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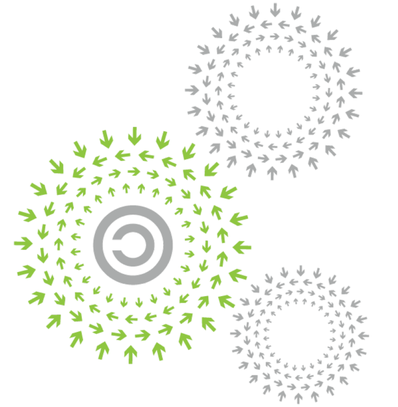
SONiC on Cisco 8000

Praveen Bhagwatula, Fellow, Cisco



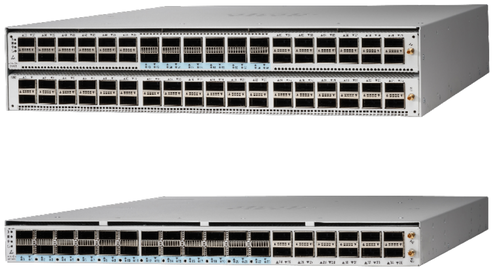
Cisco Silicon ONE

NETWORKING

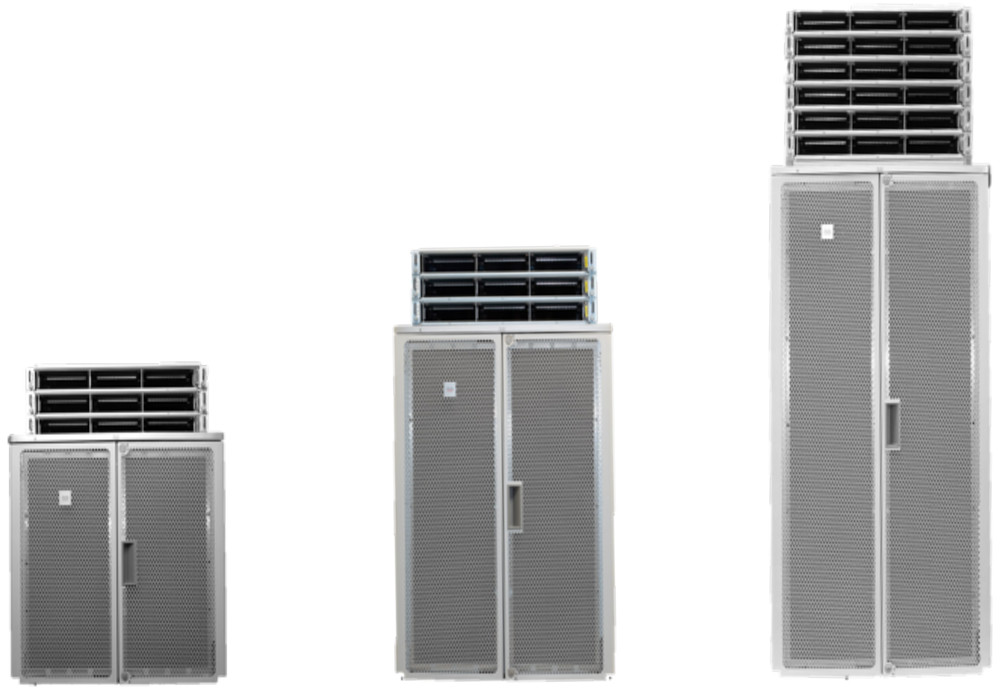
- 10.8T device with 3 roles
- NPU for modular systems w/ Ethernet fabric (flexible network/fabric allocation)
- Fabric element
- System on Chip
- Large on-die SRAM forwarding resources
- TCAM
- SRAM
- On-package FIB & buffer expansion via HBM

