

Global AI Data Center Switch
Market: Analysis By Type
(InfiniBand & Ethernet), By
Enterprise Size (Large Enterprises
& Small & Medium Enterprises
(SMEs), By Region, Size and
Trends with Impact of COVID-19
and Forecast up to 2029

March 2024



Global AI Data Center Switch Market: Coverage

Executive Summary and Scope

Introduction/Market Overview

Global Market Analysis

Regional Market Analysis

Impact Of COVID-19

Dynamics

Competitive Landscape

Company Profiling

Global AI Data Center Switch Market: Coverage

Scope of the Report

Attributes	Details
Title	Global AI Data Center Switch Market: Analysis By Type (InfiniBand & Ethernet), By Enterprise Size (Large Enterprises & Small & Medium Enterprises (SMEs), By Region, Size and Trends with Impact of COVID-19 and Forecast up to 2029
Coverage	Global and Regional
Regional Coverage	North America, Europe, Asia Pacific, ROW
Market Influencing Variables	Growth Drivers, Challenges, Market Trends
Forecast Period of Market	2024-2029
Competition in the Market	Consolidated
Key Players	Nvidia Corporation, Cisco Systems, Inc., Hewlett Packard Enterprise Company, Dell Technologies Inc., Huawei Investment & Holding Co. Ltd., Broadcom Inc., Arista Networks, Inc., Juniper Networks, Inc., Celestica Inc., Marvell Technology, Inc., and Quanta Computer Inc. (Quanta Cloud Technology (QCT))

Global AI Data Center Switch Market

Executive Summary

The integration of AI into data centers revolutionizes data transmission, storage, and processing. AI applications, with their data and compute intensive workloads distributed across multiple servers and processors, create a high-density data flow within data centers, posing networking bottlenecks and inefficiencies, necessitating upgrades in switch protocols, bandwidth, and software. Traditional centers adapt swiftly to meet AI application demands, birthing AI Data Center Switches. These advanced switches, designed for AI workloads, prioritize fast connectivity, minimal latency, and precise data processing. The surge in AI adoption fuels unprecedented demand for these switches. Enterprises and cloud providers rush to enhance networking capacity to match AI-driven workload needs. AI Data Center Switches become vital in modern data infrastructure, driving innovation and efficiency in AI computing. This dynamic landscape underscores their critical role in the ever-evolving realm of AI-enabled computing. The global AI data center switch market was valued at US\$2.78 billion in 2023, and is expected to be worth US\$19.38 billion in 2029.

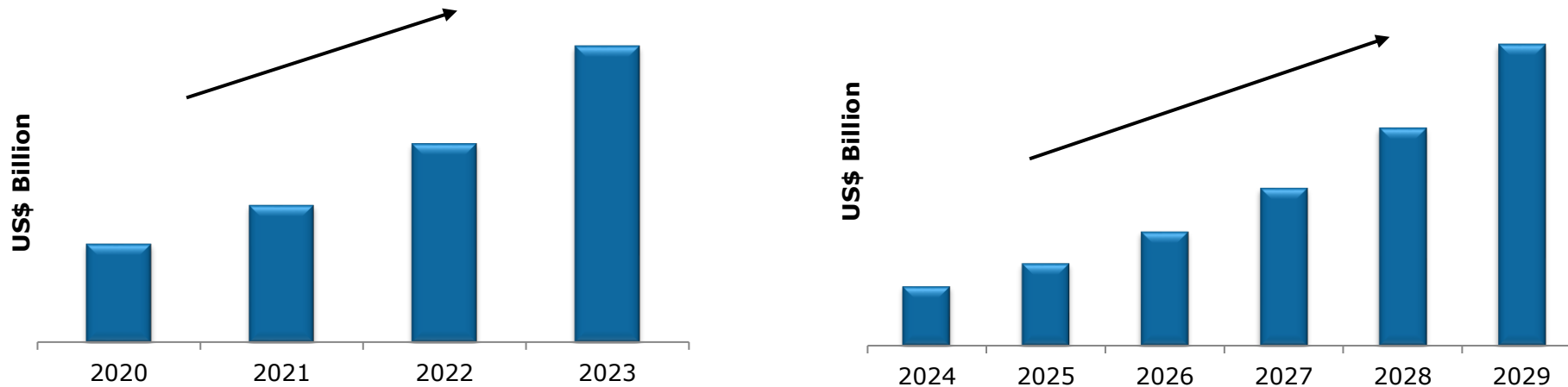
Global AI data center switch market can be segmented on the basis of type (infiniband & ethernet) and enterprise size (large enterprises & small & medium enterprises (SMEs)). Over time InfiniBand switches have enjoyed widespread adoption due to their swift and effective communication pathways between AI data center switches and storage systems. However, the Ethernet switches are gaining significant traction in the AI data center networking market and are expected to become the dominant technology. North America dominated the market in 2023.

