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Next step in PCI Fabric Switching: ExpressFabric®



Let Your **Application** benefit

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In a nutshell

25 years of N.A.T.



- Product Portfolio

- Board Level Products

- communication and processing boards
 - intelligent switches and system controllers
 - carriers, converters, adapters and extenders
 - custom and reference designs

- Software

- board support packages, drivers
 - signaling stacks and protocols
 - applications and APIs

- Systems

- pre-validated platforms for development and prototyping
 - turn-key solutions

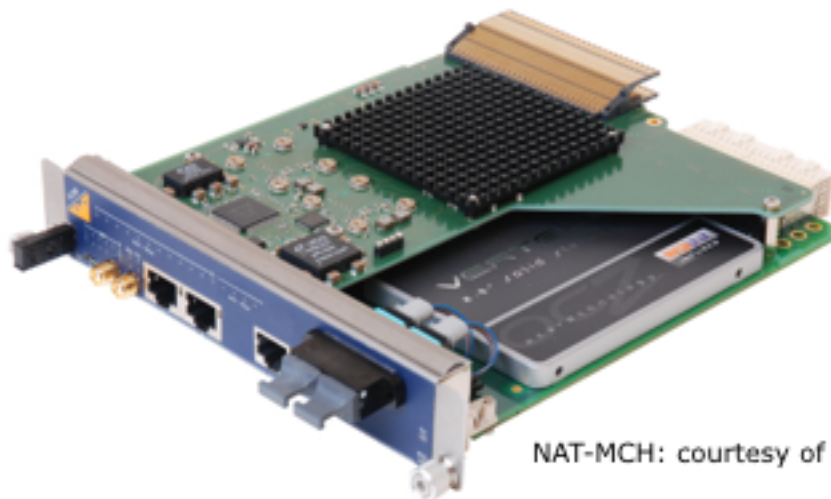


Motivation

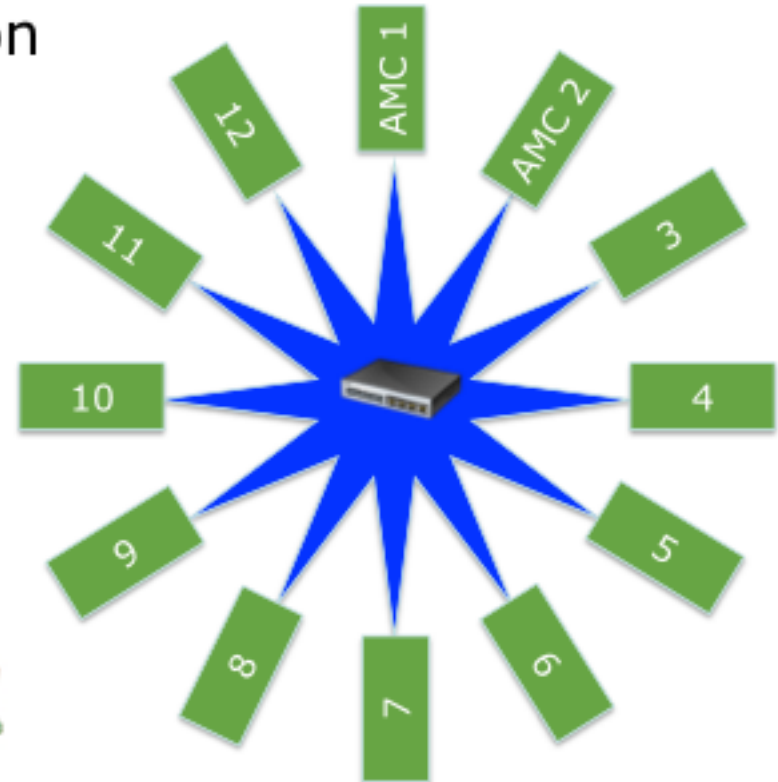
Situation today



- MCH is central part of the solution
 - “Guardian Angel”
 - Management
 - switching



NAT-MCH: courtesy of N.A.T.