Cisco 8000
Powered by Cisco Silicon ONE

NETWORKING



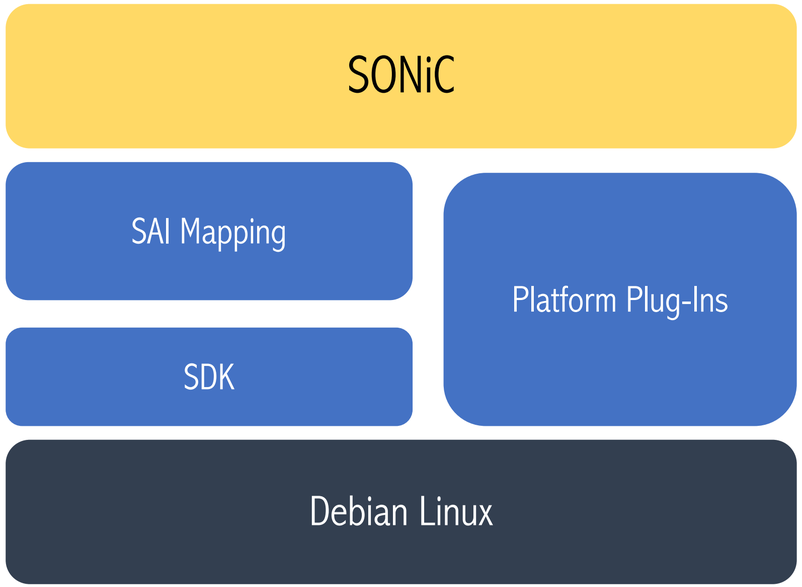
Cisco 8200

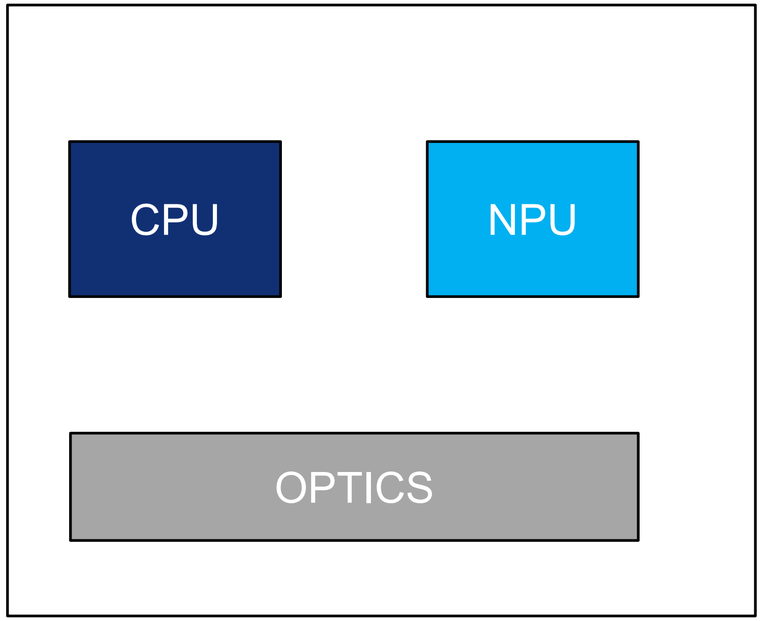


Cisco 8800

SONiC on Cisco 8200 Platforms

NETWORKING



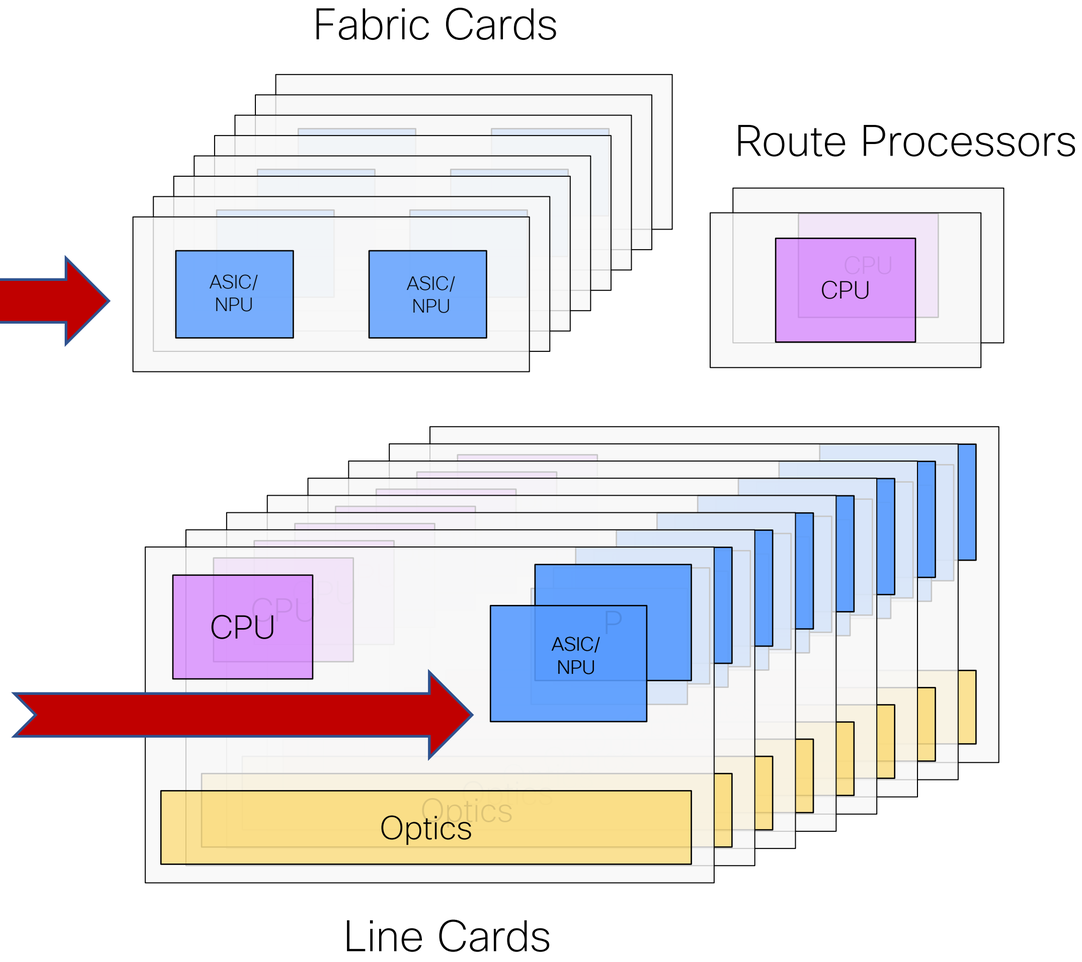


