

# Data Center Server Market update

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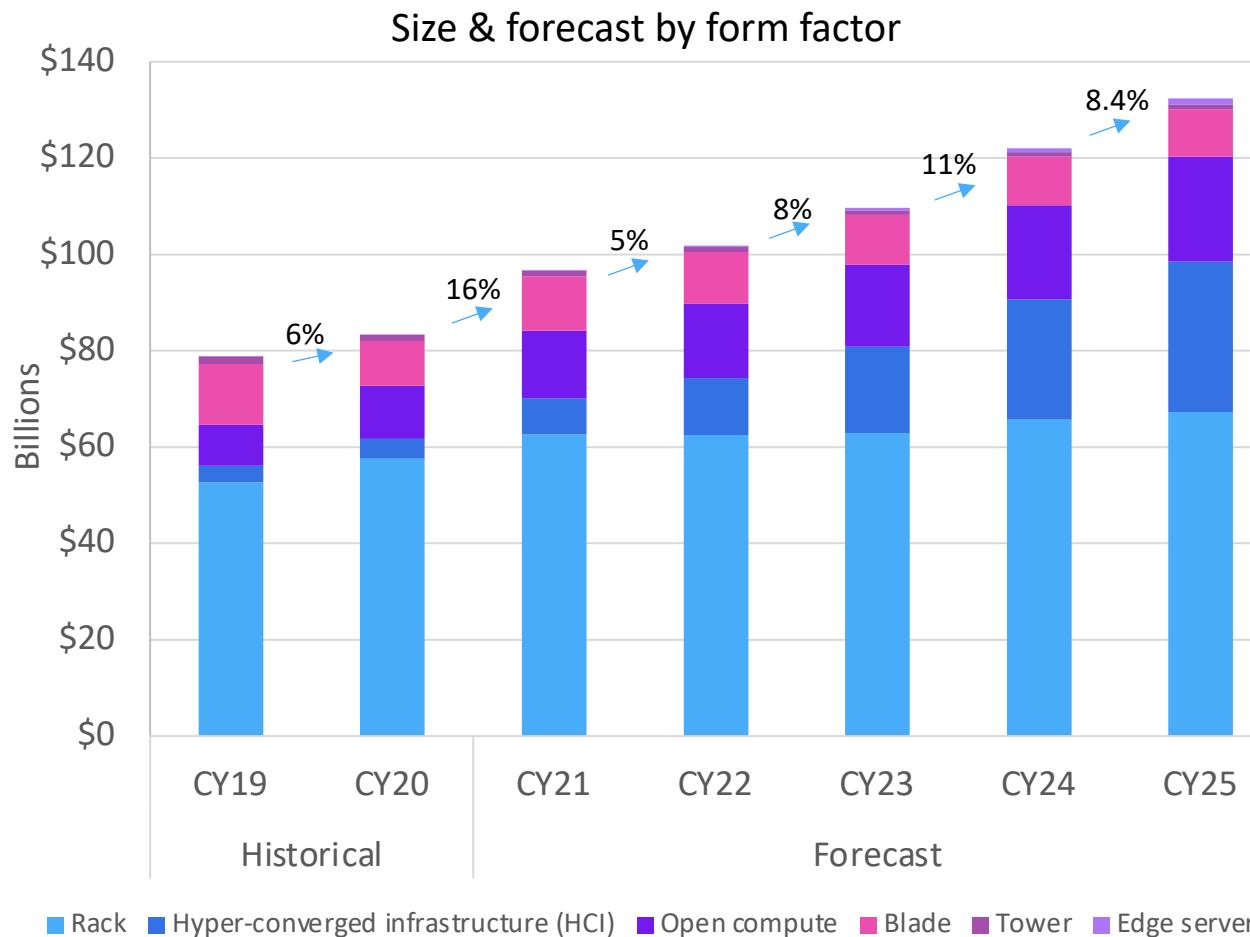
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