



June 13-15, 2023

DoubleTree by Hilton San Jose

SmartNICsSummit.com

Smart NICs Market Update

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Dell'Oro Group Covered Areas 2023



Subscription Research

Telecommunications

Broadband Access & Home Networking
Microwave Transmission & Mobile Backhaul
Mobile Core Network (MCN) & Multi-Access Edge Computing (MEC)
Mobile Radio Access Network (RAN)
Optical Transport
Service Provider Router & Switch

Enterprise Networks

Ethernet Switch—Campus
Ethernet Switch—L2+L3 Overall
Wireless LAN

Data Center Infrastructure

Data Center IT Capex
Data Center Physical Infrastructure
Ethernet Adapter & Smart NIC
Ethernet Switch—Data Center

Security

Network Security
SASE & SD-WAN

Advanced Research Reports

Telecommunications

5G Workloads Moving to the Public Cloud
Cable Outside Plant*
Coherent Optics*
Fixed Wireless Infrastructure & CPE
Open RAN
Private Wireless
RAN 2030

Enterprise Networks

AI Workloads*
Campus NaaS & Public Cloud-Managed LAN*
Distributed Cloud Networking*

Data Center Infrastructure

Data Center IT Semiconductors & Components*
KVM Switches & Serial Console Servers
Telecom Server

Security

Cloud Workload Security

Bi-Annual Reports

Telecommunications

Telecom Capex

** New Report*

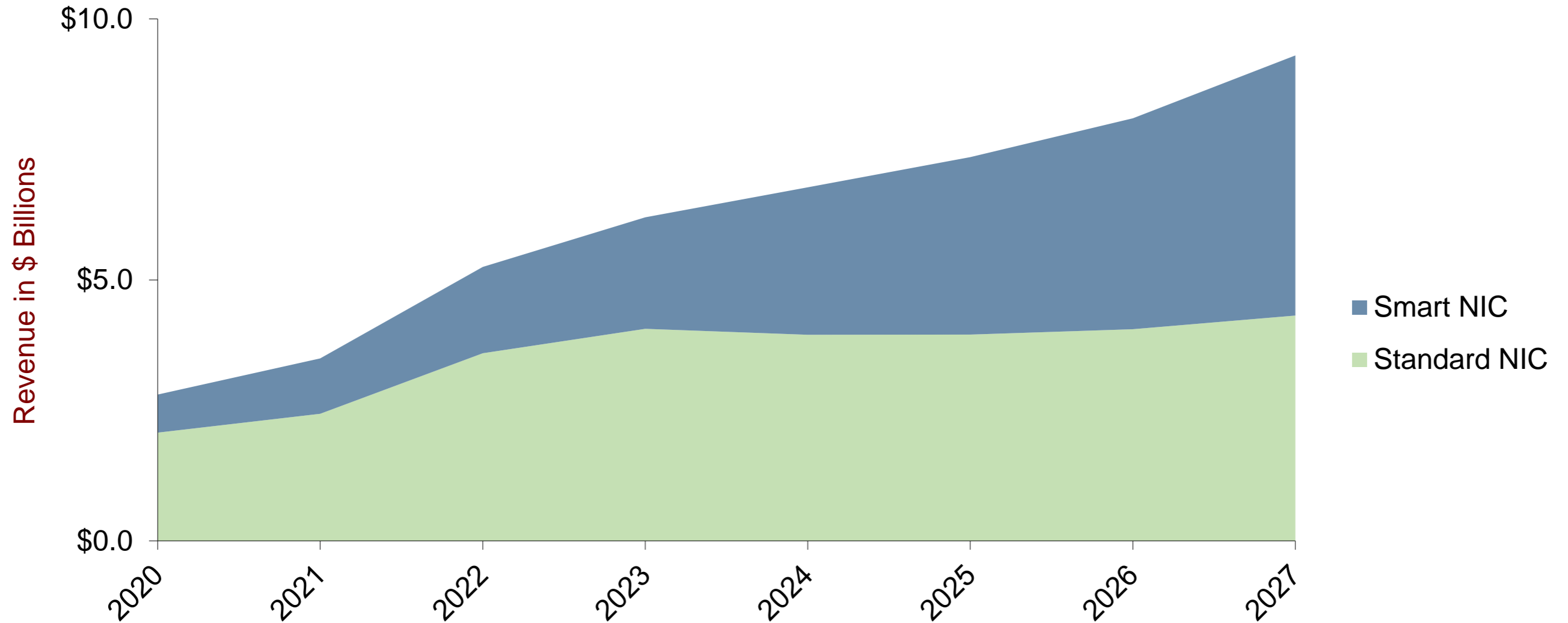


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Ethernet Adapter Market Opportunity



