Verified System Library Overview

Accelerate AI and the Visual Cloud with Intel® Data Center GPU Flex Series

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GPU
FLEX SERIES

The Intel Data Center GPU Ready System verification process is designed to support faster, optimized deployment of the Intel Flex Series GPUs across the data center from our broad range of service providers.

Verification Process for Intel® Data Center GPU Ready Systems

The Intel Data Center GPU Ready System verification process is conducted by our service providers. Intel provides a suite of tools and tests to be run by the provider. The test suite includes automated stress and functional tests based on system configurations, giving the provider pass or fail results at the end. Once the provider's system has met the specific criteria specified and the results have been verified by Intel, the server can be listed as GPU Ready* for Intel Flex Series. GPU Ready systems from service providers, such as Dell, Lenovo, Nettrix, Powerleader, Supermicro and others are now available on Intel Flex Series.

Intel Data Center GPU Ready System Verification Test Suite
▶ One-stop shop for GPU hardware functional tests , including installs for the required tests
▶ Product-specific and configuration- specific GPU stress for each test
▶ Confirm pass/fail on each test
▶ Log collections for Intel review

Sample Tests for the Intel® Data Center GPU Ready System Verification Process

Verification Test	Purpose
Test Wrapper	Single interface for running tests and providing snapshot of system configuration to trigger all tests and gather system information.
Power Delivery and Management	Ensures the platform supports required power (peak and average) by stressing the platform and calculating total platform power consumption
High-Speed IO Margining and Bandwidth	Ensures the end-to-end channel of the PCIe interface has adequate eye height (EH) and eye width (EW) margin.
Mechanical Fit Test	Ensures the card can physically fit into the system without interference and is adequately supported to prevent damage from mechanical shock and vibration.
Thermal Test	Ensures the platform cooling solution meets thermal specifications by testing the system with the GPU inside a heat chamber.
Reset Test	Ensures the platform reliably functions after a varying series of scripted resets and checks the link status and GPU functionality after each OS boot or device level reset.
System Management	Makes sure that the system meets minimum Intel expectation and platform system management capabilities.
Platform Health Check	Verifies system's health by running diagnostic tests and running a PCIe* link width and speed check along with a base address register (BAR) check.

Intel® Data Center GPU Ready OEM Systems and Configurations

OEM System	Intel Flex Series GPU	Intel Platform	# of Cards	# of CPUs	Node Size
ASRock 4U8G-ICX2/2T-INTEL	Intel® Data Center GPU Flex 170	3rd Gen Intel Xeon	8	2	4U
ASRock 4U8G-ICX2/2T-INTEL	Intel® Data Center GPU Flex 140	3rd Gen Intel Xeon	8	2	4U
Cisco UCS X210c M7 + X440p	Intel® Data Center GPU Flex 170	4th Gen Intel Xeon	2	2	Blade
Cisco UCS X210c M7 + X10c + X440p	Intel® Data Center GPU Flex 140	4th Gen Intel Xeon	6	2	Blade
Cisco UCS C220 M7 (1U) with Gen 4 Riser	Intel® Data Center GPU Flex 140	4th Gen Intel Xeon	3	2	1U
Cisco UCS C220 M7 (1U) with Gen 5 Riser	Intel® Data Center GPU Flex 140	4th Gen Intel Xeon	2	2	1U
Cisco UCS C220 M7 (1U) with Gen 5 Riser	Intel® Data Center GPU Flex 140	4th Gen Intel Xeon	3	2	1U
Cisco UCS C240 M7 (2U) with Gen 4 Riser	Intel® Data Center GPU Flex 140	4th Gen Intel Xeon	5	2	2U
Cisco UCS C240 M7 (2U) with Gen 4 Riser	Intel® Data Center GPU Flex 170	4th Gen Intel Xeon	3	2	2U
Cisco UCS C240 M7 (2U) with Gen 5 Riser	Intel® Data Center GPU Flex 140	4th Gen Intel Xeon	5	2	2U
Cisco UCS C240 M7 (2U) with Gen 5 Riser	Intel® Data Center GPU Flex 170	4th Gen Intel Xeon	3	2	2U
Cisco UCS X410c M7 + X440p	Intel® Data Center GPU Flex 140	4th Gen Intel Xeon	4	4	Blade
Cisco UCS X410c M7 + X440p	Intel® Data Center GPU Flex 170	4th Gen Intel Xeon	2	4	Blade
Cisco UCS X210c M7 + X440p	Intel® Data Center GPU Flex 170	5th Gen Intel Xeon	2	2	Blade
Cisco UCS X210c M7 + X10c + X440p	Intel® Data Center GPU Flex 140	5th Gen Intel Xeon	6	2	Blade
Cisco UCS C220 M7 (1U) with Gen 4 Riser	Intel® Data Center GPU Flex 140	5th Gen Intel Xeon	3	2	1U
Cisco UCS C220 M7 (1U) with Gen 5 Riser	Intel® Data Center GPU Flex 140	5th Gen Intel Xeon	2	2	1U
Cisco UCS C220 M7 (1U) with Gen 5 Riser	Intel® Data Center GPU Flex 140	5th Gen Intel Xeon	3	2	1U
Cisco UCS C240 M7 (2U) with Gen 4 Riser	Intel® Data Center GPU Flex 170	5th Gen Intel Xeon	3	2	2U
Cisco UCS C240 M7 (2U) with Gen 4 Riser	Intel® Data Center GPU Flex 140	5th Gen Intel Xeon	5	2	2U
Cisco UCS C240 M7 (2U) with Gen 5 Riser	Intel® Data Center GPU Flex 170	5th Gen Intel Xeon	3	2	2U
Cisco UCS C240 M7 (2U) with Gen 5 Riser	Intel® Data Center GPU Flex 140	5th Gen Intel Xeon	5	2	2U
Dell PowerEdge XR12 Rack Server	Intel® Data Center GPU Flex 140	3rd Gen Intel Xeon	2	1	2U
Dell PowerEdge R750 Rack Server Config 2-2	Intel® Data Center GPU Flex 140	3rd Gen Intel Xeon	6	2	2U
Dell PowerEdge R750 Rack Server Config 1	Intel® Data Center GPU Flex 140	3rd Gen Intel Xeon	6	2	2U
Dell PowerEdge R750 Rack Server	Intel® Data Center GPU Flex 170	3rd Gen Intel Xeon	4	2	2U
Dell PowerEdge R760 Rack Server	Intel® Data Center GPU Flex 170	4th Gen Intel Xeon	2	2	2U
H3C UniServer R4900 G5	Intel® Data Center GPU Flex 170	3rd Gen Intel Xeon	4	2	2U
H3C UniServer R4900 G6	Intel® Data Center GPU Flex 170	4th Gen Intel Xeon	4	2	2U
H3C UniServer R4900 G6	Intel® Data Center GPU Flex 140	4th Gen Intel Xeon	7	2	2U
IEI NF5468M6	Intel® Data Center GPU Flex 170	3rd Gen Intel Xeon	16	2	4U
IEI NF5280M6	Intel® Data Center GPU Flex 140	3rd Gen Intel Xeon	4	2	2U
IEI NF5280M6	Intel® Data Center GPU Flex 170	3rd Gen Intel Xeon	4	2	2U