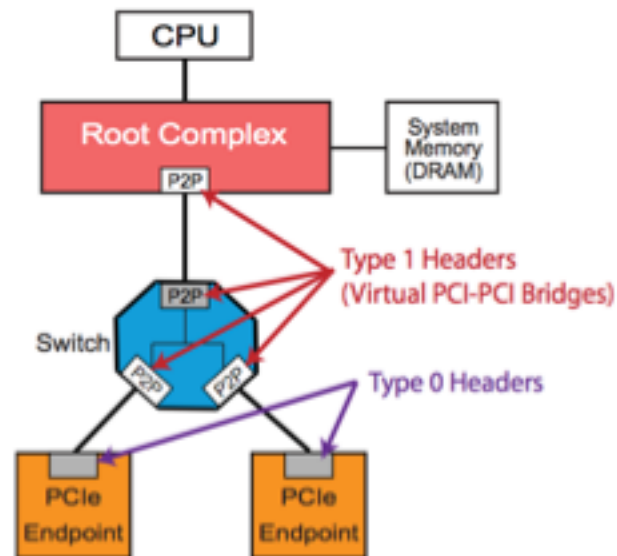


Motivation

Situation today: no-brainers & challenges



- scenario I



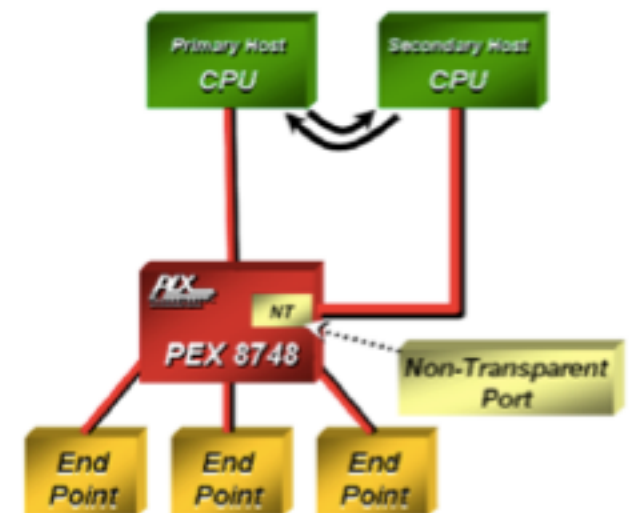
single root complex

- scenario II



multi root complexes

- scenario III