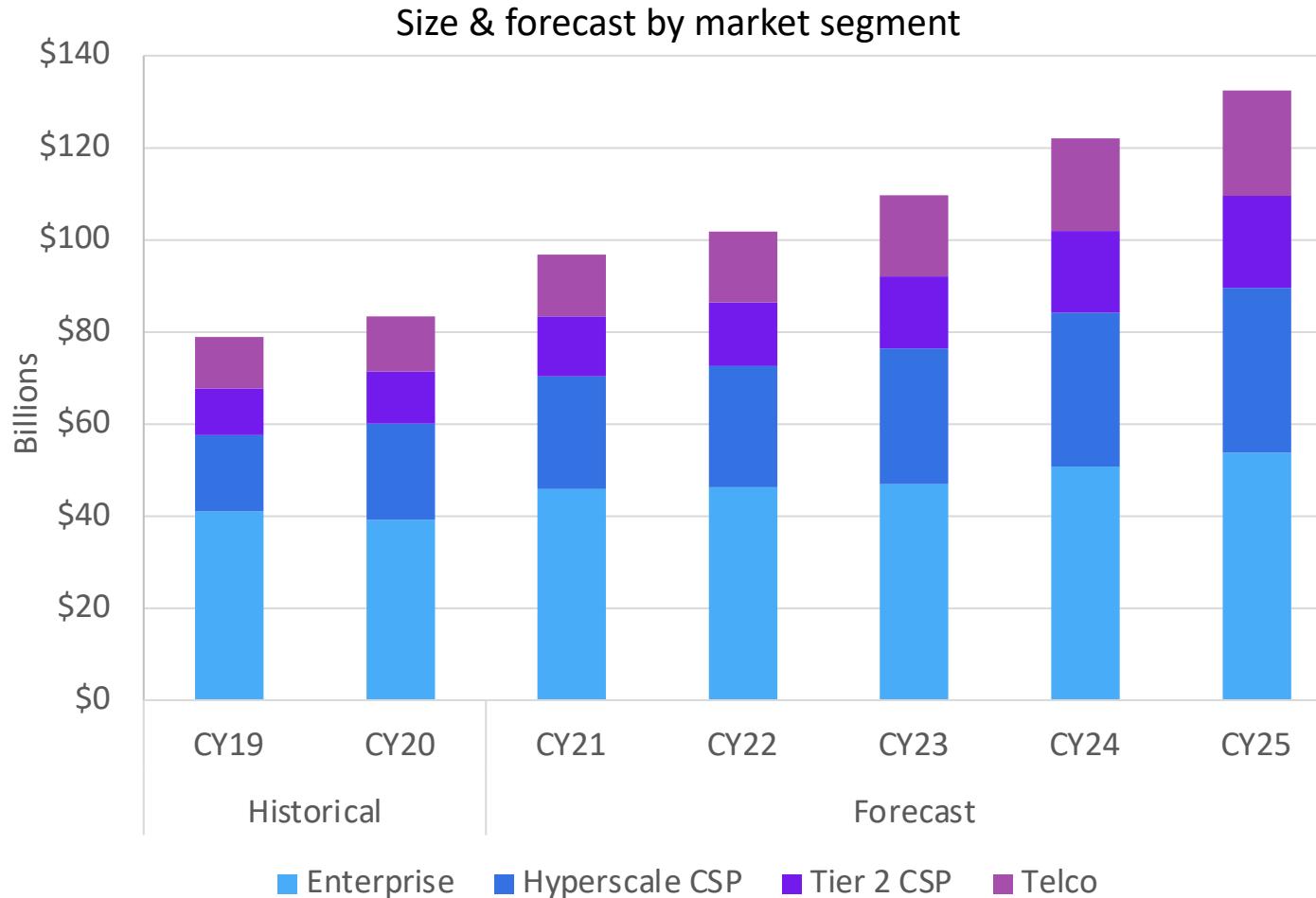
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# Server market tops \$132 billion in CY25