The COVID-19 pandemic profoundly altered the global AI data center switch market, presenting both challenges and opportunities. Supply chain disruptions and manufacturing delays impacted hardware production, causing shortages and price hikes for AI data center switches. Meanwhile, the pandemic spurred demand for cloud services, remote work solutions, and digital transformation, increasing the need for robust switches. With AI's expanding role in sectors like healthcare and finance, enhancing data center capabilities became a priority. Furthermore, the rise of edge computing and 5G networks escalated demand for switches to manage edge-generated data.

Global AI data center switch market is expected to show a significant increase during the forecasted period. The growth can be attributed to increasing adoption of AI and machine learning (ML), favorable government regulations, GPU acceleration, surge in data generation, demand for high-performance computing and need for scalability and flexibility. However, some challenges are also impeding the growth of the market such as lack of advanced data center infrastructure and high upfront investment required for deploying AI-enabled switches.

AI Data Center Switch Market: Global Analysis

Global AI Data Center Switch Market by Value

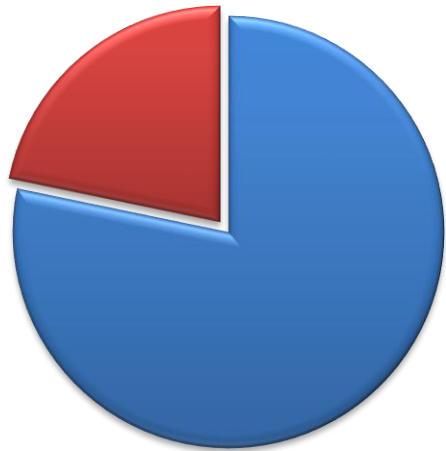


CAGR	
2020-2023	xx%
2024-2029	xx%

Global AI Data Center Switch market was valued at US\$... billion in 2023 and is anticipated to reach up to US\$... billion by 2029 from US\$... billion in 2024, with a CAGR of xx%.

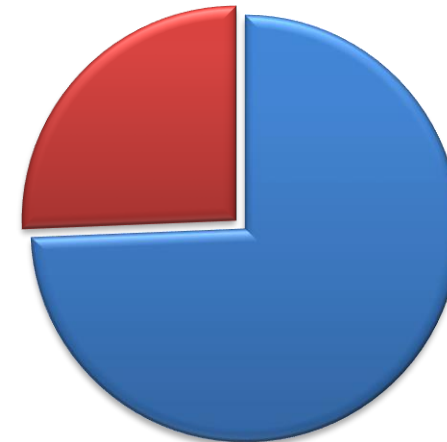
AI Data Center Switch Market: Global Analysis

