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DC-SCM 2.0

Datacenter Secure Control Module

OCP Tech Talk

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What is DC-SCM 2.0

A collaboration to expand upon the DC-SCM 1.0 specification to allow for future scalability and longevity across multiple generations of enterprise platforms. To support evolving manageability interfaces, range of entities being securely managed and forthcoming use cases such as multi-node server designs.

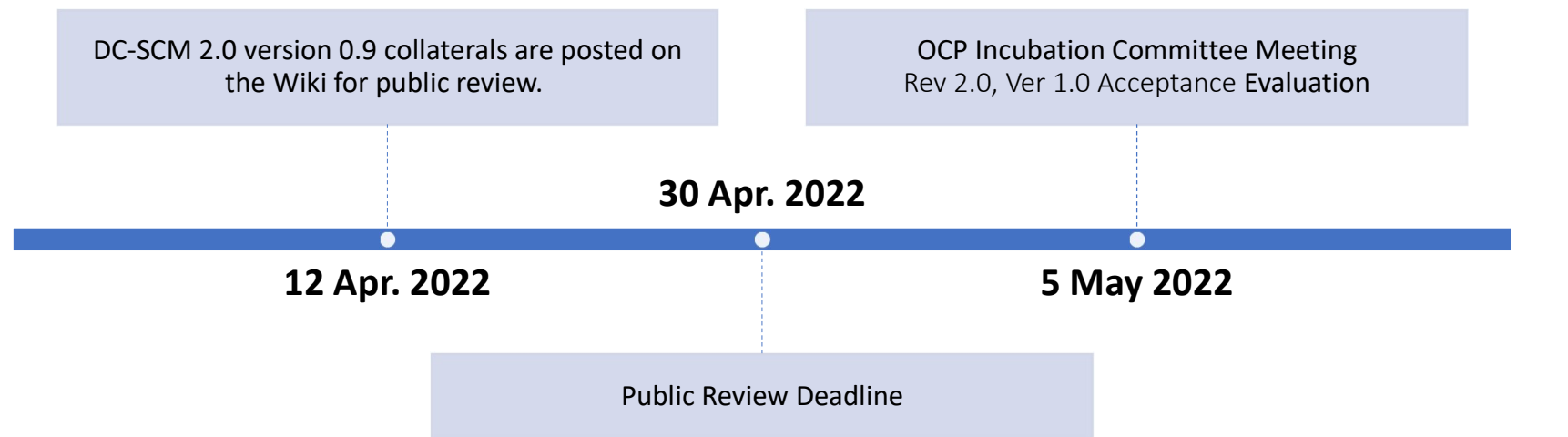


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Where we are

DC-SCM 2.0 Document	Version
Base Specification	0.9
LTPI Specification	0.9
DC-SCI Pinout Spreadsheet	0.98
HFF 3D STEP files	0.9
HFF 2D Drawings	0.9



