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# Smart NIC Market Update

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Dell'Oro Group

# Dell'Oro Group Covered Areas 2022

## Subscription Research

### Telecommunications Infrastructure

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 Infrastructure

Ethernet Switch—Campus  
Ethernet Switch—L2+L3 Overall  
Network Security  
SASE & SD-WAN\*  
Wireless LAN

### Data Center IT Infrastructure

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

## Advanced Research Reports

### Telecommunications Infrastructure

5G  
CBRS (last report: Jan 2022)  
5G Workloads on the Public Cloud\*  
Open RAN  
Private Wireless  
RAN 2030\*

### Enterprise Networks Infrastructure

Cloud Workload Security\*

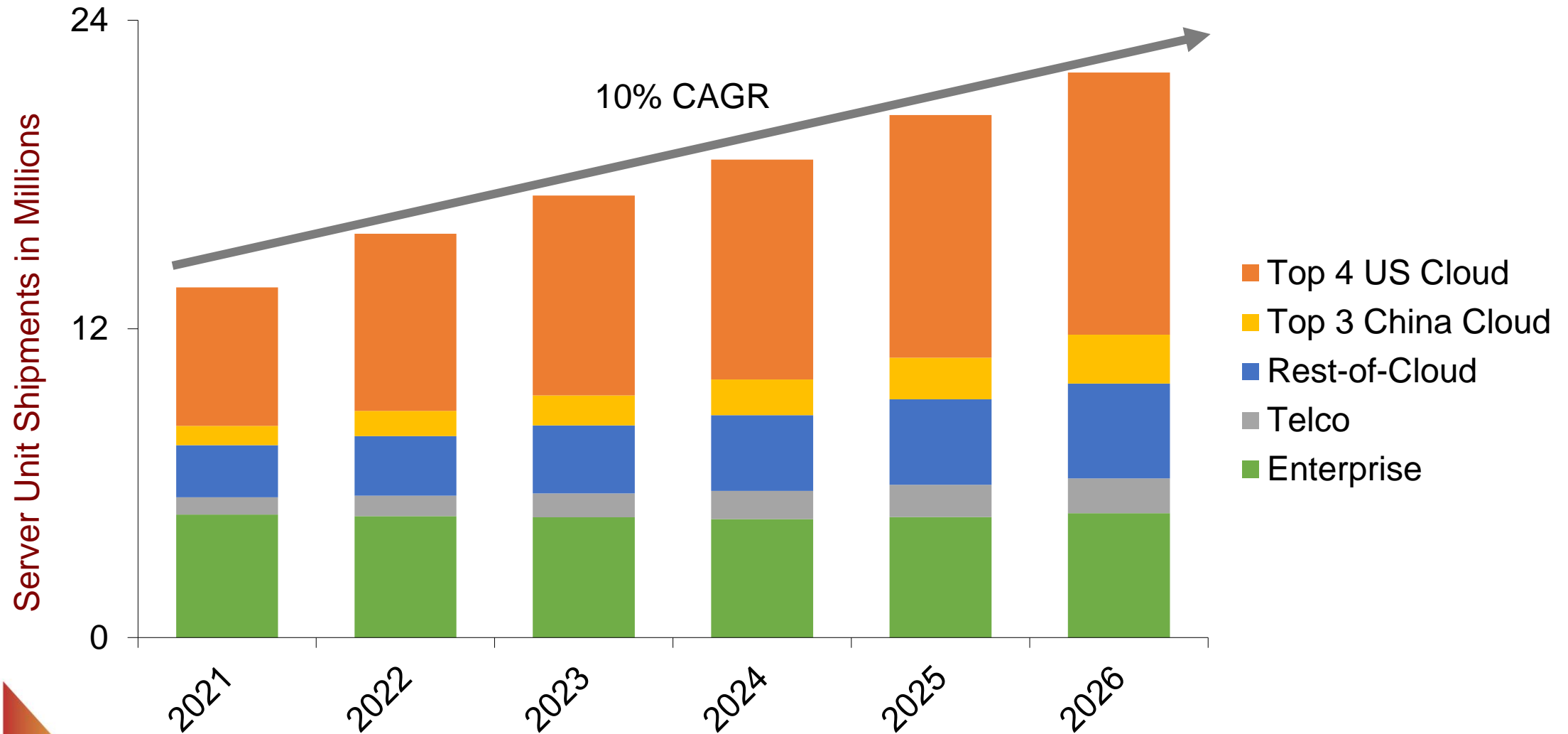