Global AI Data Center Switch Market by Type; 2023



Type	Share
InfiniBand	xx%
Ethernet	xx%

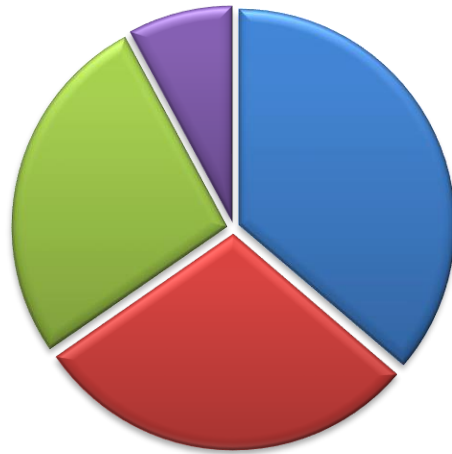
Global AI Data Center Switch Market by Enterprise Size; 2023



Enterprise Size	Share
Large Enterprises	xx%
Small & Medium Enterprises (SMEs)	xx%

AI Data Center Switch Market: Global Analysis

Global AI Data Center Switch Market by Region; 2023



North America, xx%

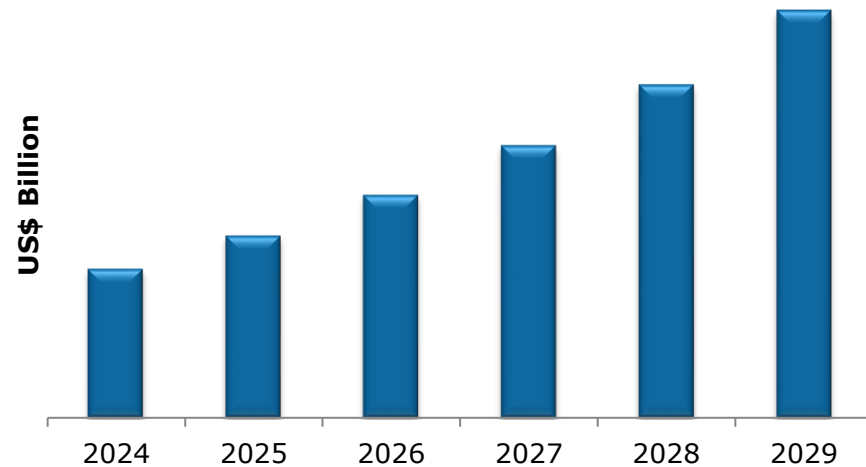
Europe, xx%

Asia Pacific, xx%

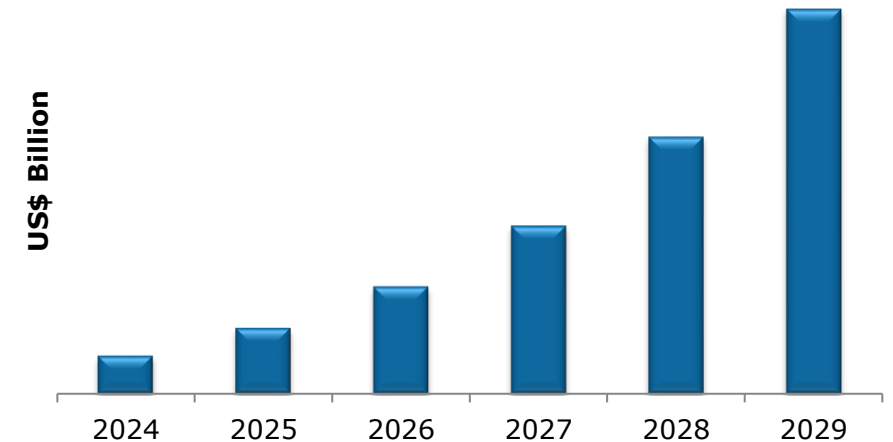
ROW, xx%