- CY20 was defined by the coronavirus disease 2019 (COVID-19) pandemic and global lockdown.
- Consumer and enterprise demand for cloud services surged, driving up the server consumption of CSPs and the overall market went up 6% in CY20.
- Strong demand for cloud services and CPU refresh cycle would further drive the market upward by 16% in CY21.
- Server revenue growth in 2021 will outpace server unit growth similarly to CY17 and CY18 when an increase in memory cost put upward pressure on server prices.
- Total server unit shipments are projected to hit 20 million annually by CY25, growing at 8% CAGR.
  - HCI grows at a 58% CAGR out to CY25, hitting 12% of servers.
  - Open compute servers account for 34% of servers shipped in CY25, up from 22% in CY19.
  - Edge servers represent 4% of servers shipped in CY25, up from 0% in CY19.

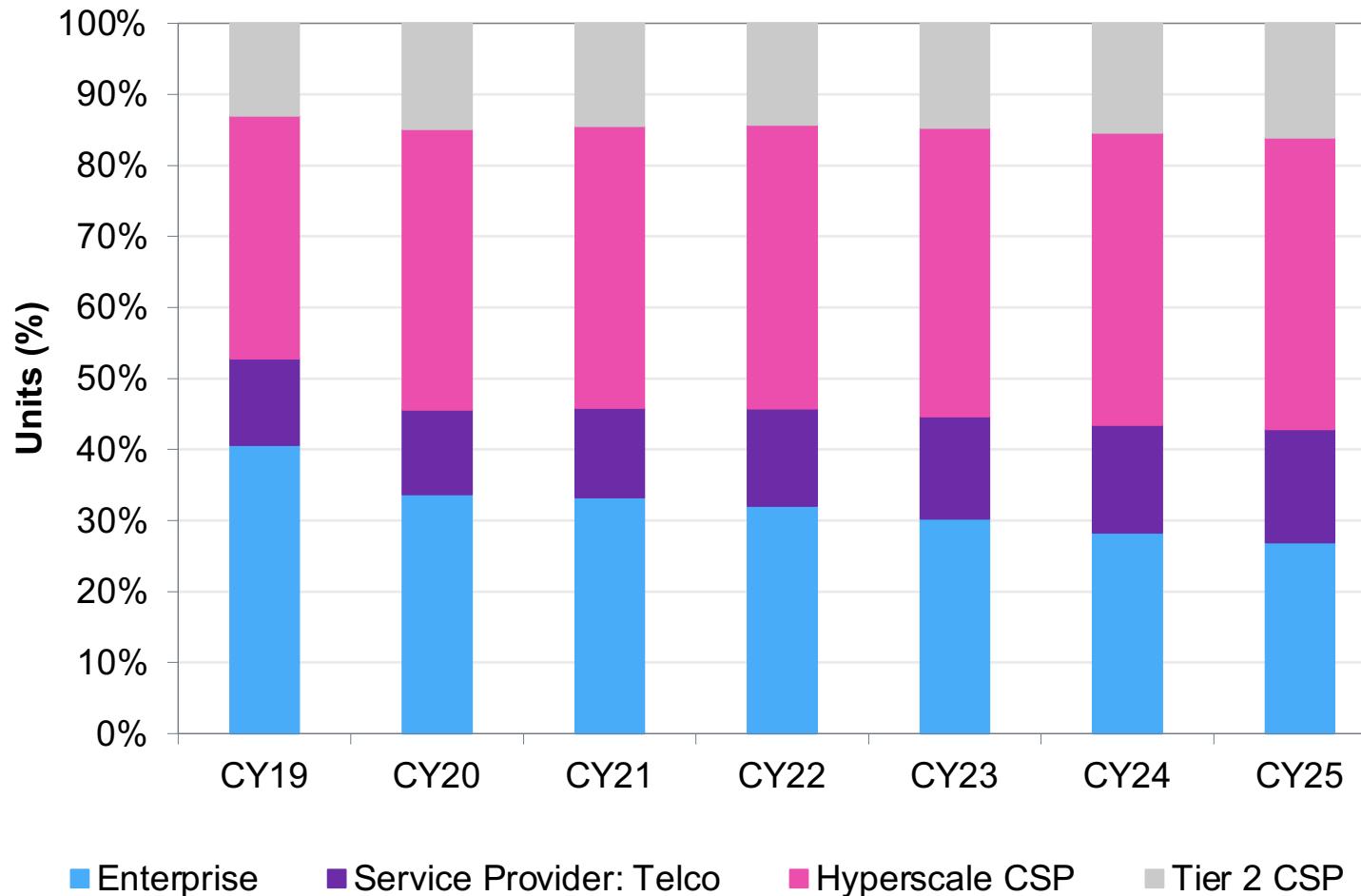
# Demand for cloud services drives CSPs server consumption



