

*The world's most scalable programmable switch family – 1 Tbps through 25.6 Tbps featuring industry-leading analytics, largest on-chip buffer and lowest-latency*

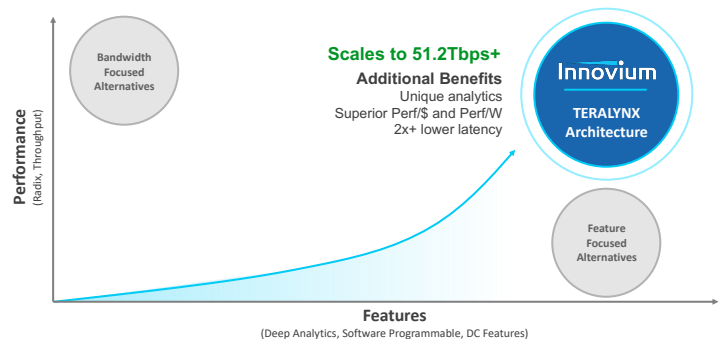
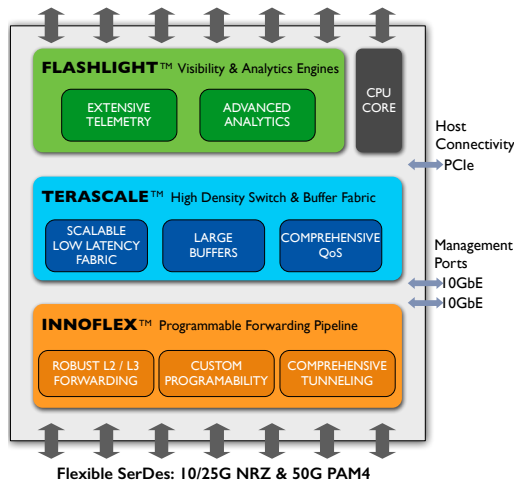
#### OVERVIEW

Data centers are set to dominate IT infrastructure across Cloud, Edge and Enterprise. In addition to an unlimited thirst for bandwidth, critical data center requirements include deeper, actionable analytics, programmability for fast feature introduction & investment protection, best power efficiency, low latency and flexibility. These factors demand a fresh, innovative and focused approach to architecting highly scalable, high performance networking silicon.

Innovium is the only provider offering robust PAM4 networking solutions with a consistent feature set for 1 to 25.6Tbps products today with architecture scaling to 51.2Tbps+. Innovium's TERALYNX family delivers low latency, advanced telemetry, rich tunneling and programmability to enable unmatched visibility while easily adapting to new network protocols. Innovium's TERALYNX 5, TERALYNX 7 and TERALYNX 8 family provide a comprehensive switch portfolio for ToR and upper network tiers of cloud and edge data centers. The TERALYNX family supports FLASHLIGHT™, Innovium's unmatched telemetry with the ability to pinpoint any network delays, drops, or congestion and correlate network events to the application level, all in hardware with zero impact to performance. Modern software for TERALYNX family, designed from the ground up, has been hardened to be production grade so customers can deploy these switches with confidence.

#### KEY FEATURES

- Comprehensive IP forwarding and highly scalable/flexible layer 2 and 3 tables for IPv4, IPv6 and hybrid networks
- Line-rate programmability to accommodate future networking protocols with software upgrades
- Extensive tunneling capabilities such as IP-in-IP, GRE, MPLS, VXLAN and Geneve
- Very low latencies - cut-through and store-and-forward
- Advanced QoS/traffic management feature set such as DCB, RDMA/RoCE and QCN
- FLASHLIGHT™ delivers breakthrough visibility and telemetry, including support for P4 In-band Network Telemetry (INT) along with critical extensions



#### KEY BENEFITS

- Industry leading performance and scale enables customers to deploy fewer network switches and tiers dramatically reducing cost, power, latency & management
- 10/25/50/100G SerDes lowers cost/bit and enables higher scale IO such as 200GbE & 400GbE with backward compatibility
- Breakthrough visibility and analytics capabilities enable predictive, faster & more accurate issue resolution, higher automation and self-healing autonomous networks
- Superior power efficient switch drives overall data center efficiency and better TCO
- InnoFlex™ programmable forwarding pipeline enables support of custom & new standard protocols without

### TERALYNX 5



Up to 6.4T  
For Edge & ToR

### TERALYNX 7



Up to 12.8T  
For all DC tiers

### TERALYNX 8



Up to 25.6T  
For all DC Tiers

#### TERALYNX 5 Highlights

##### 1.2T – 6.4Tbps NRZ & PAM4

- Up to 128 10/25/50G LR SerDes
- Up to 128 ports

##### Popular Switch Configurations

- 32 x 100G
- 48 x 25G + 8 x 100G
- 48 x 100G + 4 x 400G

#### TERALYNX 7 Highlights

##### Upto 12.8Tbps NRZ & PAM4

- Up to 256 10/25/50 LR SerDes
- Up to 168 ports

##### Popular Switch Configurations

- 32 x 400G
- 64 x 200G
- 128 x 100G

#### TERALYNX 8 Highlights

##### 8 – 25.6.Tbps NRZ & PAM4

- Up to 256 10/25/50/100G LR SerDes
- Up to 256 ports

##### Popular Switch Configurations

- 32 x 800G
- 64 x 400G
- 128 x 200G

### Popular Switch System Designs



48xSFP28 + 8xQSFP28



32xQSFP-DD



1RU, 32 x 800G  
(QSFP-DD800 or 800G-OSFP)



32xQSFP28



128xQSFP28



2RU, 64 x 400G  
(QSFP-DD or OSFP)



48xSFP-DD + 4xQSFP-DD



4RU, 128 x 200G  
(QSFP-56)

### Software Support

- High performance and highly resilient, modern software with a clean-sheet design
- Common software development kit (SDK) across entire product line helps customers develop NOS stack quickly & easily
- Support for open APIs, including OCP SAI and SONiC

**About Us:** Innovium is a leading provider of high performance, innovative switching silicon solutions for cloud, enterprise and edge data centers. Today, Innovium TERALYNX family delivers software compatible products ranging from 1Tbps to 12.8Tbps with unmatched telemetry, low latency, programmability, and large buffers, with a feature rich architecture that scales to 51.2Tbps+. Innovium's products have been selected and validated by market-leading switch OEM, ODM and cloud providers. The company is headquartered in Silicon Valley, California and is backed by leading venture capital firms including Greylock Partners, Walden Riverwood, Capricorn Investment Group, Qualcomm Ventures, S-Cubed Capital and Redline Capital.

# Innovium

[www.innovium.com](http://www.innovium.com)

**Contact:** 6001 America Center Drive, Suite 200, San Jose, CA 95002 • Tel: 408-385-7733 • Email: [marketing@innovium.com](mailto:marketing@innovium.com)

Copyright © 2020. Innovium, Inc. All right reserved.

Innovium, TERALYNX, FLASHLIGHT, TERASCALE, and INNOFLEX are the trademarks of Innovium, Inc. All other trademarks are property of their respective owners.