AI Data Center Switch Market: Type Analysis

Global InfiniBand AI Data Center Switch Market by Value



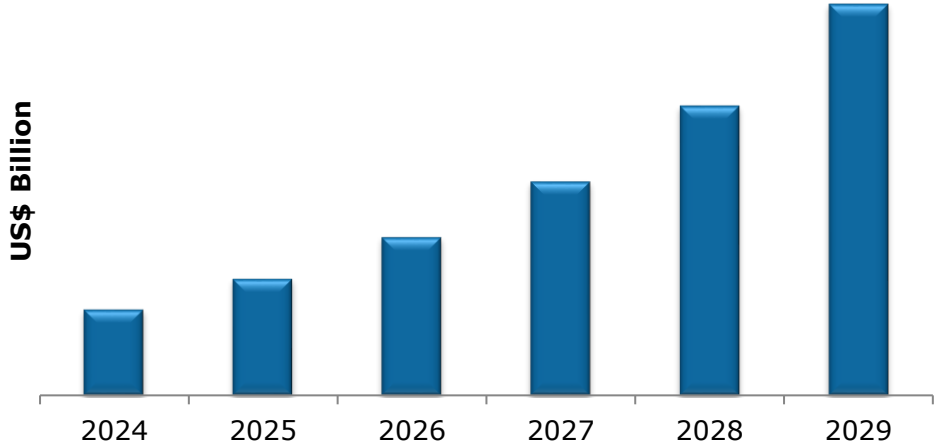
Global Ethernet AI Data Center Switch Market by Value



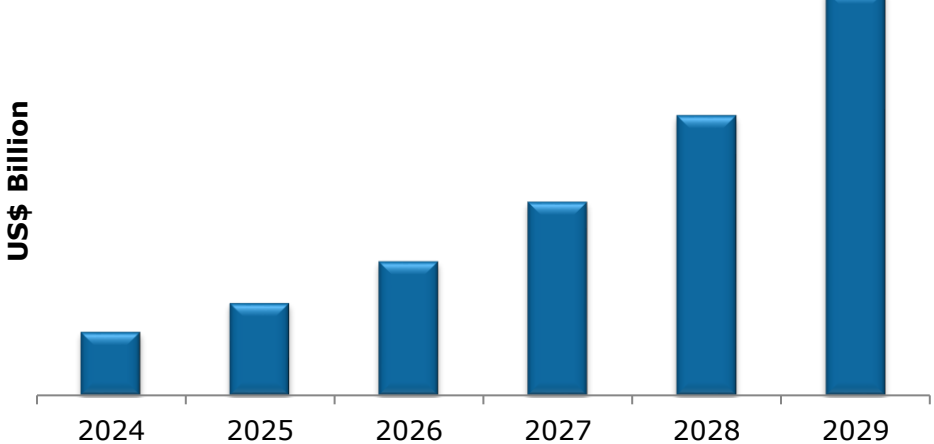
Type	CAGR (2024-2029)
InfiniBand	xx%
Ethernet	xx%

AI Data Center Switch Market : Enterprise Size Analysis

Global Large Enterprises AI Data Center Switch Market by Value



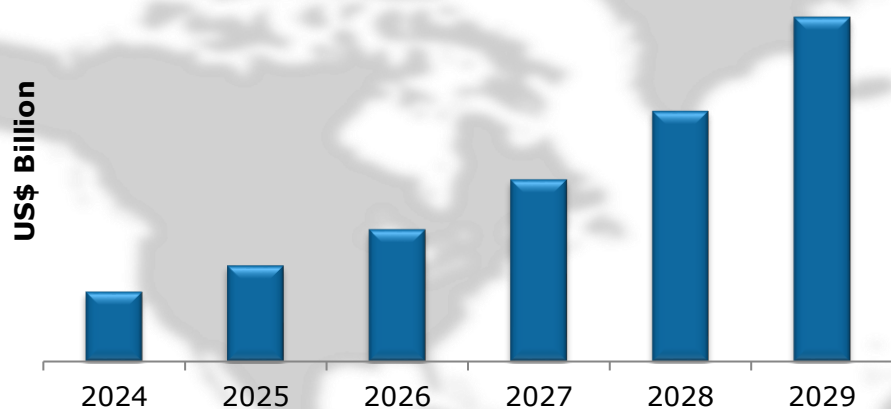
Global Small & Medium Enterprises (SMEs) AI Data Center Switch Market by Value