Segment	CY20-CY25 CAGR
Enterprise	7%
Telco	14%
Hyperscale CSP	11%
Tier 2 CSP	12%
<b>Grand Total</b>	<b>10%</b>

- Servers sold to hyperscale CSPs to be 41% of server units shipped by CY25, up from 34% in CY19.
- Tier 2 CSPs account for 16% of CY25 servers, up from 13% in CY19. Telcos account for 16% of servers shipped in CY25 server, up from 12% in CY19.
- DC servers sold to enterprise will be 27% of all servers shipped by CY25, down from 41% in CY19

# DC server units forecast by market segment



Enterprise customers to opt for a hybrid cloud model

- On-premise servers hosting the low latency, mission critical workloads
- Servers in a public cloud or colocation facility hosting the non-critical applications

# Workloads driving server growth at the enterprise/non CSP



**Analytics**



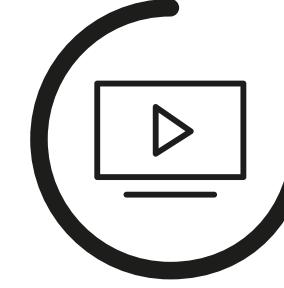
**AI/ML  
Inferencing**



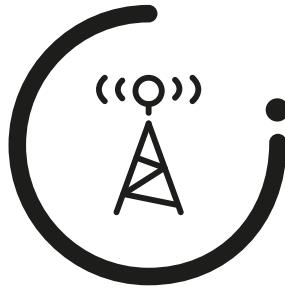
**Storage**



**Security**

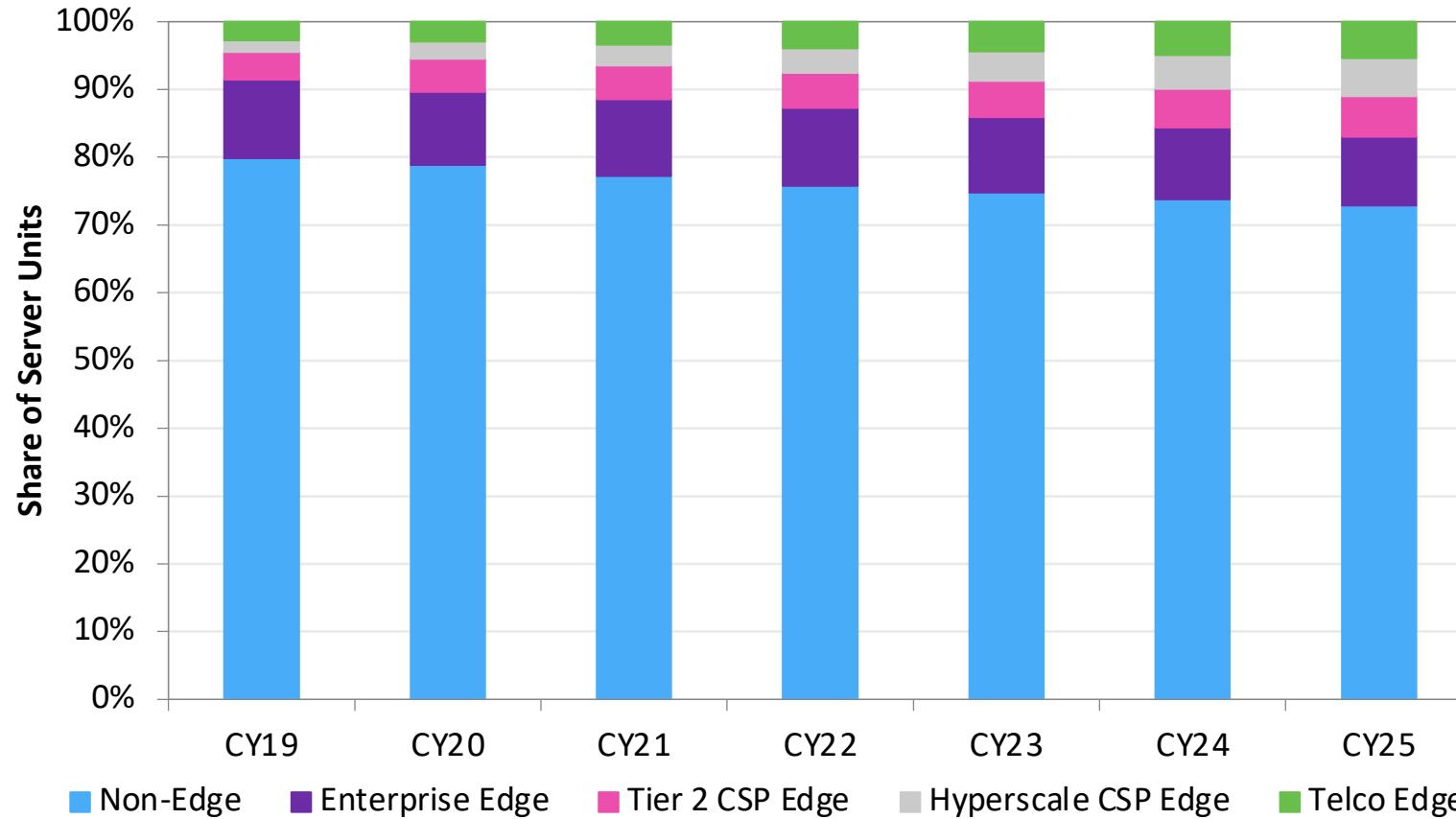


**VDI  
(Remote  
working)**



**VNF  
(ORAN)**

# Servers at the edge to cross 5million by CY25



5.4 million or 27% of all servers shipped in CY25 will be located at the edge, up from 2.8 million (21%) in CY20