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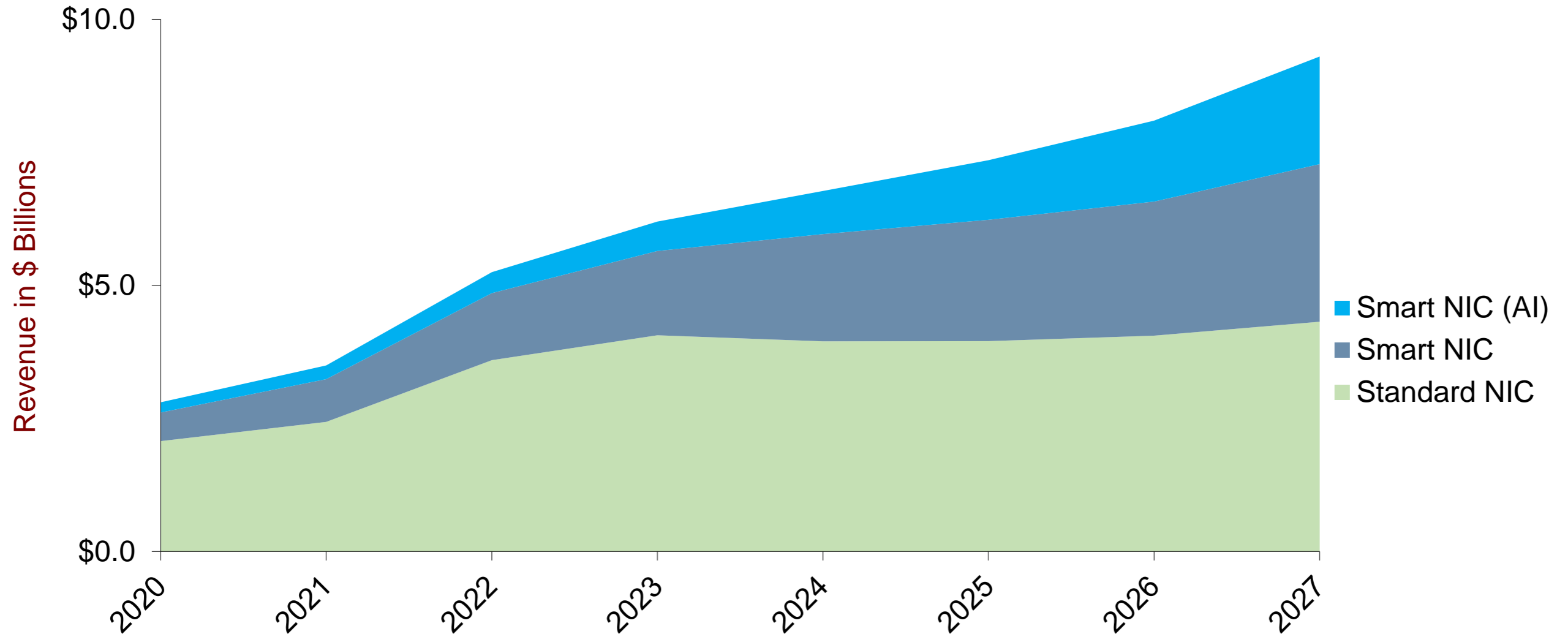
Smart NIC Target Applications

Networking
and Security
Offloads

Storage
Offload and
Acceleration

Accelerated
Computing
(AI)