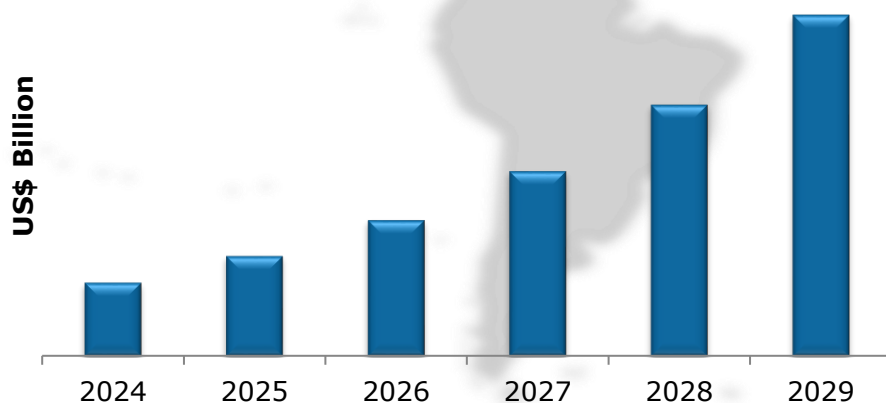
Enterprise Size	CAGR (2024-2029)
Large Enterprises	xx%
Small & Medium Enterprises (SMEs)	xx%

AI Data Center Switch Market: Regional Analysis

North America AI Data Center Switch Market by Value



Europe AI Data Center Switch Market by Value



Region	CAGR (2024-2029)
North America	xx%
Europe	xx%
Asia Pacific	xx%
ROW	xx%

North America AI Data Center Switch Market: An Analysis

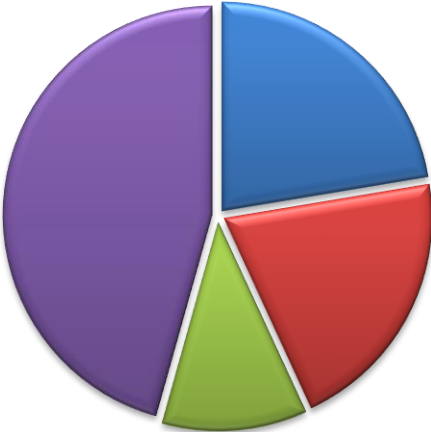
North America AI Data Center Switch Market by Region; 2023



Region	Share (2023)	CAGR (2024-2029)
The US	xx%	xx%
Canada	xx%	xx%
Mexico	xx%	xx%

Europe AI Data Center Switch Market: An Analysis

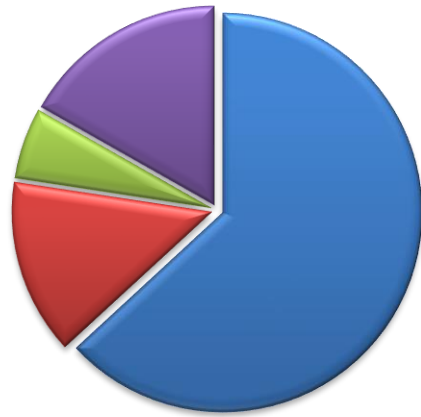
Europe AI Data Center Switch Market by Region; 2023



Region	Share (2023)	CAGR (2024-2029)
Germany	xx%	xx%
UK	xx%	xx%
France	xx%	xx%
Rest of Europe	xx%	xx%