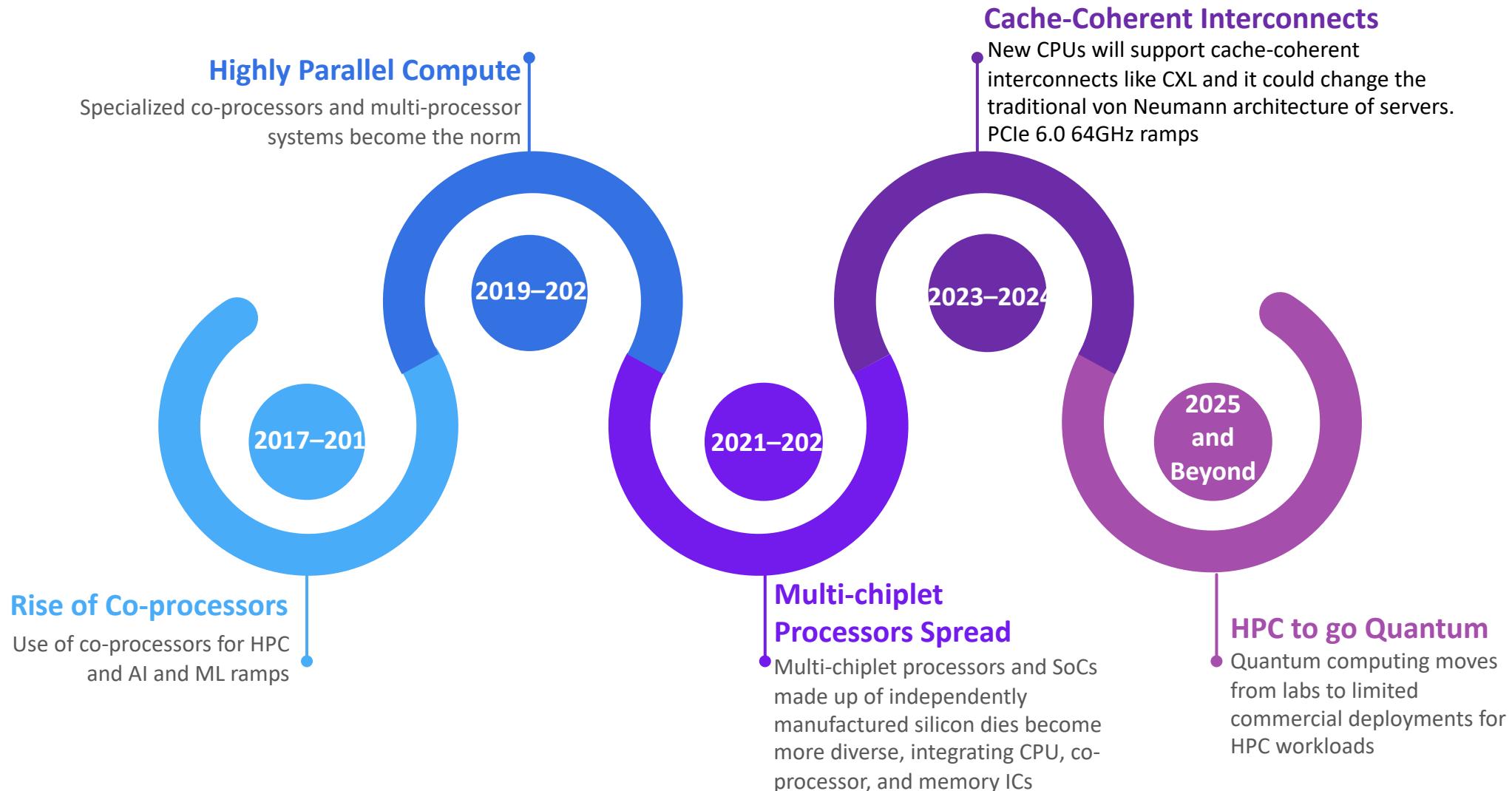
- The telco edge - 5% of all servers shipped in CY25
- The hyperscale CSP edge - 6% of all servers shipped in CY25
- Tier 2 CSP edge - 6% of all servers shipped in CY25
- Enterprise edge is the largest, representing 10% of all servers shipped in CY25.