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Where to find us

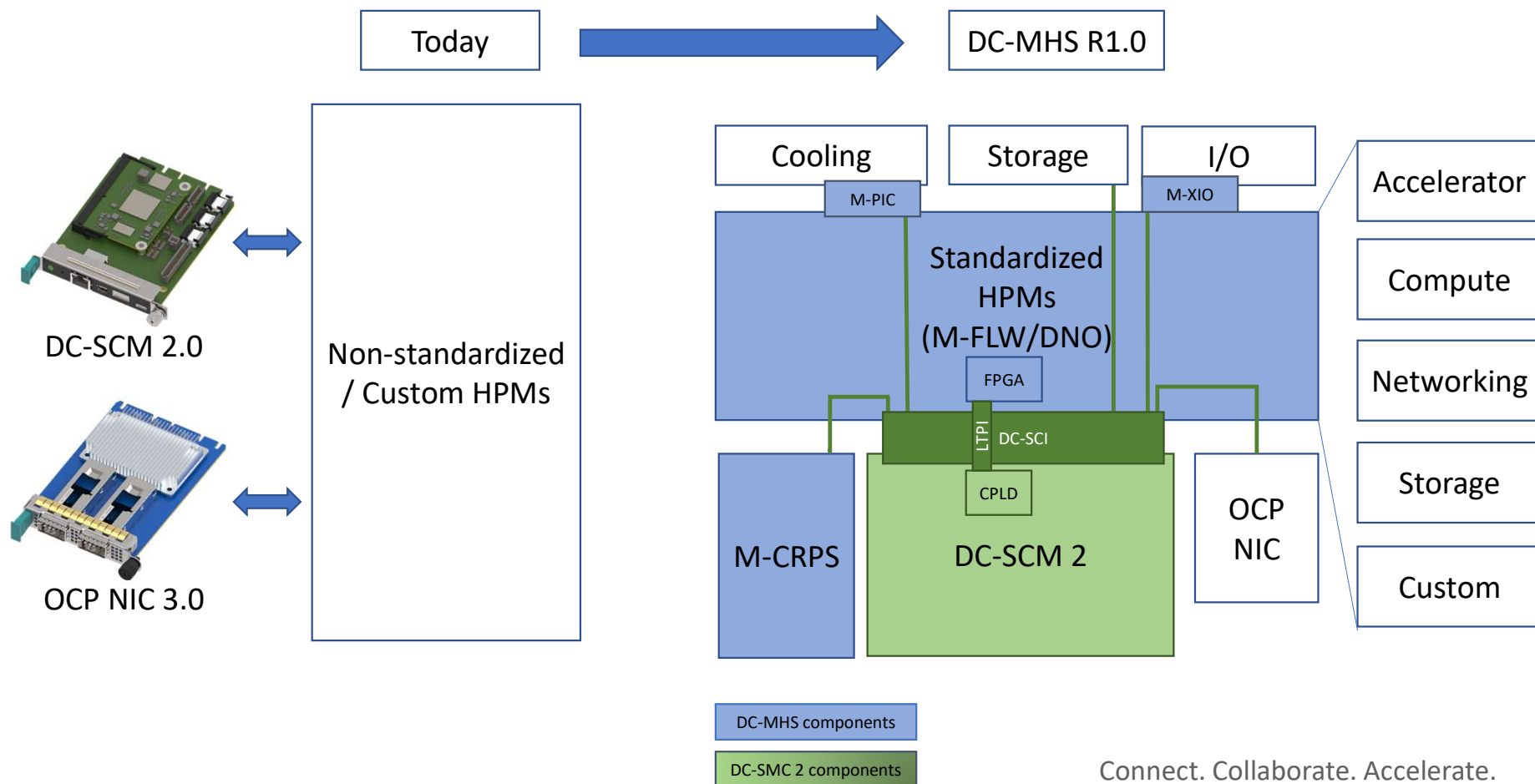
- This is a Hardware Management Module sub-project under Hardware Management:

<https://www.opencompute.org/projects/hardware-management-module-incubation>

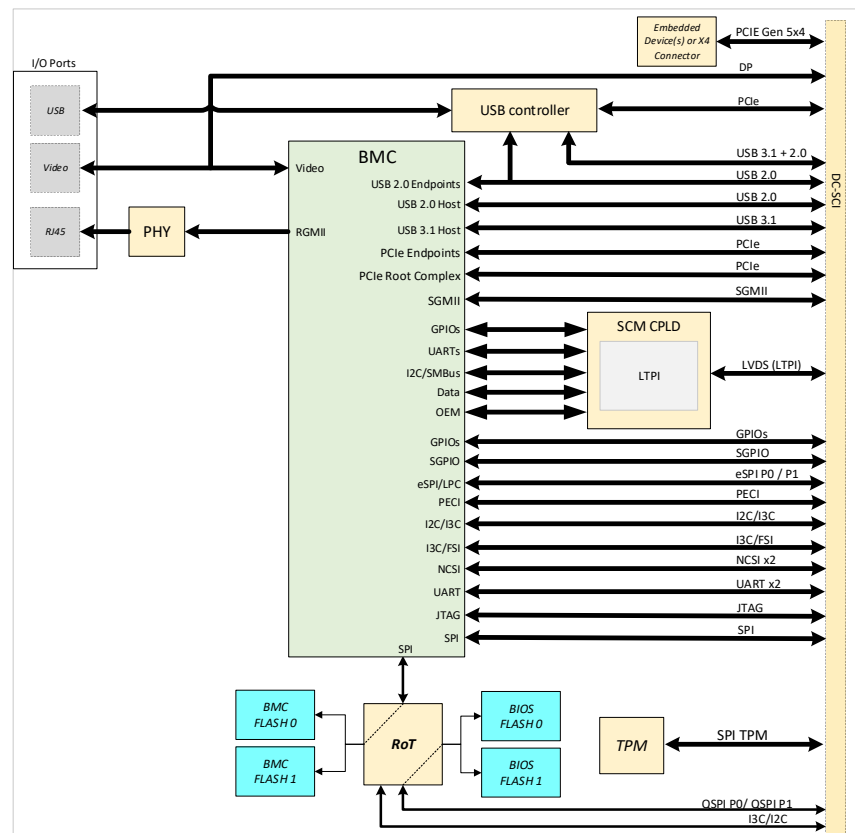
- For the latest documentation:

https://www.opencompute.org/wiki/Hardware_Management/Hardware_Management_Module

DC-SCM 2.0 / OCP NIC & DC-MHS

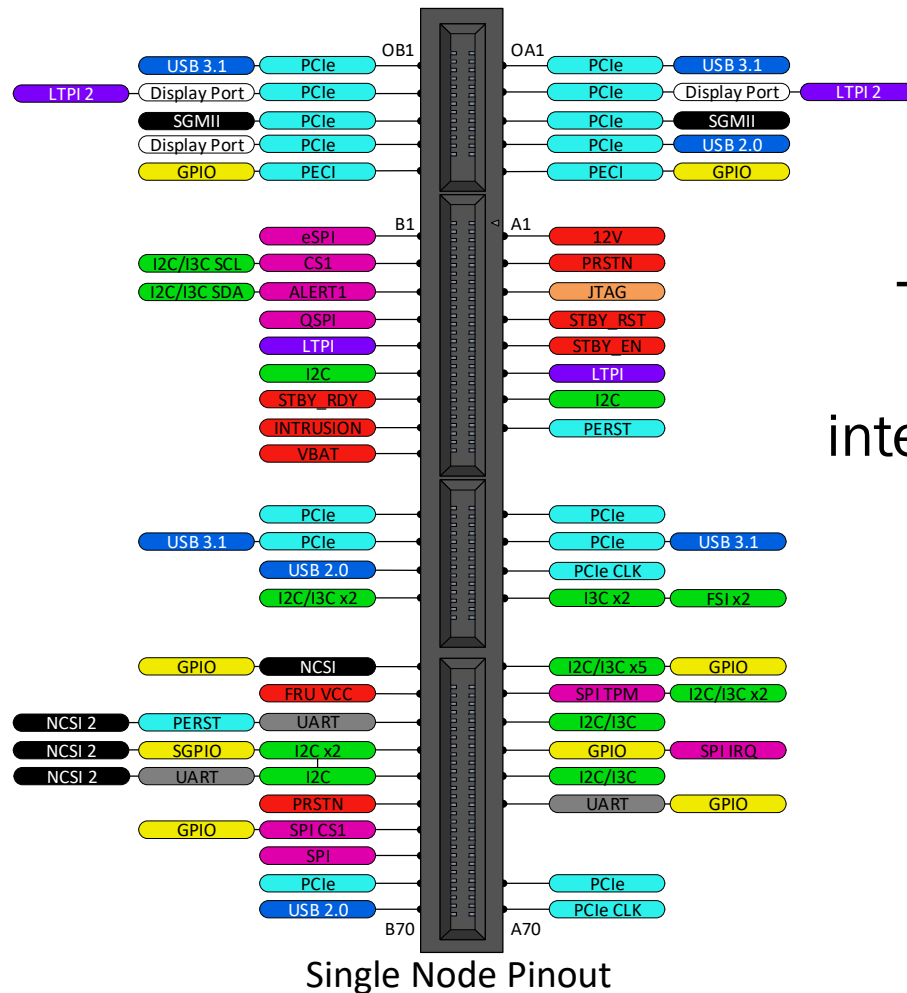


DC-SCM 2.0 – One Arch. Specification for Multiple Platform Design Types



- DC-SCM 2.0 as a toolbox:
 - Multiple Alternative Interfaces:
 - NCSI x 2
 - OpenFSI
 - UART
 - SGPIO
 - SGMII
 - Display Port
 - Multiple topologies support on:
 - USB
 - PCIe
 - Single & Dual Node Options
 - Multiple LTPI tunneling capabilities

DC-SCM 2.0 – Multi-Function Pins



The base spec offers a wide menu of mutually exclusive interface options that implies HW co-design for electrical interoperability.



What's Next – Standardize Platform Types

Objective:

Minimize DC-SCM SKUs & maximize HPM leverage/re-use

Proposal:

Define DC-SCI Design Specs above the Base Spec:

- Type 1 = 1S-4S Single Node servers (AMD, Arm, Intel, Power, etc.)
- Each pin gets 1 function, power domain, direction
- Connectivity block diagrams and usage descriptions
- Electrical guidance for HPM & DC-SCM to maximize HW interoperability
- Still assumes "Plug-n-Recode"
- Excludes HW that does not traverse the DC-SCI

[DC-SCI Type 1 Pinout Proposal](#)

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