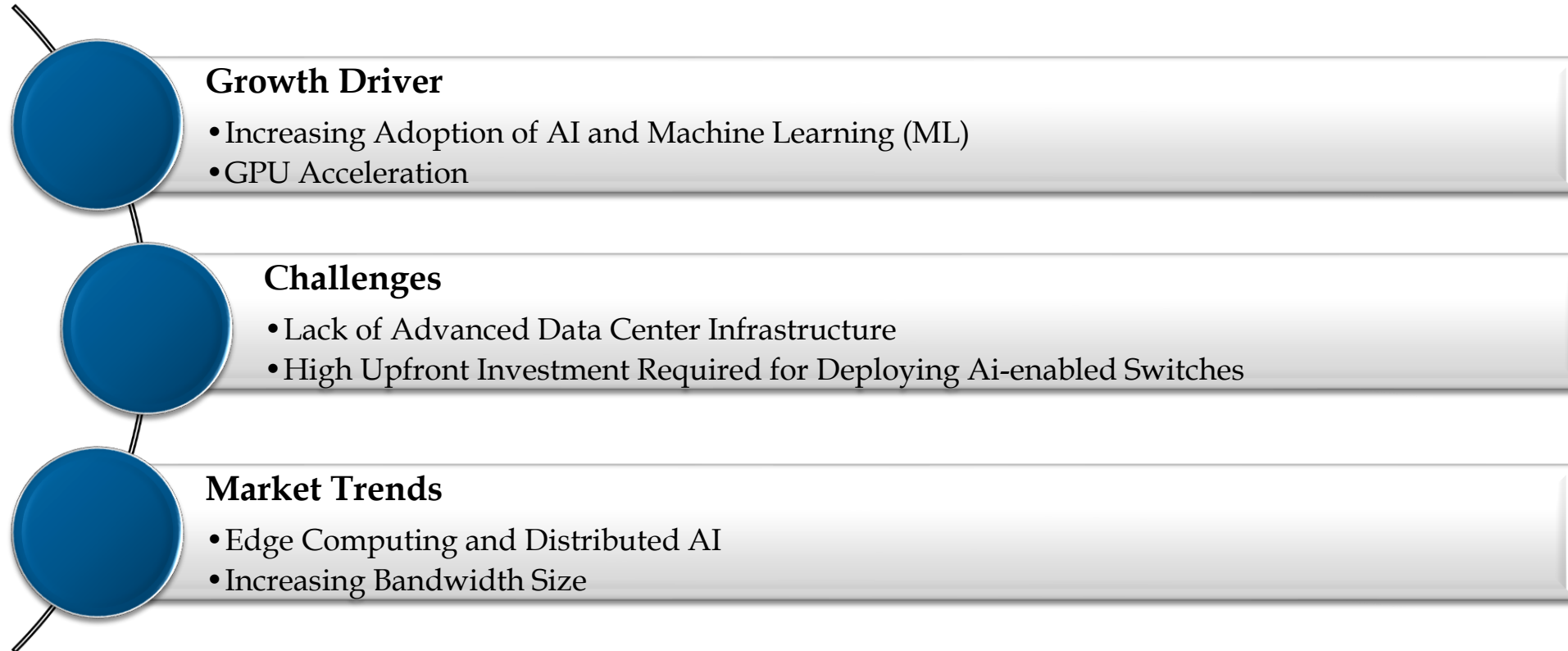
Asia Pacific AI Data Center Switch Market: An Analysis

Asia Pacific AI Data Center Switch Market by Region; 2023



Region	Share (2023)	CAGR (2024-2029)
China	xx%	xx%
Japan	xx%	xx%
India	xx%	xx%
Rest of Asia Pacific	xx%	xx%

Global AI Data Center Switch Market: Dynamics



Global AI Data Center Switch Market: Competitive Landscape

Players Profiled

- ❑ Nvidia Corporation
- ❑ Cisco Systems, Inc.
- ❑ Hewlett Packard Enterprise
- ❑ Dell Technologies Inc.
- ❑ Huawei Investment & Holding
- ❑ Broadcom Inc.
- ❑ Arista Networks, Inc.
- ❑ Juniper Networks, Inc.
- ❑ Celestica Inc.
- ❑ Marvell Technology, Inc.
- ❑ Quanta Computer Inc. (Quanta Cloud Technology (QCT))

Global AI Data Center Switch Players by Market Share; March 2021 – December 2022 (Percentage, %)