Decomposing Cisco 8000

NETWORKING

Fabric NPU

Line Card NPU



Cisco 8800

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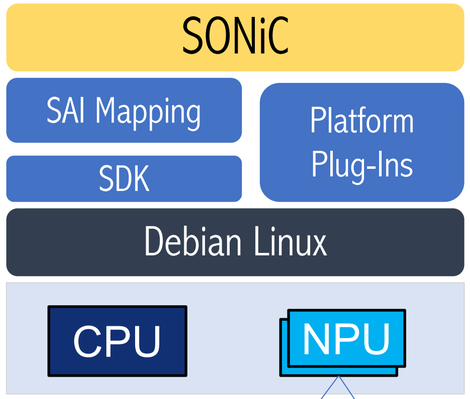
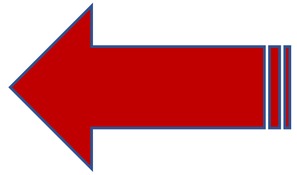
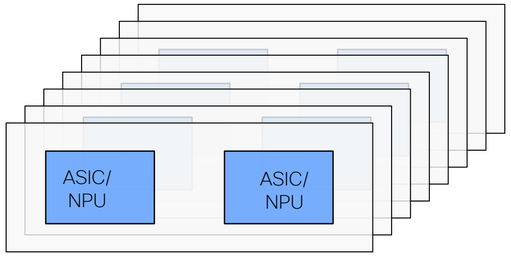
Multi-Instance SONiC

