P920 AND P720 POWER CONFIGURATOR

Contents

Overview

The ThinkStation P920 and P720 platforms are built using a similar system power design that was originally introduced in the predecessor P-series platforms. There are some unique changes to the P920 and P720 power design that make support for various components within the systems easier for the end user. The purpose of this document is to outline the overall power design for the ThinkStation P920 and P720 platforms and set forth the supported hardware configurations associated with each.

Section 1 – Key Architectural Changes

While the overall power design of the P720 platform is similar to its predecessors, there are some important changes that should be noted when configuring the P720 power. In the P700 and P710 series, the power supply had two methods to deliver power to the components within the system:
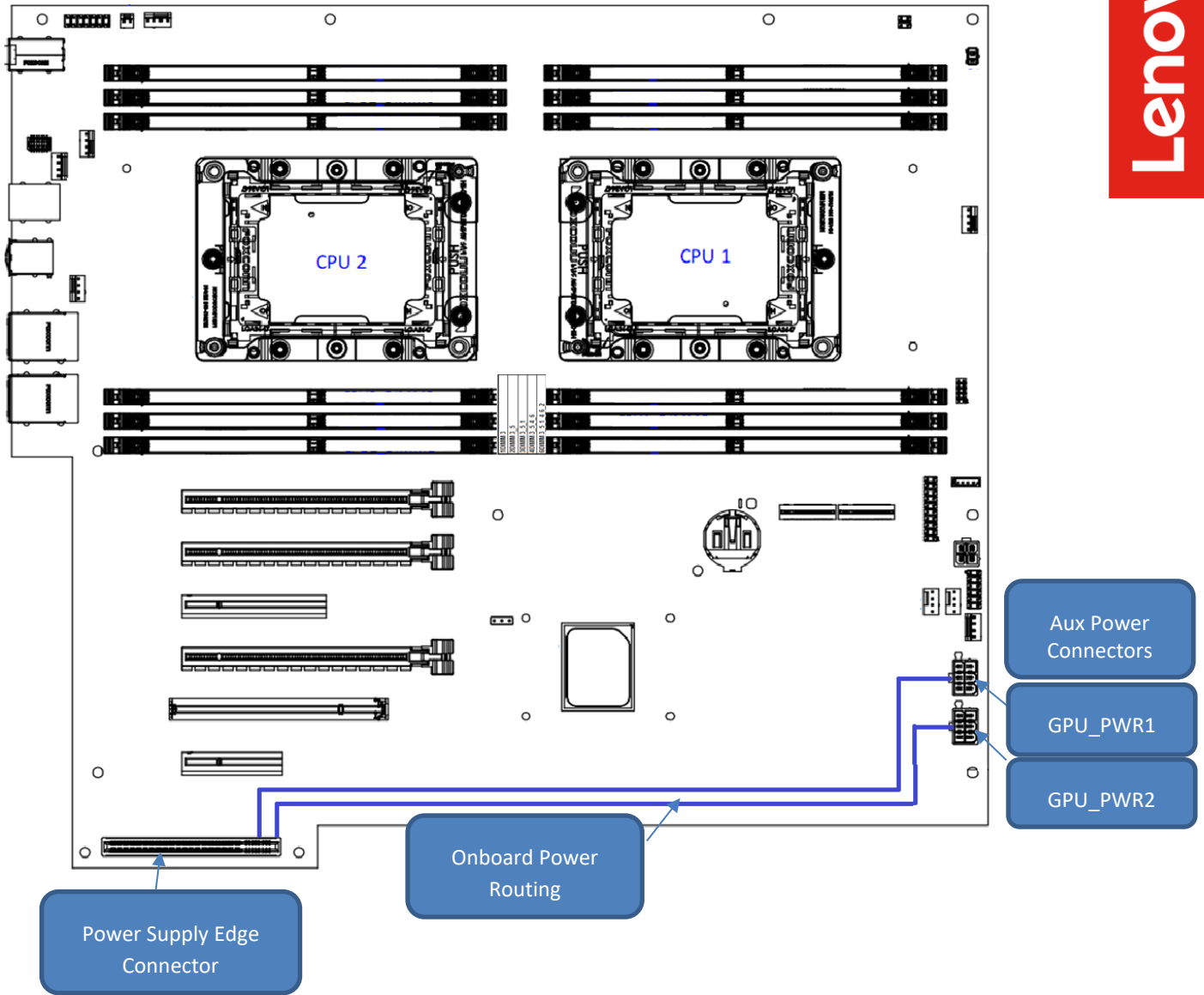
- A printed circuit board (PCB) "edge" style connector that provided power to the motherboard
- A cable connection that allowed for power to be distributed to add in cards, such as auxiliary power for GPUs.

