flex.



Flex Cloud Server Platforms

We design and build technologies to support high volume deployments of cloud infrastructure. Our global scale and a comprehensive scope help you seamlessly expand your data center capacity and footprint.

Our advantage

- Industry-leading experience delivering fully-integrated and tested compute, storage and infrastructure solutions
- Global sourcing and supply chain expertise
- Best-in-class manufacturing of data center products
- Worldwide distribution, service, repair and reverse logistics
- Global scale that offers unparalleled capacity
- Engineering expertise that delivers high quality, high performance custom technology solutions

Custom solutions

When you work with us, you will have a partner that understands the complexities of your industry and knows how to apply cloud and data center solutions to address them. Your business needs, budget and time-to-market requirements are the guiding principles for our custom solutions. When your needs change, we'll adapt with you. If you require a high-quality, high-performance system with faster time to market, we offer rack-level compute and storage solutions and can customize systems to suit your needs.

Massive scope

We help customers take their ideas from Sketch-to-Scale® while simplifying their supply base. Our scope includes custom design and integration, manufacturing and global logistics. Additionally, we offer warranty service, repair and even tax and trade consultation.

We'll collaborate with you to design custom compute and storage systems that meet your needs and support specific workloads. We work with you to fully understand your business and applications so that we can deliver the best system performance, cost and time-to-market.

Global scale & supply chain

We have the global scale and physical infrastructure to help you grow your global data capacity and footprint. Unexpected events and competition can slow the regional growth of your data centers. Expansion demands can spike suddenly. A flexible cloud supply chain keeps you ready for anything. Our manufacturing and deployment presence around the world ensures that your supply chain is agile, scalable and reliable.

How to use this guide

This guide features cloud server platforms that can be customized to meet your needs, then deployed in any network. Our portfolio of platforms consists of compute and storage solutions in a variety of configurations.

We design and manufacture fully-tested, custom, turn-key systems that meet your technical and business needs. With multiple preconfigured cloud server platforms and hundreds of variants, these technology solutions are customized for specific work flows.

Reference Platforms Examples



Cloud Server Platforms

	1U Dual Processor S5152N	1U Dual Processor Edge \$5152\$	1U Single Processor S6112	1U Dual Node H6112 (per sled)
Form Factor	1U	10	10	10
Processor	Dual Intel Xeon Skylake - SP	Dual Intel Xeon Skylake - SP	AMD EPYC Naples	AMD EPYC (Rome Ready)
Memory	16x DDR4 Slots	16x DDR4 Slots	16x DDR4 Slots	8x DDR4 Slots
Storage	10x 2.5″ Hot-Swap	10x 2.5″	10 x 2.5" , 1 M.2	2x 2.5″Hot Swap
Storage Controller	U.2 NVMe & 12Gb/s SATA	U.2 NVMe & SATA	2 SATA / NVMe M.2	2 SATA / NVMe M.2
Network	2 x 1GbE	2-Port 10GbE Mezzanine	2x 1GbE 1x Dedicated Management Port	1x 1GbE
Expansion	2 PCI-E 3.0 x 16 OCP 2.0 Mezzanine	2 PCI-E 3.0 x 16 OCP 2.0 Mezzanine	2 PCI x 8 Low Profile Slots 1x OCP Gen3 x 16 Mezzanine	1PCIe x 16HHHL 1 OCP 2.0 Mezzanine
Power	(1 + 1) 800W RPSU	(1 + 1) 800W RPSU	(1 + 1) 750W RPSU	(1 + 1) 800W RPSU
	2U Quad Node	2U All Flash Array	2 OU JBOD	
	H6212 (per sled)	5224DN	CT0245J	
Form Factor	2U	20	2U OU (Open R	lack)

	Horne (per sied)	VELTOIL	OT CE TO CE
Form Factor	20	2U	2U OU (Open Rack)
Processor	AMD EPYC (Rome Ready)	Dual Intel Skylake - SP Processors / Controller	Expander Module (3) 12Gb SAS Based Modules
Memory	8x DDR4 Slots	16x DDR4 RDIMM / LRDIMM Up to 2666MT/s per Controller	External Ports (2) Mini-SAS HD per Expander Module
Storage	6x 2.5″ Hot-Swap	24x Hot-Swap 2.5″ Dual-Ported NVMe U.2	Storage (45) 3.5" and 2.5" SAS/SATA Hot-Pluggable in Three Sleds with 15 Drives/Sled
Storage Controller	2 SATA/NVMe M.2	(2) Controllers in Active-Active Config PCle 3.0 x16 non-transparent bridge (NTB) for inter-controller communication	Mid-Plane Drive mid-planes in each sled connected to dedicated expander module
Network	1 x 1GbE	4x 10GbE Ports 1x 1GbE Management Port	Fan (6) Single or Dual Rotor 60mm hot-swappable
Expansion	1 PCI x16HHHL 1 OCP 2.0 Mezzanine	2x PCIe 3.0 x16 (FHHL) or 3x PCIe 3.0 x16 (HHHL) or 3x PCIe 3.0 x16 / x8 (HHHL) and 1x PCIe 3.0 x8 Mezzanine Slot per Node	Manageability Via SES-2
Power	(1+1) 2000W RPSU	Suports 1+1 Redundant Configurations 2000W 80+ Titanium, BBU Optional	Power Single 12V DC Bus-Bar Connection

In addition to our cloud server platforms, we are leading advancements in new data center standards as a founding member of the Open19[™] consortium and as a Platinum partner of the Open Compute Project (OCP). We aim to address the increasing demands for flexible cloud infrastructure while reducing complexity and costs.

For more information, please visit flex.com or follow us on Twitter @flexintl

Flex is the Sketch-to-Scale® solutions provider that designs and builds Intelligent Products for a Connected World®. With approximately 200,000 professionals across 30 countries, Flex provides innovative design, engineering, manufacturing, real-time supply chain insight and logistics services to companies of all sizes in various industries and end-markets. Flex – Live Smarter[™].

Copyright © 2019, Flex. All rights reserved. No part of this document may be reproduced in any form without the prior written permission of Flex.