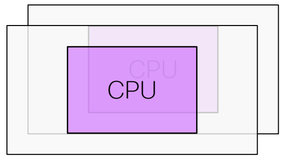




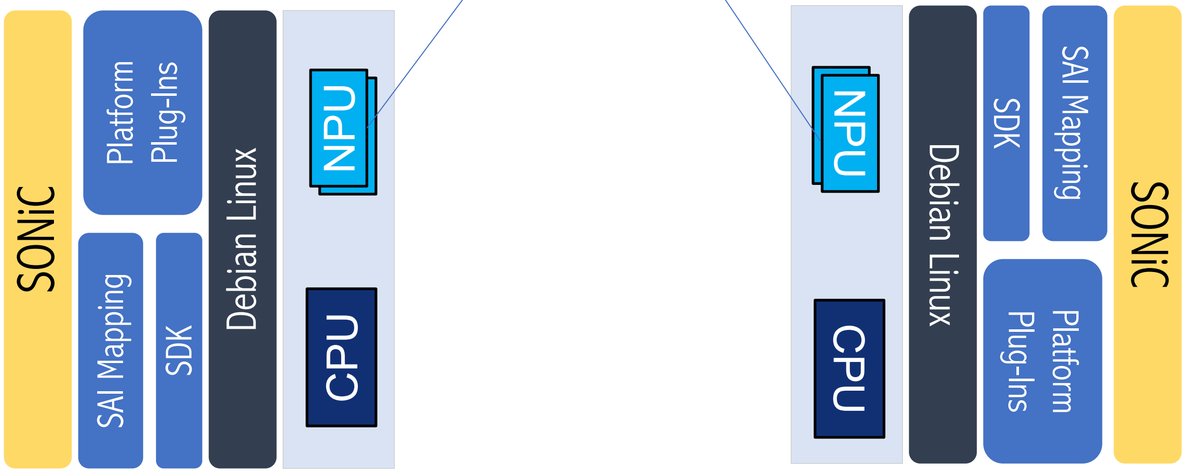
Fabric Cards

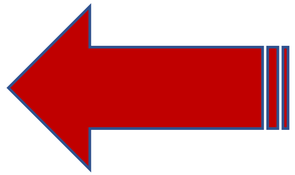


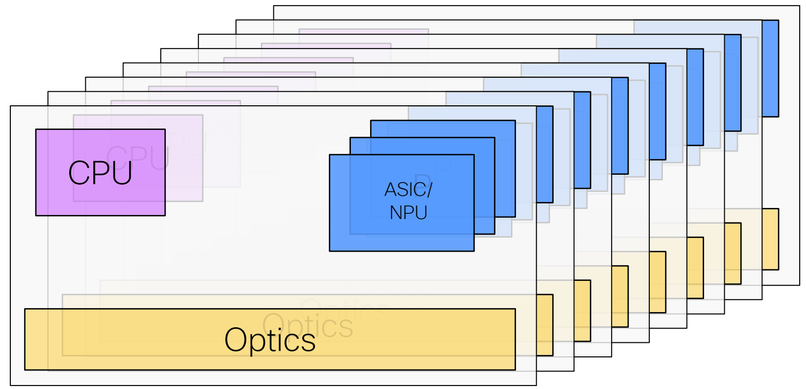