With the P720, all power is now delivered to the system in a single connection via the PCB edge connector. Instead of using a separate cable connection for auxiliary powered devices, power for those devices is now cabled directly off the motherboard.

This becomes particularly advantageous when considering the upgradability of the P720 power supply. For previous P7XX platforms, upgrading the power supply to one with higher wattage also meant upgrading the auxiliary power cabling associated with that supply. This was a bit of a daunting task as the auxiliary cabling was routed underneath the motherboard requiring technicians to disassemble a large portion of the system to fully upgrade the power supply and cabling. With this new design, upgrading a power supply is as simple as installing the new power supply unit, and attaching any auxiliary power cable updates directly to the top of the motherboard. No system disassembly/reassembly is necessary. Figure 1 below shows the basis of this new design.

The P920 platform very closely follows the power delivery design of its predecessors with the main difference being a higher capacity (wattage) power supply.

Figure 1 - P720 Power Design

CPU 2

CPU 1

Aux Power Connectors

GPU_PWR1

GPU_PWR2

Onboard Power Routing

Power Supply Edge Connector

Section 2 – Power Ratings for Key System Components

To fully understand the power capabilities of the ThinkStation P920 and P720 platforms, it's important to understand the defined power ratings for the various internal components used within the system. Figure 2 below describes the power ratings for the various CPUs supported on the P920 and P720.

Figure 2 - CPU Power Ratings

SKYLAKE

CPU Name (Xeon Processor Scalable)	CPU Power	Additional CPU Information
Platinum 8180	205W	2.5GHz, 28 cores, DDR4-2666, Turbo, Hyper-threading
Platinum 8180M	205W	2.5GHz, 28 cores, DDR4-2666, Turbo, Hyper-threading
Platinum 8176	165W	2.1GHz, 28 cores, DDR4-2666, Turbo, Hyper-threading
Platinum 8176M	165W	2.1GHz, 28 cores, DDR4-2666, Turbo, Hyper-threading
Platinum 8170	165W	2.1GHz, 26 cores, DDR4-2666, Turbo, Hyper-threading
Platinum 8170M	165W	2.1GHz, 26 cores, DDR4-2666, Turbo, Hyper-threading
Platinum 8168	205W	2.7GHz, 24 cores, DDR4-2666, Turbo, Hyper-threading
Platinum 8164	150W	2.0GHz, 26 cores, DDR4-2666, Turbo, Hyper-threading
Platinum 8160	150W	2.1GHz, 24 cores, DDR4-2666, Turbo, Hyper-threading
Platinum 8160M	150W	2.1GHz, 24 cores, DDR4-2666, Turbo, Hyper-threading
Platinum 8160T	150W	2.1GHz, 24 cores, DDR4-2666, Turbo, Hyper-threading
Platinum 8158	150W	3.0GHz, 12 cores, DDR4-2666, Turbo, Hyper-threading
Platinum 8156	105W	3.6GHz, 4 cores, DDR4-2666, Turbo, Hyper-threading
Platinum 8153	125W	2.0GHz, 16 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6154	200W	3.0GHz, 18 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6152	140W	2.1GHz, 22 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6150	165W	2.7GHz, 18 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6148	150W	2.0GHz, 20 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6146	165W	3.2GHz, 12 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6144	150W	3.5GHz, 8 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6142	150W	2.6GHz, 16 cores, DDR4-2666, Turbo, Hyper-threading