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# Consumption based models

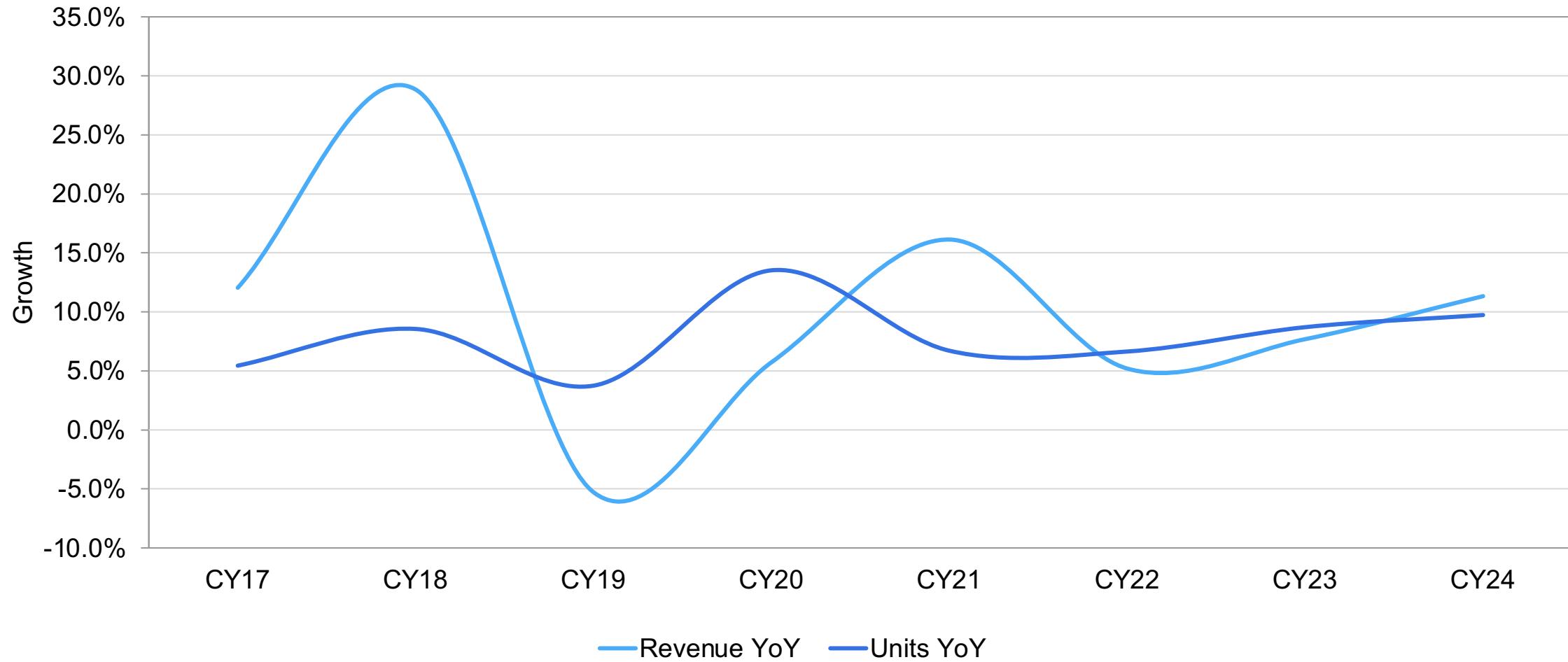
	 Green Lake	 AWS outpost
Formfactor choices	✓	
Price		✓
Ease of deployment	✓	✓
Integration with existing IT environment	✓	
Integration with public cloud		✓
Optimized for maximum VMs per server		✓