Route Processors



NETWORKING







Line Cards

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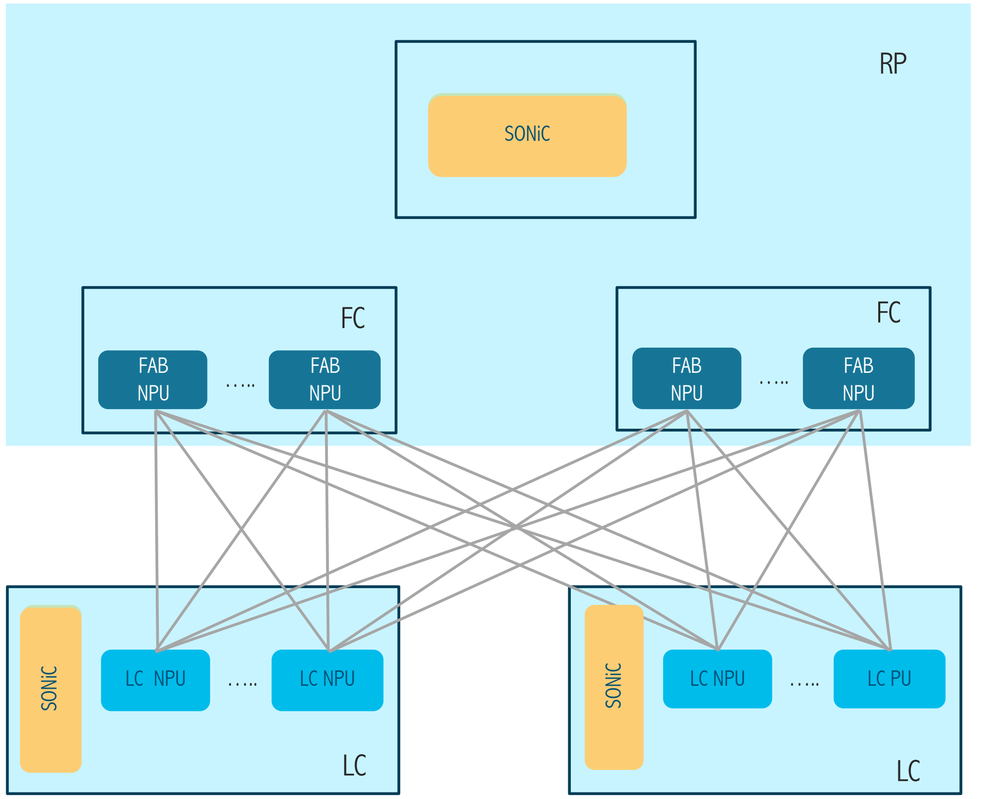
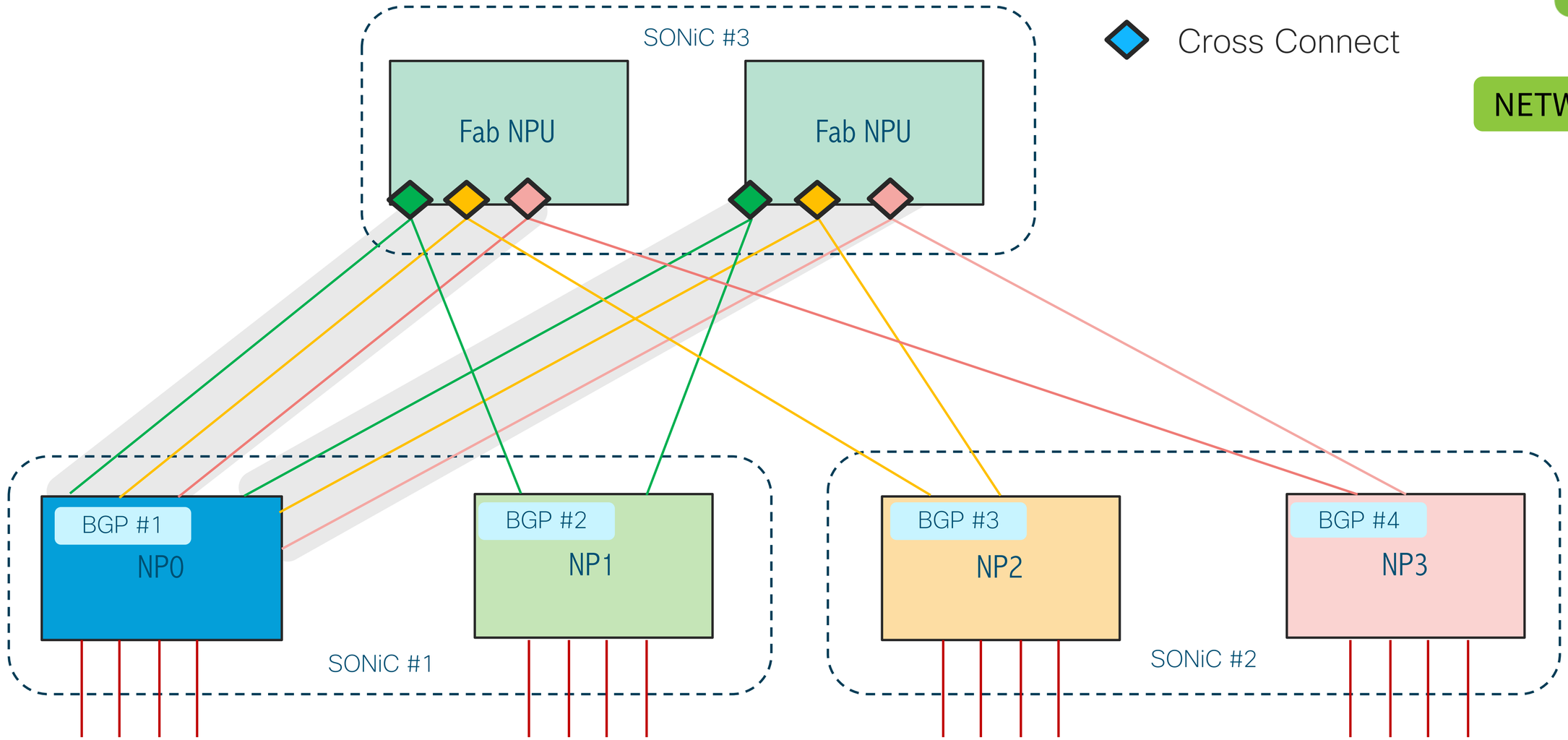
Forwarding Model