Smart NIC Opportunity for AI



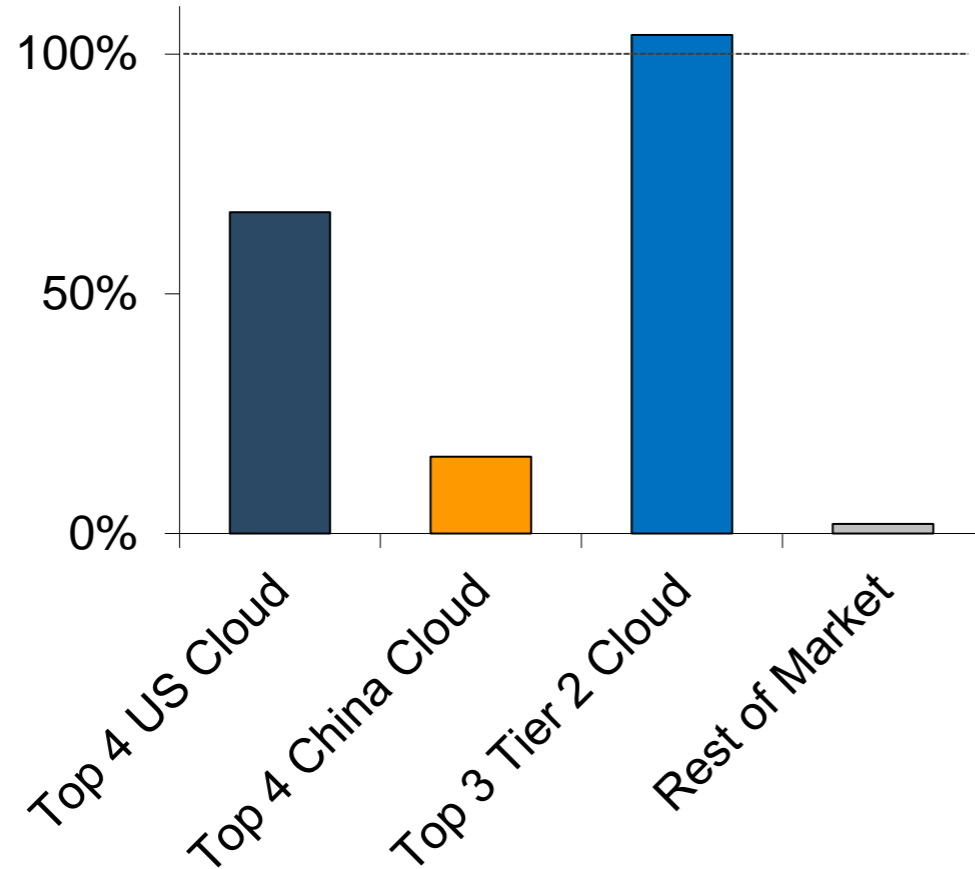
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Smart NIC Vendor Model

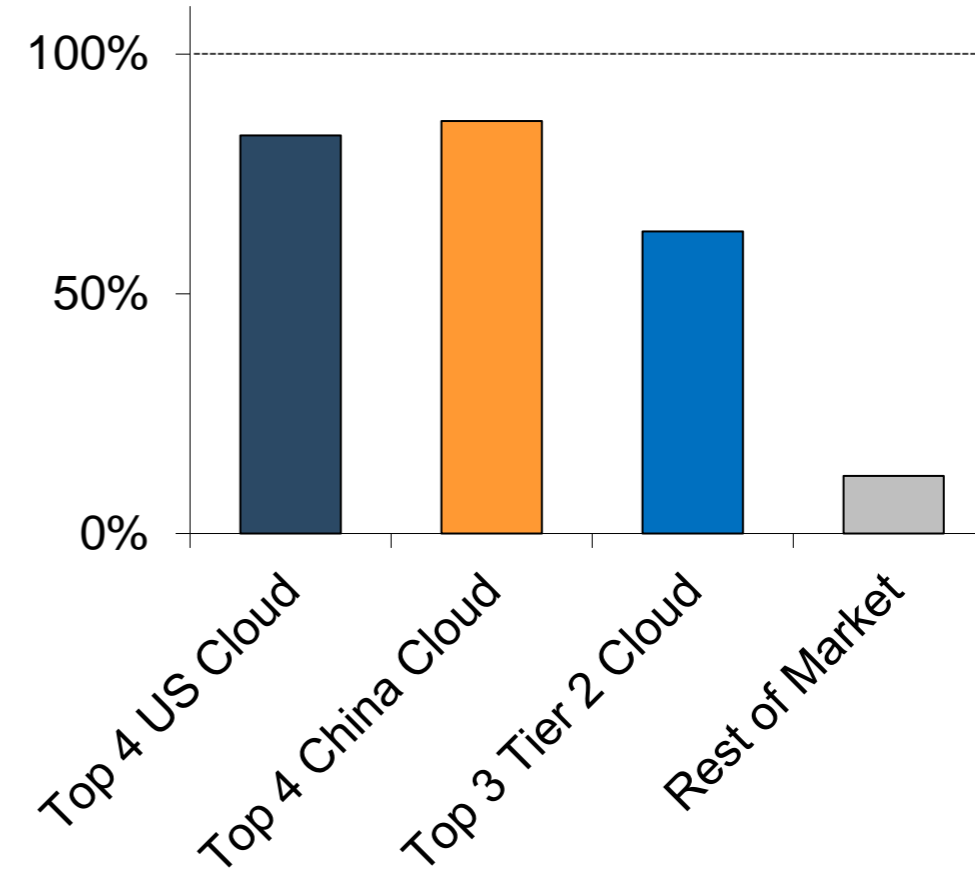
Chip Vendors	Adapter Vendors	End-users
Closed Vendors Amazon (Annapurna) Alibaba (X-Dragon, CIPU) Microsoft (Fungible?)	Closed Vendors (Chip) Amazon (Annapurna) Alibaba (X-Dragon, CIPU) Microsoft (Fungible?)	Amazon Alibaba Microsoft (Fungible?)
Open Vendors AMD (Pensando DSC) Intel (IPU) Marvell (Liquid IO DPU) NVIDIA (Bluefield DPU)	Closed Vendors (Chip) Google (Intel IPU) Microsoft (Intel IPU, NVIDIA controller) Other Cloud SPs (Intel IPU)	Google Microsoft Other Cloud SPs
	Open Vendors AMD, Intel, Marvell, Napatech, NVIDIA Server OEMs	Cloud Enterprise Telco