## Bi-Annual Reports

### Telecommunications Infrastructure

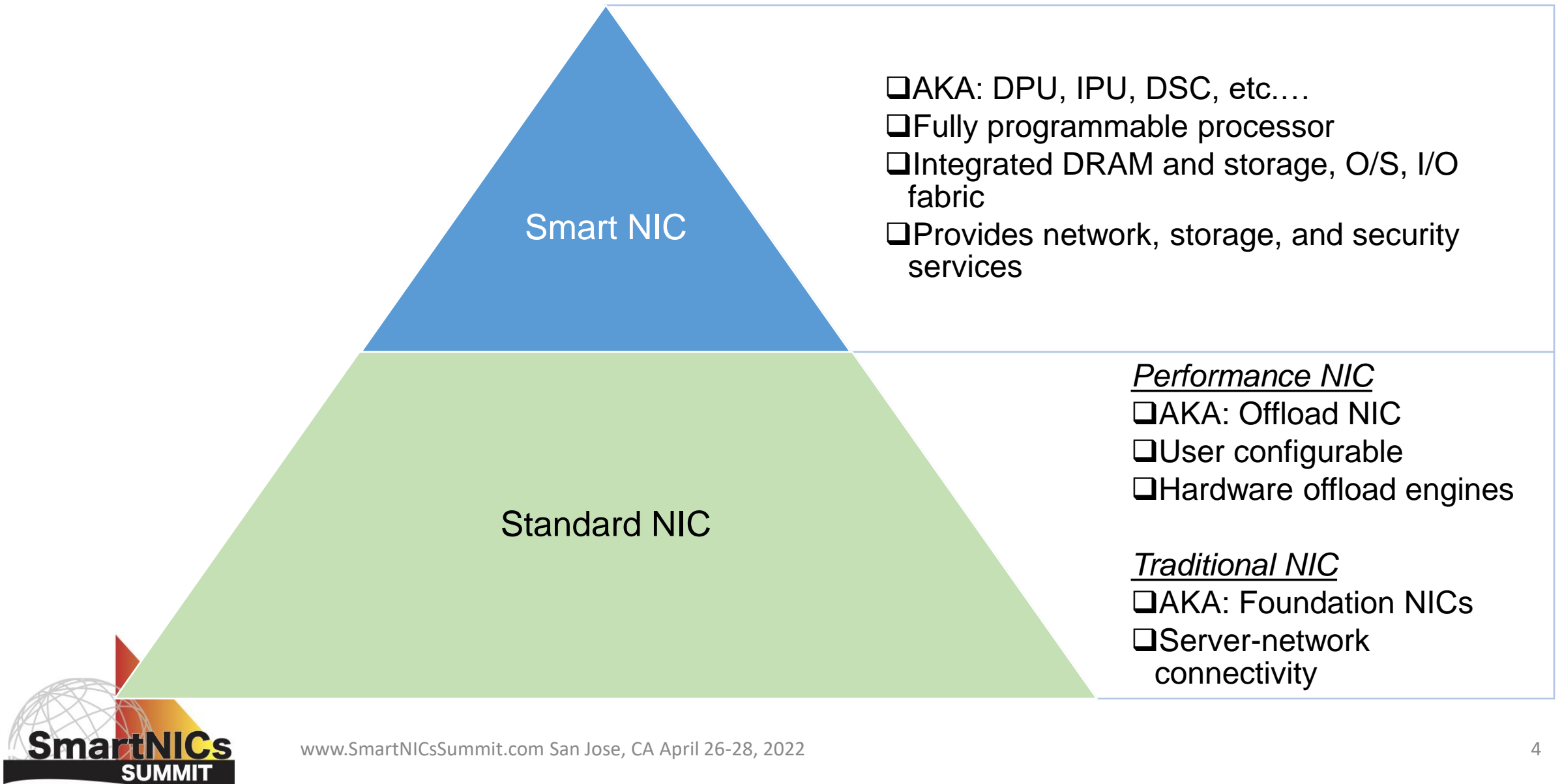
Telecom Capex

*\* New Report*

# Server Market Opportunity

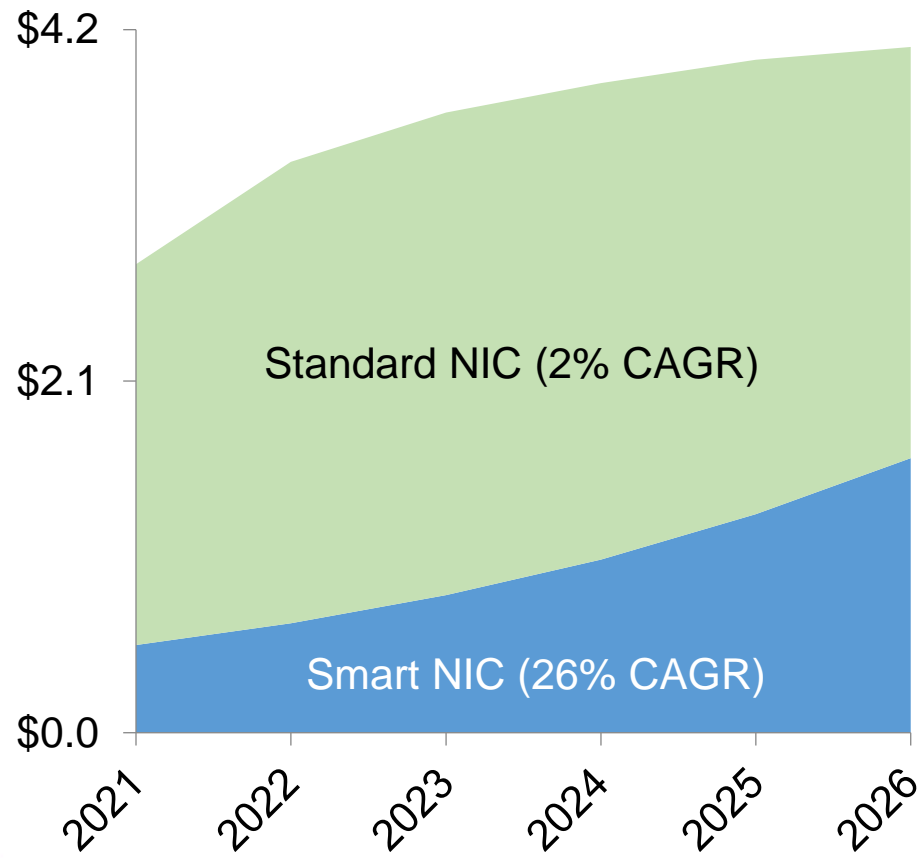


# Smart NIC Definition

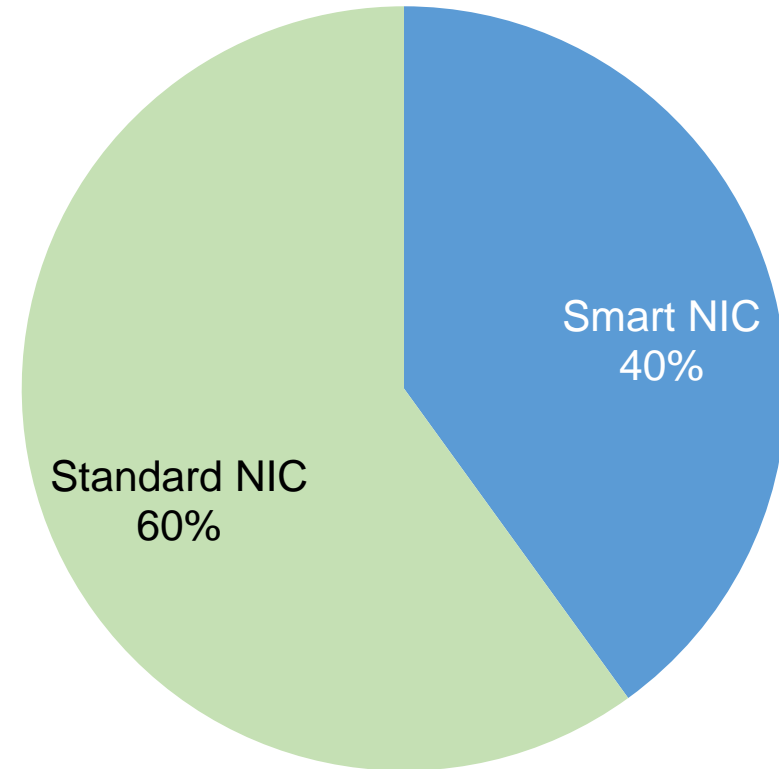


# Ethernet Adapter Market Outlook

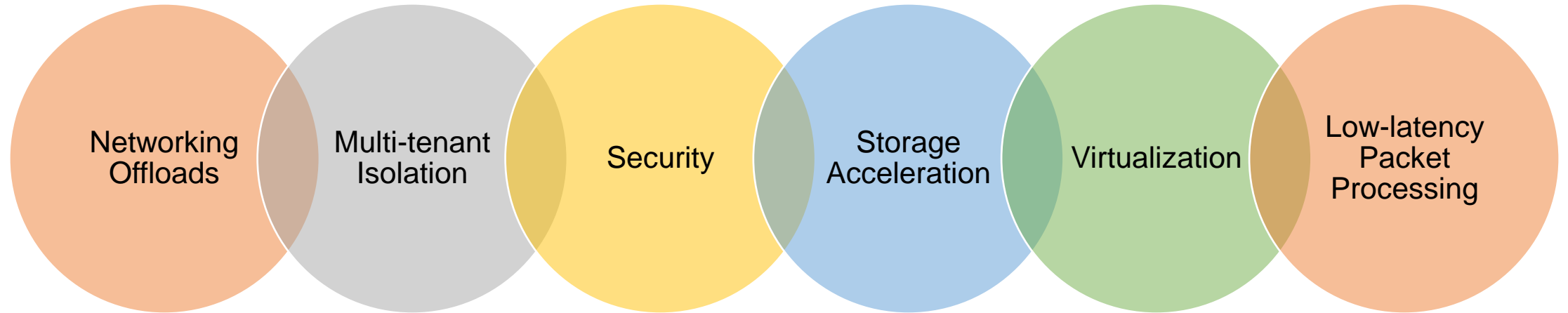
Revenue in \$ Billions



2026 Revenue Share %



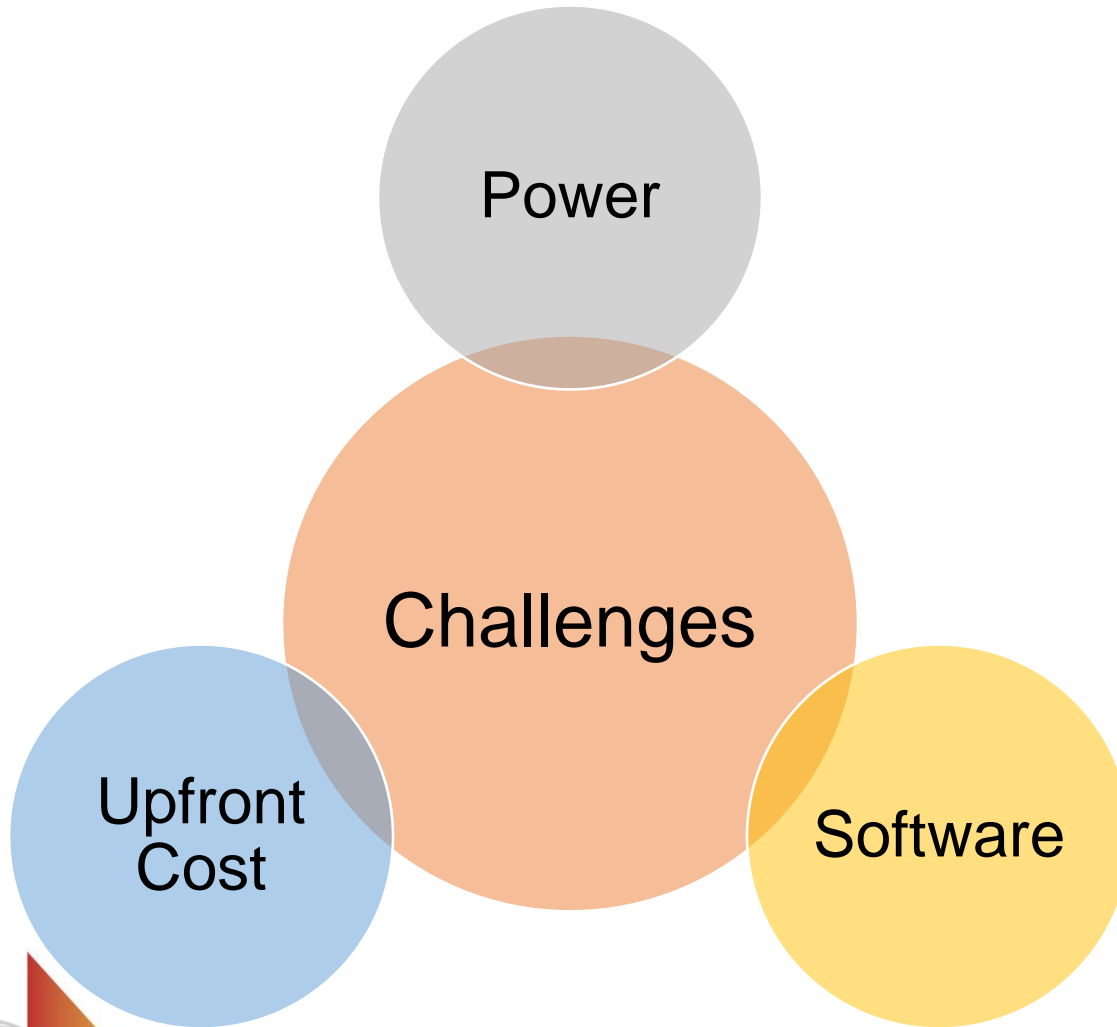
