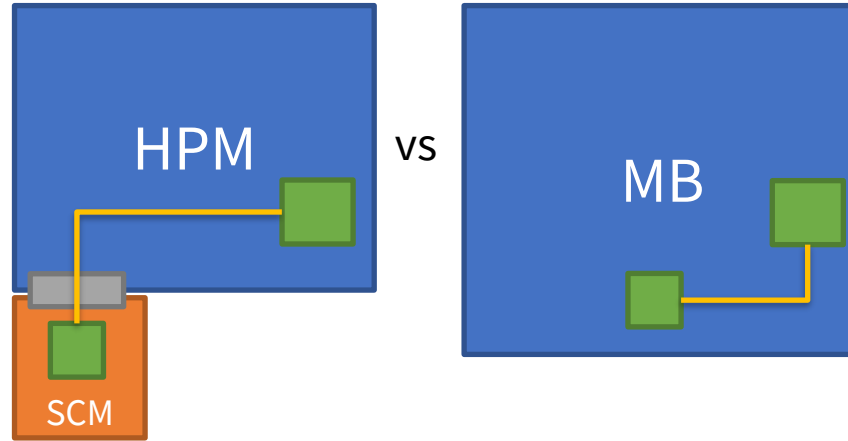
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Cons of Integrating into DC-SCM

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



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

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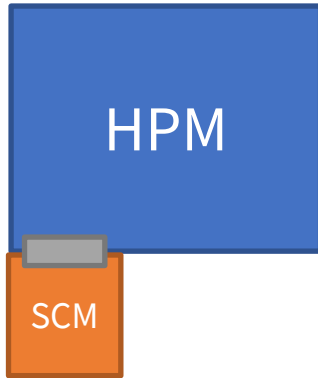


Future Improvements for DC-SCM

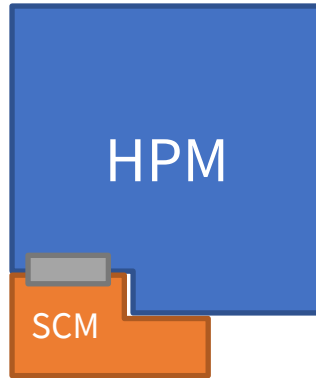


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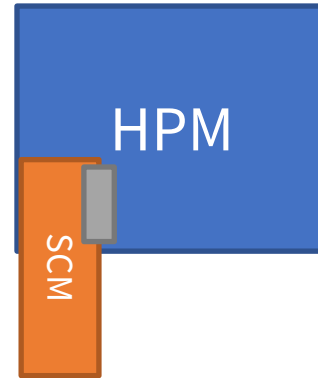
- Different form factors to support different layout needs
- Standard DC-SCI with flexible DC-SCM card shape
- Using LVDS interface to spare more DC-SCI pins → OCP DC-SCM v2.0



Horizontal



Flexible



Vertical

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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

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Thank you!



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