Smart NIC Adoption

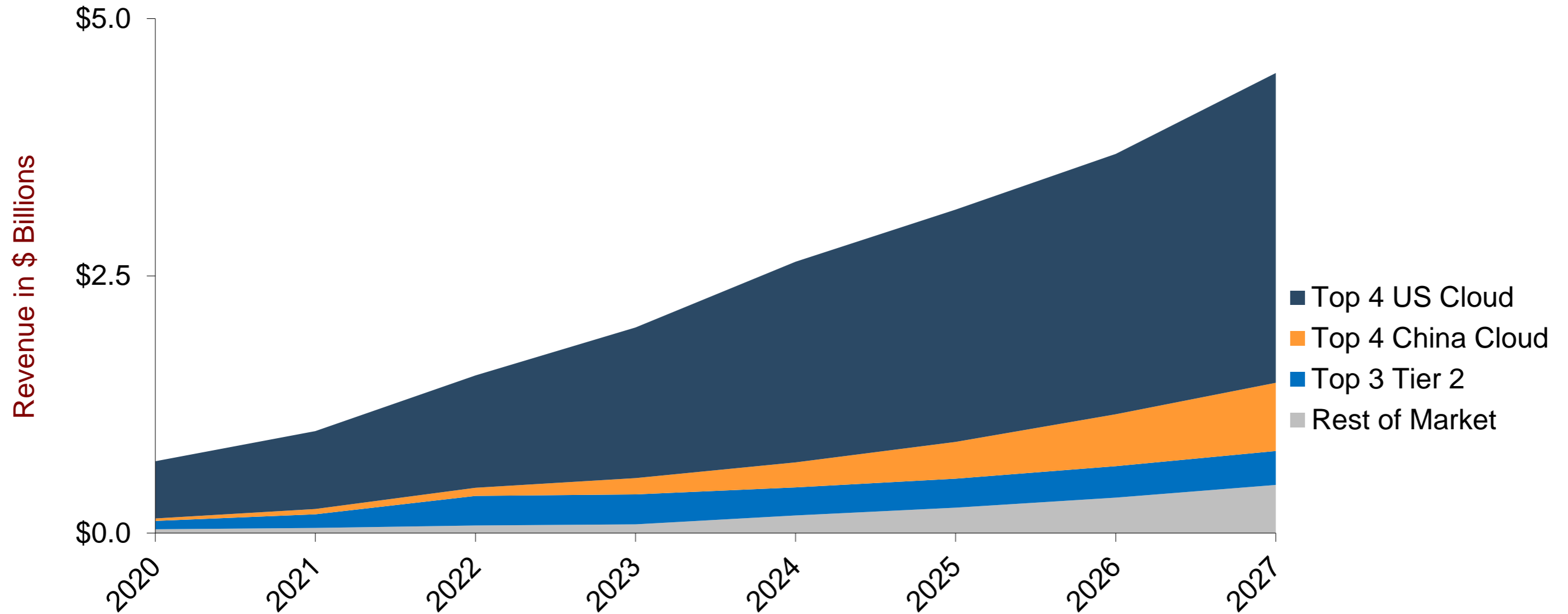
Smart NIC Server Attach Rate 2022



Smart NIC Server Attach Rate 2027

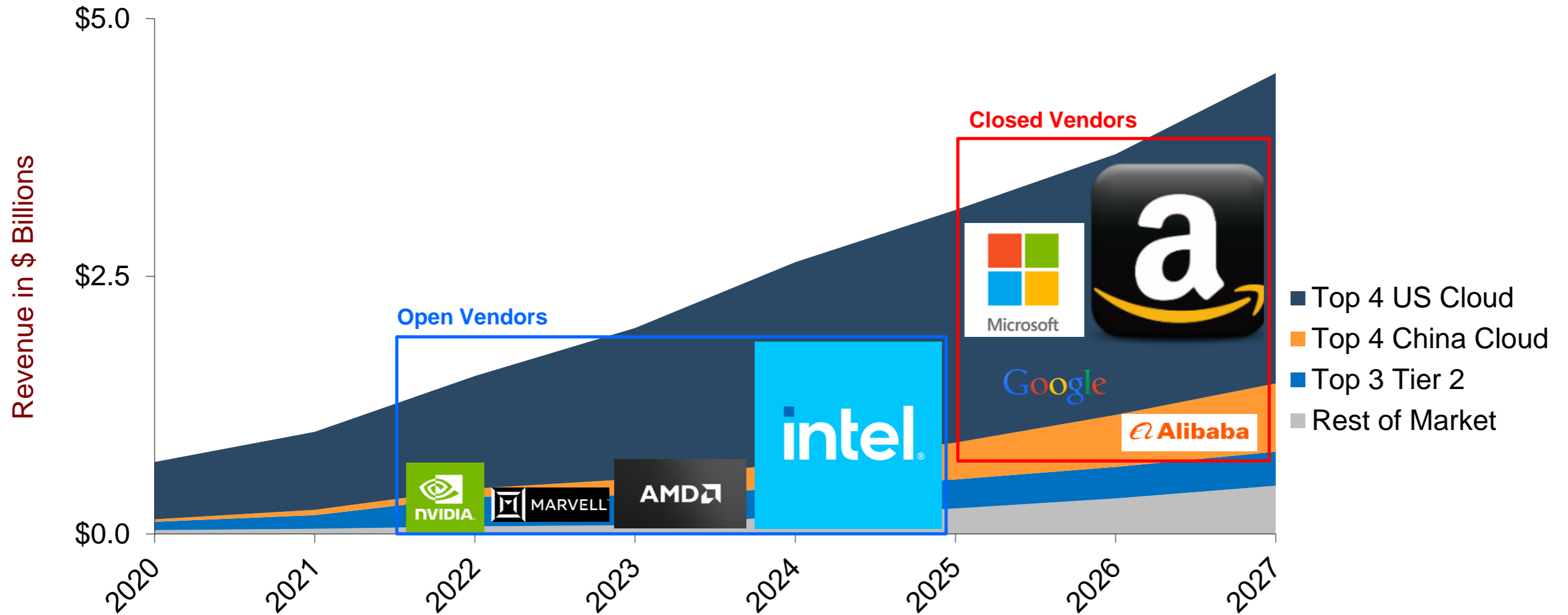


Smart NIC Market Opportunity



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Key Takeaways

- ❑ Smart NIC market isn't huge today but growing
- ❑ AI applications such as generative AI are potential growth drivers
- ❑ Smart NICs could reduce total cost of ownership for hyperscalers
- ❑ Smart NICs remain difficult to deploy, limiting usage by smaller organizations
- ❑ Captive market is hard for vendors to penetrate but progress has been made