# Smart NIC Use Cases



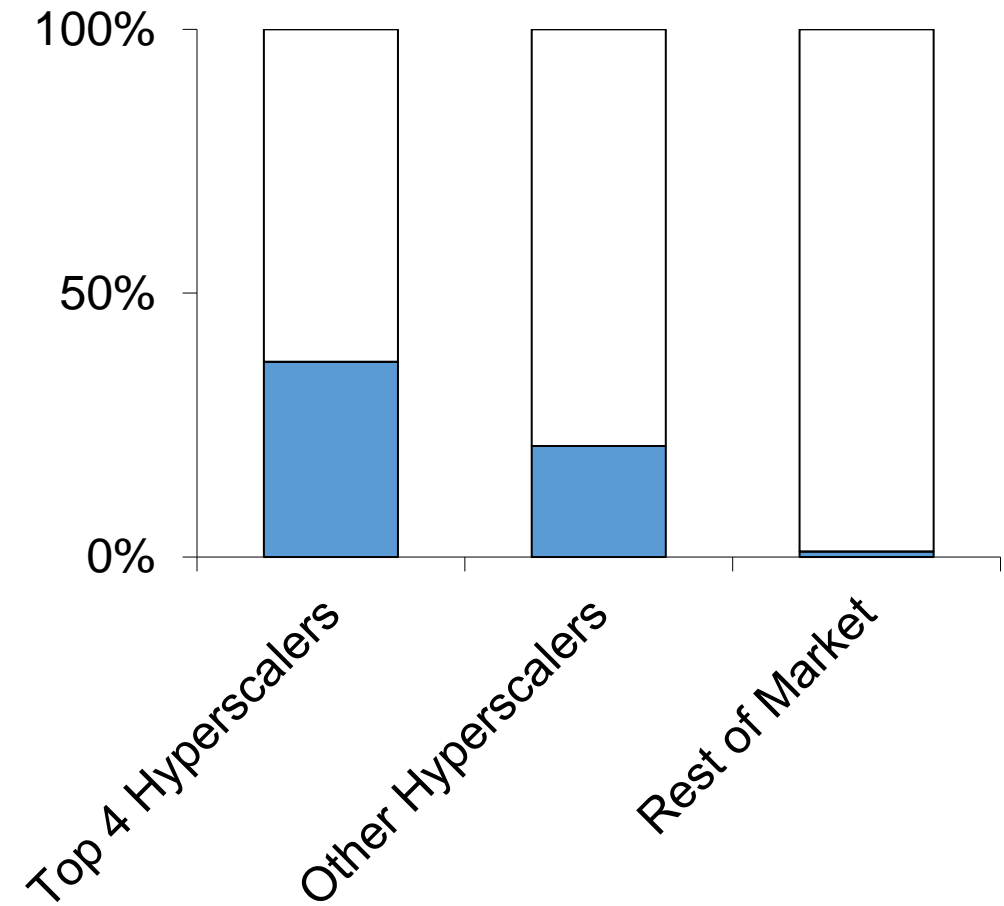
# Smart NIC Vendor Model

	Open Adapters	Closed (Proprietary ) Adapters
Open Silicon	<i>Off-the-shelf adapters for open markets:</i> <ul style="list-style-type: none"><li>❑ Intel (ARM SoC, FPGA)</li><li>❑ Marvell (ARM SoC)</li><li>❑ Napatech (FPGA)</li><li>❑ Nvidia (ARM SoC, FPGA)</li></ul>	<i>Proprietary adapters with open silicon for internal markets:</i> <ul style="list-style-type: none"><li>❑ Google (Intel Mt. Evans ARM SoC)</li><li>❑ Microsoft (Nvidia controller + Intel FPGA)</li></ul>
Closed (Proprietary) Silicon	<i>No vendors currently</i>	<i>Proprietary adapters and silicon for internal markets:</i> <ul style="list-style-type: none"><li>❑ Alibaba (?)</li><li>❑ Amazon (Annapurna ARM SoC)</li><li>❑ Huawei (Hisilicon ARM SoC)</li></ul>