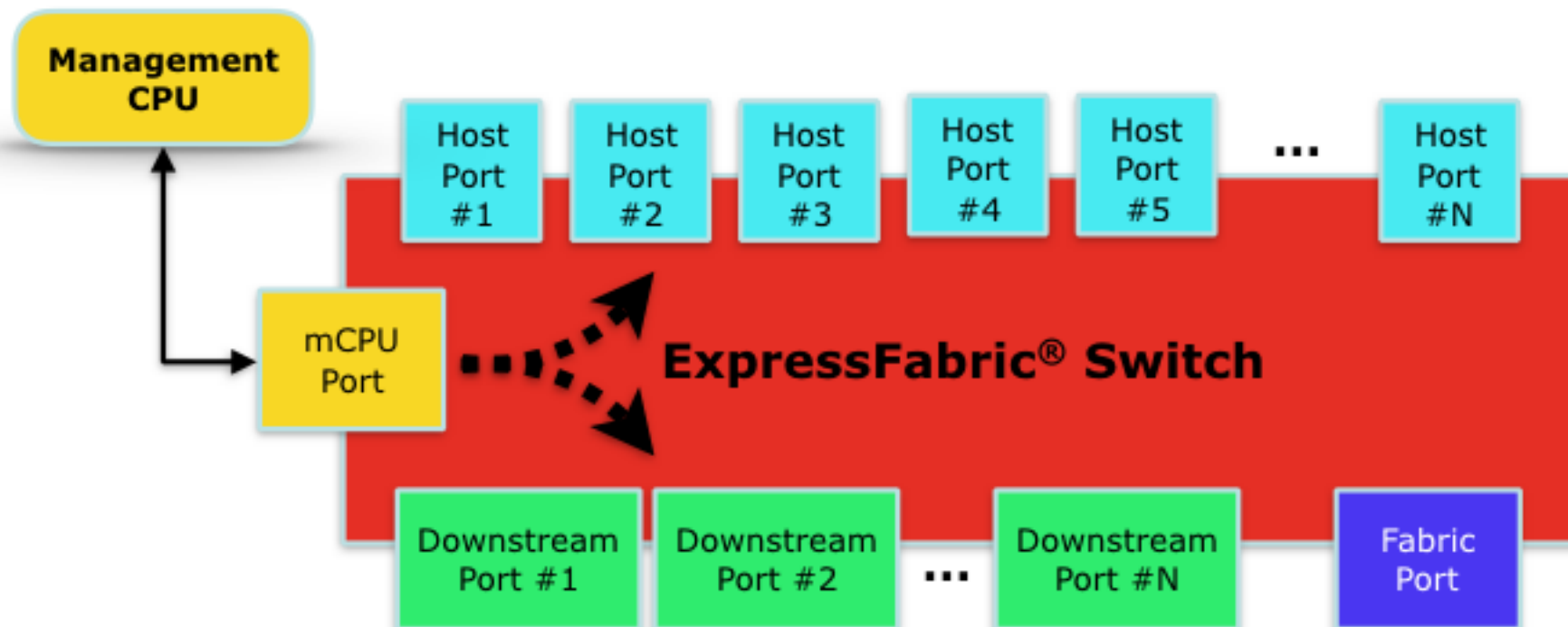


multi hosts

source: PLX/Avago

The next level

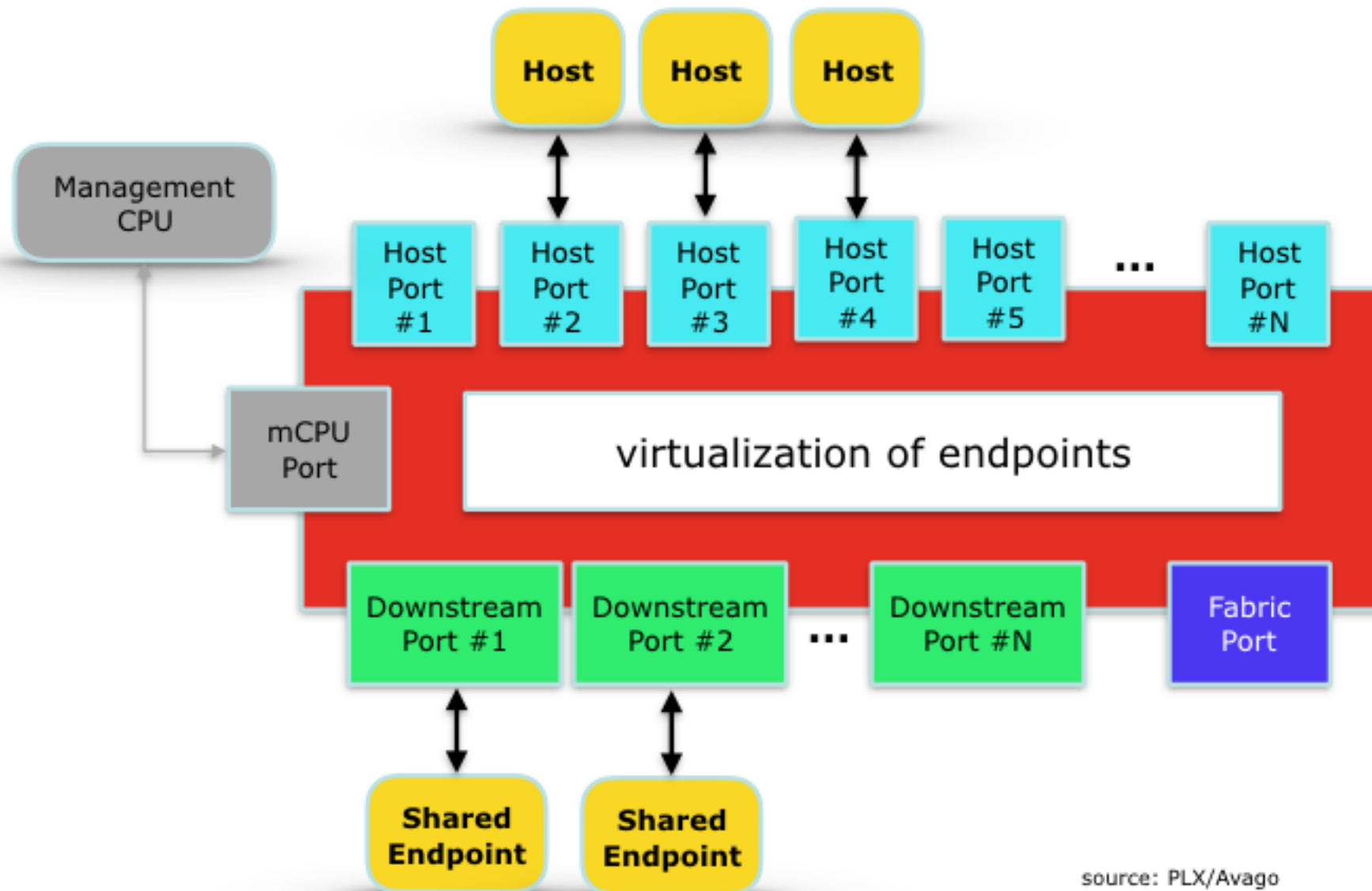
ExpressFabric® - management CPU



source: PLX/Avago

The next level

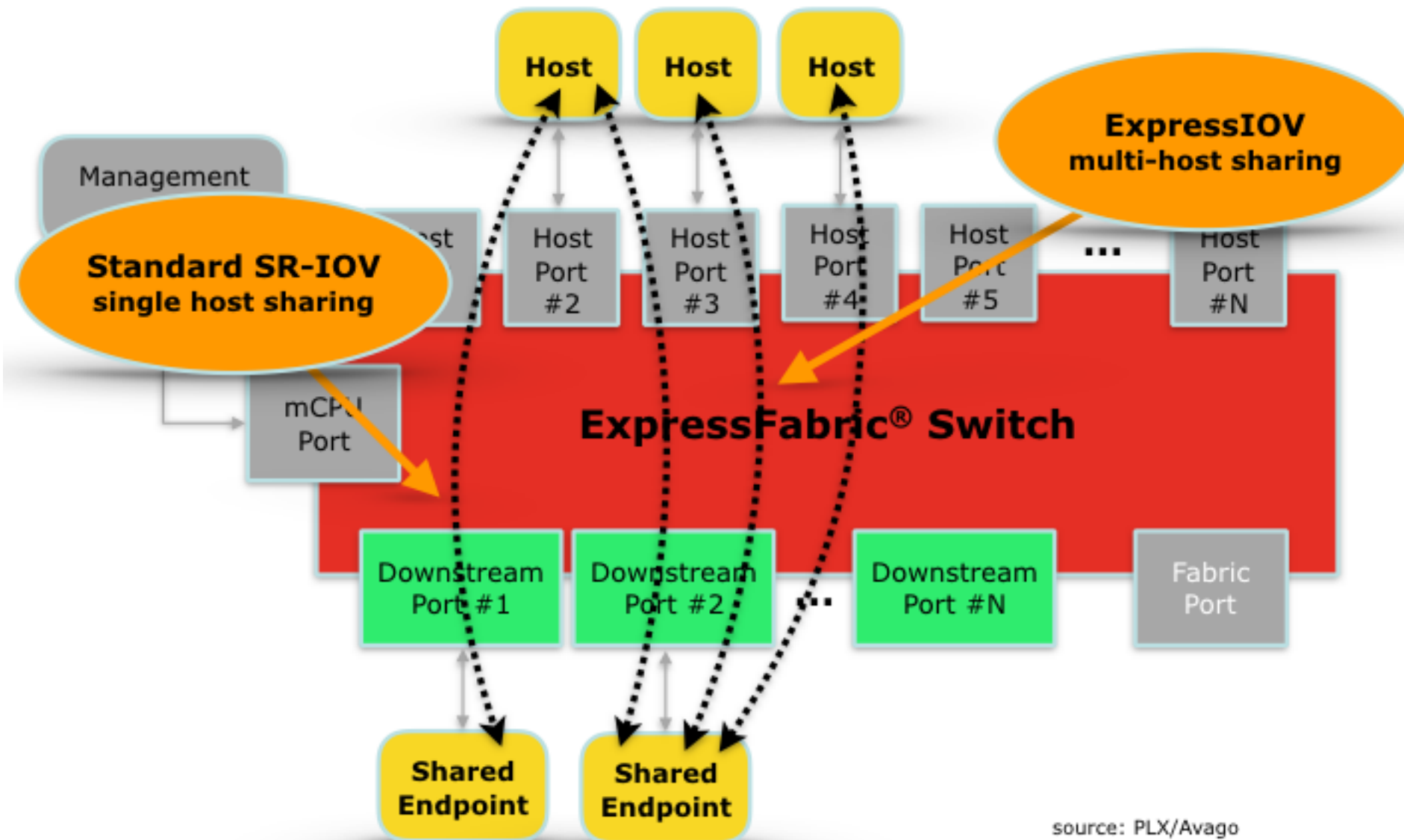
ExpressFabric® - hosts and endpoints