# Server Market Roadmap



# Appendix

# Comparison between server revenue and unit growth



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# Server Market Segment Definitions

**Hyperscale CSP**  
Server unit growth CAGR: 9%



**Tier 2 CSP**  
Server unit growth CAGR: 10%



**Telco**  
Server unit growth CAGR: 14%



**Enterprise**  
Server unit growth CAGR: 3%



Market segment description	Companies that fall in the segment
<p>Provide IT and communications services over 3rd party networks.</p> <p>Operate data centers totaling to &gt;3 million square feet.</p>	
<p>Provide IT and communications services over 3rd party networks.</p> <p>Operate data centers totaling to &lt;3 million square feet.</p>	
<p>Traditional telecommunication network providers including MSOs and mobile carriers. <b>Typically own the last mile.</b></p>	
<p>Provides products and services to target markets such as healthcare, education, transportation, manufacturing, hospitality, defense, retail, etc. Includes government.</p>	

# Appendix

## Methodology

Omdia starts from server unit shipment information supplied by vendors as well as end user survey data, and Omdia develops bottom-up actuals for server (rack, blade, open compute, tower, HCI, and edge server) unit shipments by region. Omdia then forecasts total server annual unit shipments by region, using expected server and worldwide compute growth rates, historical growth rates, and end-user DC compute survey data as a guide; short-term guidance provided by vendors is also used.

Revenue forecasts are derived by forecasting average revenue per unit on a regional basis and per segment basis and multiplying unit forecasts by revenue per unit forecasts. Generally, Omdia expects average revenue per unit to stay fairly steady as the usual per unit declines are offset by a transition to higher compute power (and more expensive) units.

## Further reading

- [Data Center Storage Equipment Market Tracker – 3Q20 Analysis](#) (December 2020)
- [Data Center Network Equipment Market Tracker – 3Q20 Analysis](#) (December 2020)
- [IoT Devices Market Tracker – 2Q20 Data](#) (December 2020)
- [NFV Technology Forecast](#) (December 2020)
- [Cloud Service Strategies and Leadership North American Enterprise Survey – 2019](#) (January 2020)

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# Appendix

## Omdia Consulting

We hope that this analysis will help you make informed and imaginative business decisions. If you have further requirements, Omdia's consulting team may be able to help you. For more information about Omdia's consulting capabilities, please contact us directly at [consulting@omdia.com](mailto:consulting@omdia.com).

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