# Smart NIC Adoption

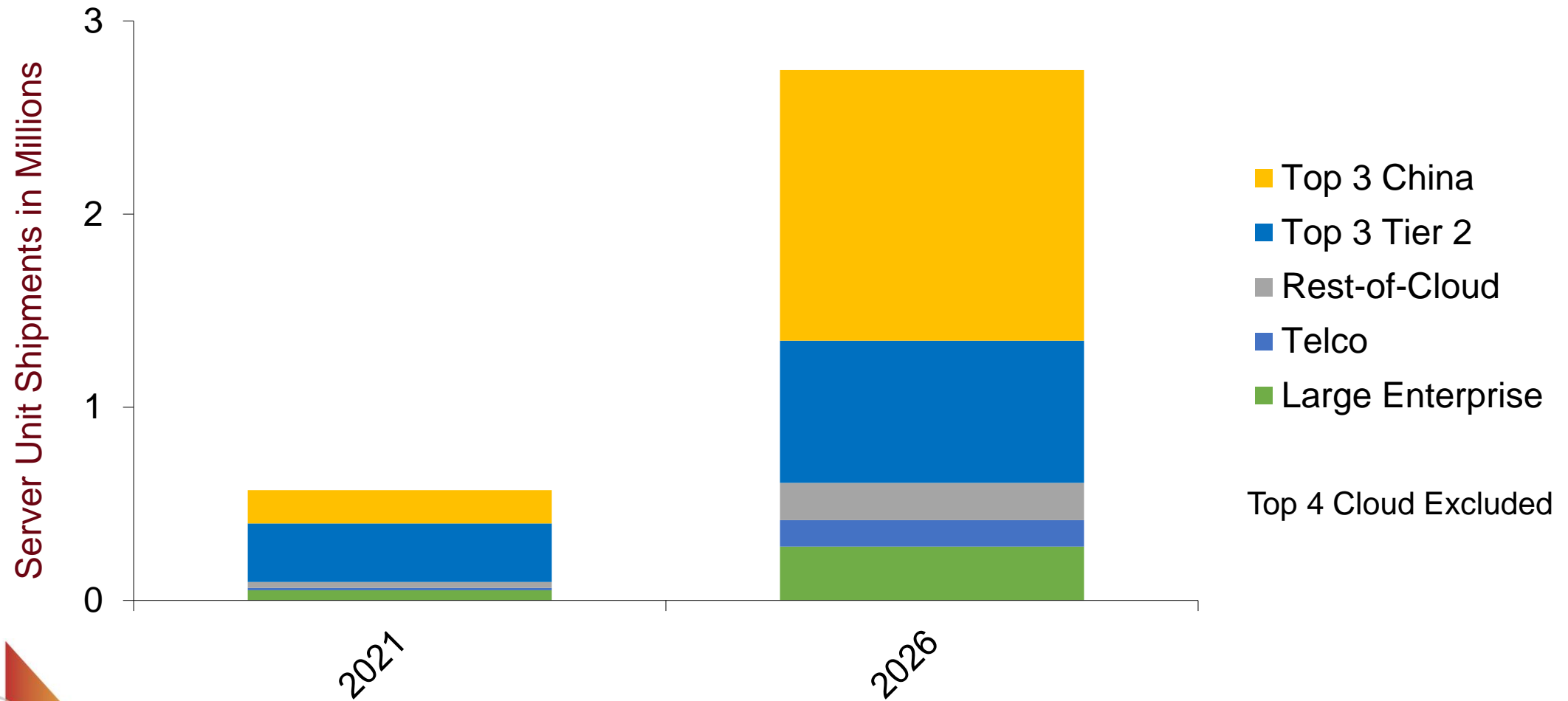


Smart NIC Server Attach Rate 2021

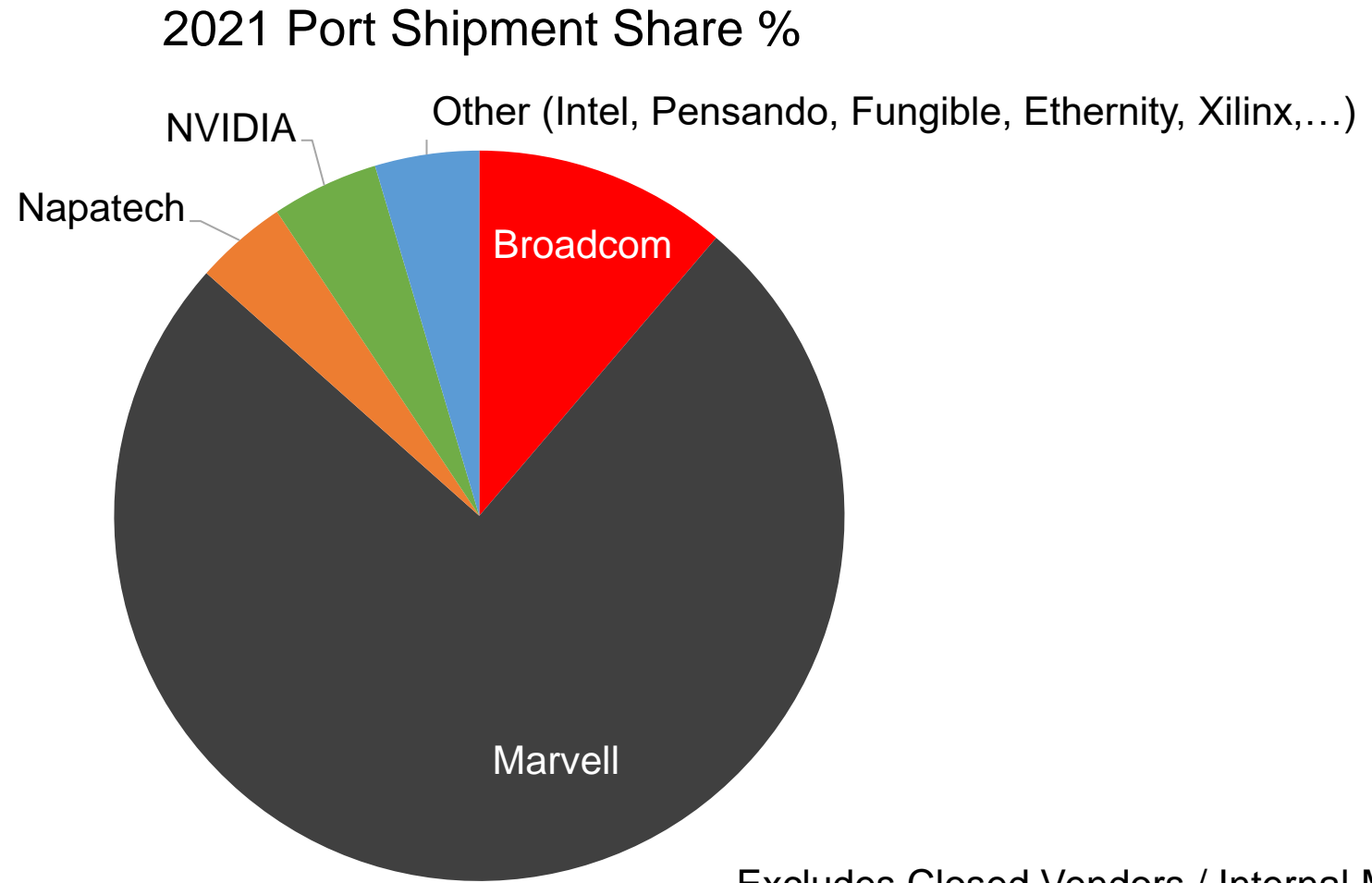




# Smart NIC Market Opportunity

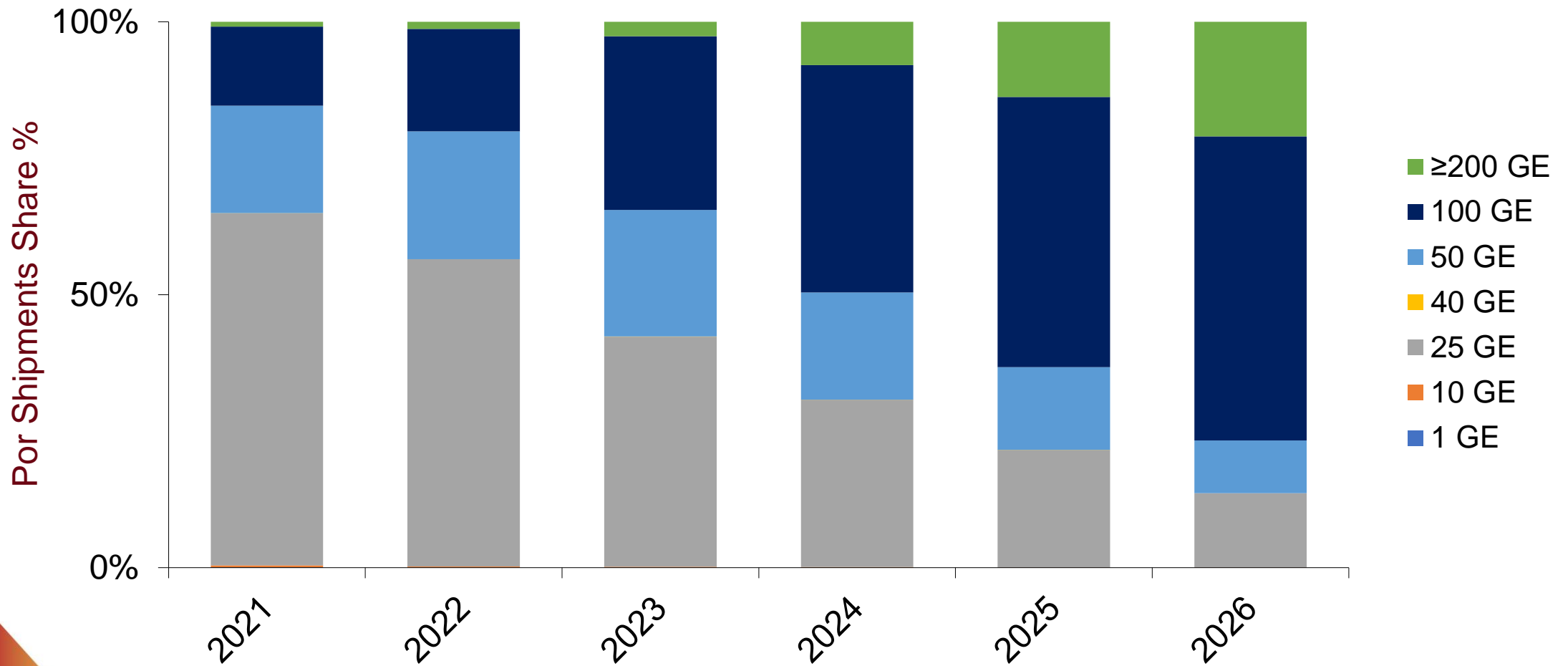


# Smart NICs Vendor Landscape



Excludes Closed Vendors / Internal Markets

# Smart NIC Speed Transitions



# Smart NIC Market Key Takeaways

- Market forecast to grow at 26% CAGR to \$1.6 B in 2026
- Pushes technology envelop in server connectivity
- Mostly deployed by hyperscalers today
- Wide range of compelling use cases
- Open market is crowded today
- Capex and opex challenges

# THANK YOU

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Research**

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