source: PLX/Avago

The next level

ExpressFabric® - hosts and endpoints



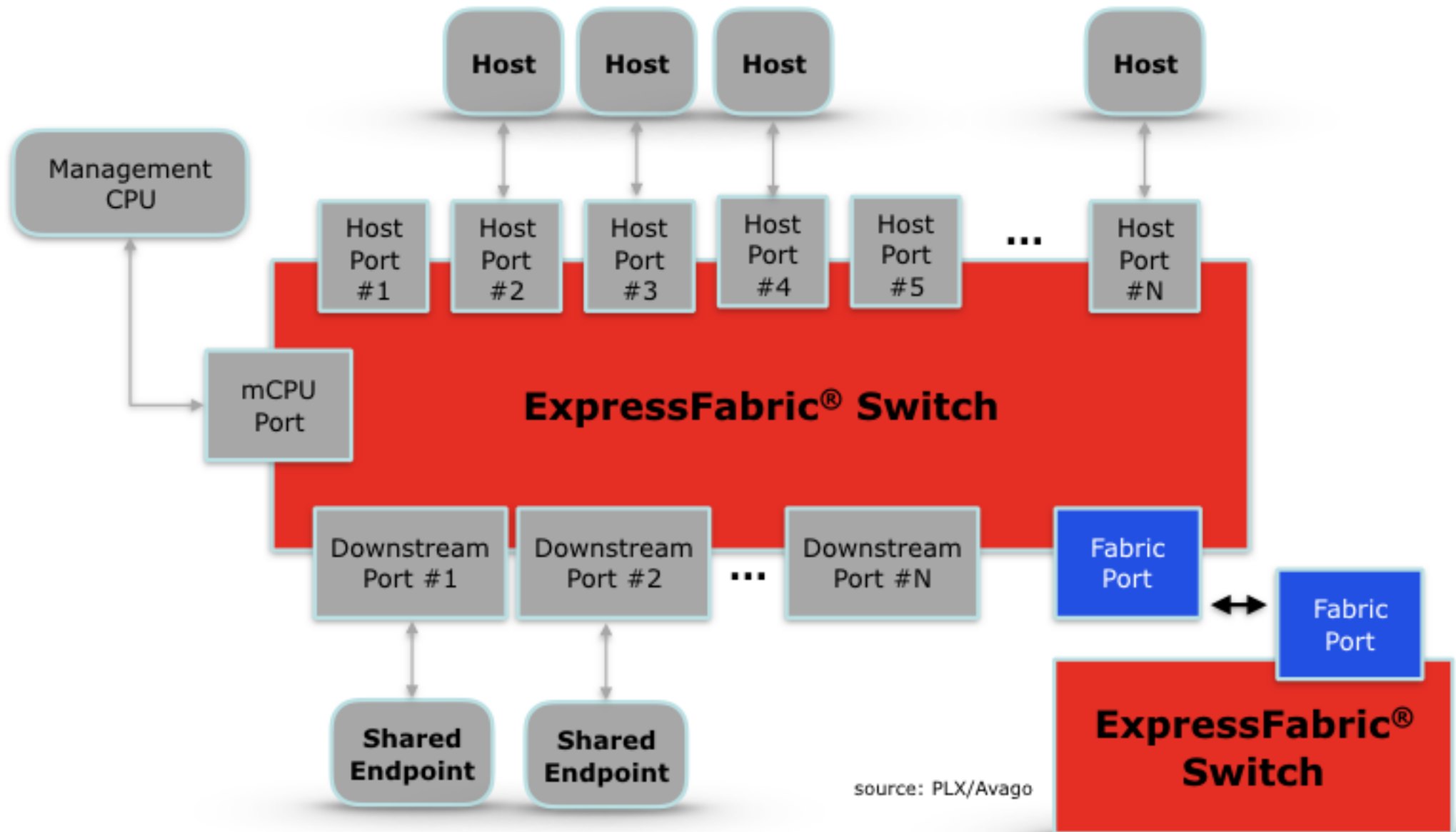
source: PLX/Avago



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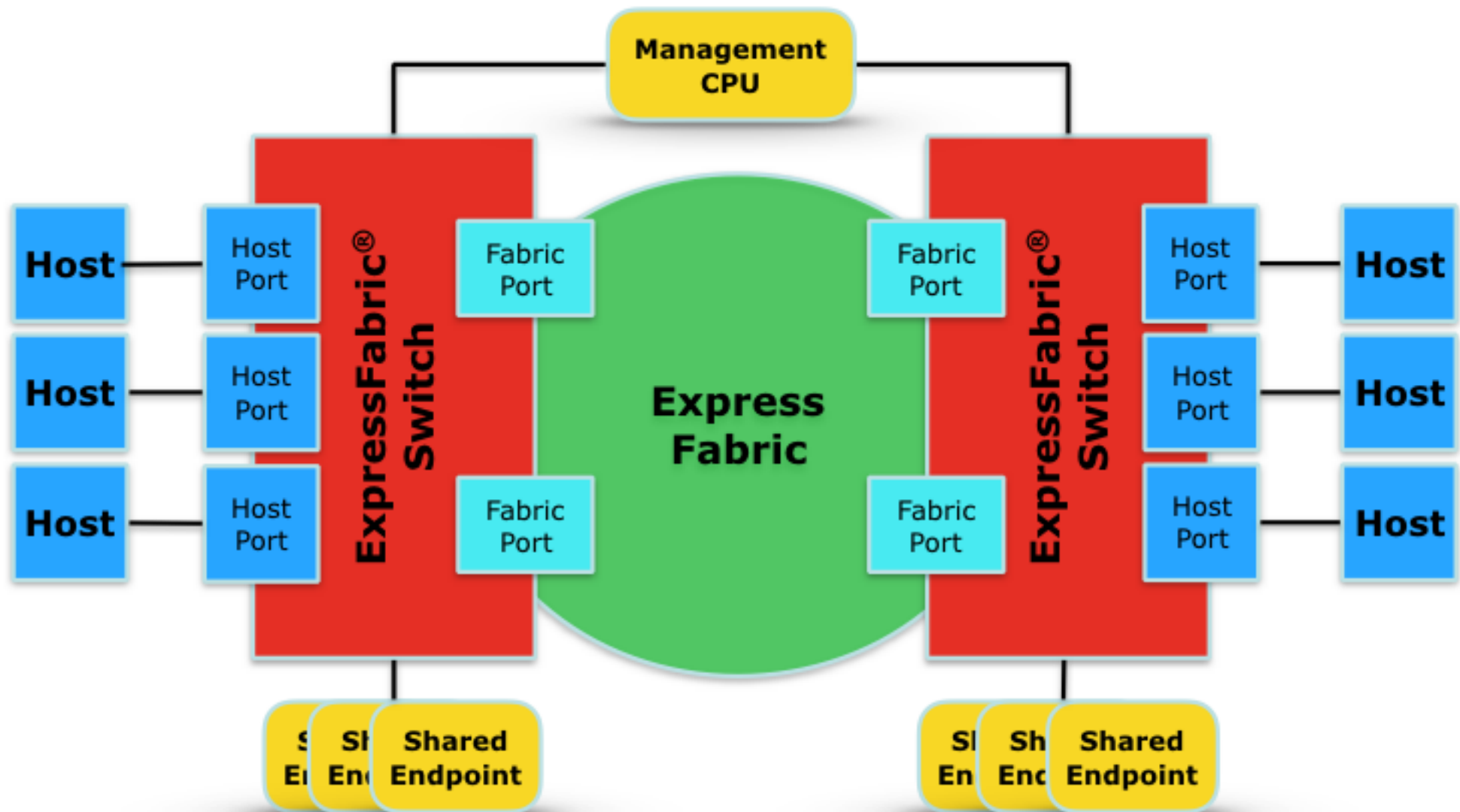
The next level

ExpressFabric® - hooking up switches



The next level

ExpressFabric® - putting it all together



source: PLX/Avago

Express Fabric[®]

Conclusion



- Express Fabric[®] vs. PCIe
 - virtualization of endpoints and isolation of hosts
 - backwards compatible
 - easier to configure when using multiple hosts
 - higher performance
 - less chipsets required
 - smaller latency
 - easy to extend

Thank you very much!

Questions?



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