Intel® Data Center GPU Ready OEM Systems and Configurations

OEM System	Intel Flex Series GPU	Intel Platform	# of Cards	# of CPUs	Node Size
Jabil J311-S	Intel® Data Center GPU Flex 140	4th Gen Intel Xeon	2	1	1U
Jabil J312-S	Intel® Data Center GPU Flex 140	4th Gen Intel Xeon	2	2	1U
Jabil J322-S	Intel® Data Center GPU Flex 170	4th Gen Intel Xeon	4	2	2U
Kunqian KI2208-MK4	Intel® Data Center GPU Flex 170	3rd Gen Intel Xeon	2	2	2U
Lenovo ThinkSystem SR660 V2 Server	Intel® Data Center GPU Flex 140	3rd Gen Intel Xeon	4	2	2U
Lenovo ThinkSystem SR660 V2 Server	Intel® Data Center GPU Flex 170	3rd Gen Intel Xeon	4	2	2U
Lenovo ThinkSystem SR660 V2 Server	Intel® Data Center GPU Flex 170	3rd Gen Intel Xeon	4	2	2U
Lenovo ThinkSystem HR650X V2 Server	Intel® Data Center GPU Flex 170	3rd Gen Intel Xeon	4	2	2U
Lenovo ThinkSystem SR650 V2 Rack Server	Intel® Data Center GPU Flex 140	3rd Gen Intel Xeon	7	2	2U
Lenovo ThinkEdge SE450 Edge Server	Intel® Data Center GPU Flex 170	4th Gen Intel Xeon	1	1	2U
Lenovo ThinkSystem SD550 V3 Server	Intel® Data Center GPU Flex 140	4th Gen Intel Xeon	1	1	1U
Lenovo WenTian WR5220 G3	Intel® Data Center GPU Flex 140	4th Gen Intel Xeon	8	2	2U
Lenovo WenTian WR5220 G3	Intel® Data Center GPU Flex 170	4th Gen Intel Xeon	6	2	2U
Nettrix X620 G40	Intel® Data Center GPU Flex 140	3rd Gen Intel Xeon	4	2	2U
Nettrix X620 G40	Intel® Data Center GPU Flex 170	3rd Gen Intel Xeon	4	2	2U
Nettrix X640 G40	Intel® Data Center GPU Flex 140	3rd Gen Intel Xeon	8	2	4U
Nettrix X640 G40	Intel® Data Center GPU Flex 170	3rd Gen Intel Xeon	8	2	4U
Powerleader PR2012W	Intel® Data Center GPU Flex 140	3rd Gen Intel Xeon	2	2	2U
Powerleader PR2715W3	Intel® Data Center GPU Flex 140	3rd Gen Intel Xeon	4	2	2U
Powerleader PR2715W3	Intel® Data Center GPU Flex 170	3rd Gen Intel Xeon	2	2	2U
xFusion FusionServer 2288H V6	Intel® Data Center GPU Flex 170	3rd Gen Intel Xeon	4	2	2U
xFusion FusionServer 2288H V7	Intel® Data Center GPU Flex 170	4th Gen Intel Xeon	4	2	2U
xFusion FusionServer 2288H V7	Intel® Data Center GPU Flex 140	4th Gen Intel Xeon	6	2	2U

Contact your account representative to learn more about the Intel Data Center GPU Ready System verification program and available GPU Ready systems for Intel Flex Series.