- Flexible fabric switching mode - Ethernet or VOQ
- Complete visibility within chassis
- Packet and byte counters, packet mirroring at each switching point
- Each CPU runs a unique SONiC instance
- BGP instance per NPU on the LC

NETWORKING



Packet Forwarding Model



NETWORKING

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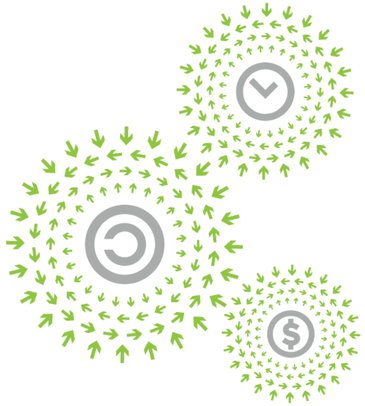
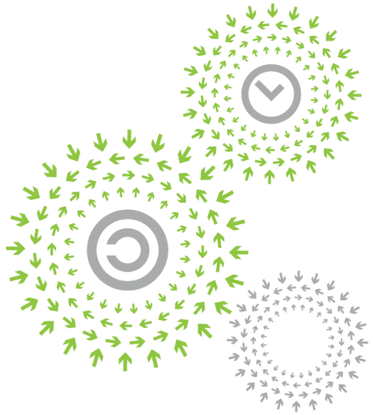
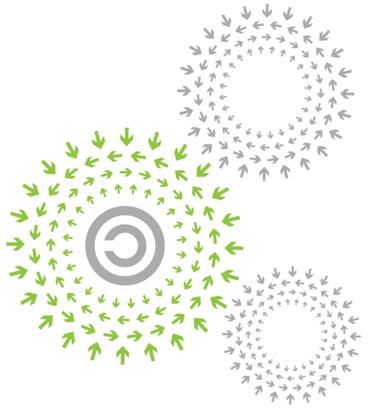
Please use one of these membership logos to designate your company’s membership level.







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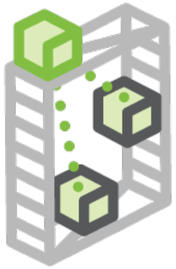
Please use the appropriate icon representing the Sub-Project Group

HIGH PERFORMANCE COMPUTING

ADVANCED COOLING SOLUTIONS

OPENEDGE

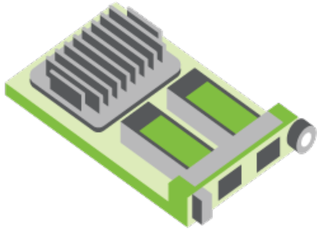


OPENRMC

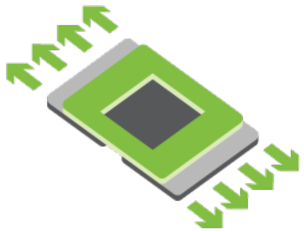
OPEN DOMAIN SPECIFIC ARCHITECTURE

ARCHIVE

MODULAR DATA CENTER



NIC3.0



OPEN ACCELERATOR INFRASTRUCTURE

SONiC

sai

onie

Open Network Linux

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