Gold 6142M	150W	2.6GHz, 16 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6140	140W	2.3GHz, 18 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6140M	140W	2.3GHz, 18 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6138	125W	2.0GHz, 20 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6138T	125W	2.0GHz, 20 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6136	150W	3.0GHz, 12 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6134	130W	3.2GHz, 8 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6134M	130W	3.2GHz, 8 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6132	140W	2.6GHz, 14 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6130	125W	2.1GHz, 16 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6130T	125W	2.1GHz, 16 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6128	115W	3.4GHz, 6 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6126	125W	2.6GHz, 12 cores, DDR4-2666, Turbo, Hyper-threading
Gold 6126T	125W	2.6GHz, 12 cores, DDR4-2666, Turbo, Hyper-threading
Gold 5122	105W	3.6GHz, 4 cores, DDR4-2666, Turbo, Hyper-threading
Gold 5120	105W	2.2GHz, 14 cores, DDR4-2400, Turbo, Hyper-threading
Gold 5120T	105W	2.2GHz, 14 cores, DDR4-2400, Turbo, Hyper-threading
Gold 5119T	85W	3.5GHz, 8 cores, DDR4-2400, Turbo, Hyper-threading
Gold 5118	105W	2.3GHz, 12 cores, DDR4-2400, Turbo, Hyper-threading
Gold 5115	85W	2.4GHz, 10 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4116	85W	2.1GHz, 12 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4116T	85W	2.1GHz, 12 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4114	85W	2.2GHz, 10 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4114T	85W	2.2GHz, 10 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4112	85W	2.6GHz, 4 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4110	85W	2.1GHz, 8 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4109T	70W	2.0GHz, 8 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4108	85W	1.8GHz, 8 cores, DDR4-2400, Turbo, Hyper-threading
Bronze 3106	85W	1.7GHz, 8 cores, DDR4-2133
Bronze 3104	85W	1.7GHz, 6 cores, DDR4-2133

Cascade Lake

CPU Name (Xeon Processor Scalable)	CPU Power	Additional CPU Information
Platinum 8280	205W	2.7GHz, 28 cores, DDR4-2933, Turbo, Hyper-threading
Platinum 8280L	205W	2.7GHz, 28 cores, DDR4-2933, Turbo, Hyper-threading
Platinum 8280M	205W	2.7GHz, 28 cores, DDR4-2933, Turbo, Hyper-threading
Platinum 8276	165W	2.2GHz, 28 cores, DDR4-2933, Turbo, Hyper-threading
Platinum 8276L	165W	2.2GHz, 28 cores, DDR4-2933, Turbo, Hyper-threading
Platinum 8276M	165W	2.2GHz, 28 cores, DDR4-2933, Turbo, Hyper-threading
Platinum 8270	205W	2.7GHz, 26 cores, DDR4-2933, Turbo, Hyper-threading
Platinum 8268	205W	2.9GHz, 24 cores, DDR4-2933, Turbo, Hyper-threading
Platinum 8260	165W	2.4GHz, 24 cores, DDR4-2933, Turbo, Hyper-threading
Platinum 8260L	165W	2.4GHz, 24 cores, DDR4-2933, Turbo, Hyper-threading
Platinum 8260M	165W	2.4GHz, 24 cores, DDR4-2933, Turbo, Hyper-threading
Platinum 8260Y	165W	2.4GHz, 24 cores, DDR4-2933, Turbo, Hyper-threading
Platinum 8256	105W	3.8GHz, 4 cores, DDR4-2933, Turbo, Hyper-threading
Platinum 8253	125W	2.2GHz, 16 cores, DDR4-2933, Turbo, Hyper-threading
Gold 6262V	135W	1.9GHz, 24 cores, DDR4-2400
Gold 6254	200W	3.1GHz, 18 cores, DDR4-2933, Turbo, Hyper-threading
Gold 6252	150W	2.1GHz, 24 cores, DDR4-2933, Turbo, Hyper-threading
Gold 6252N	150W	2.3GHz, 24 cores, DDR4-2933
Gold 6248	150W	2.5GHz, 20 cores, DDR4-2933, Turbo, Hyper-threading
Gold 6246	165W	3.3GHz, 12 cores, DDR4-2933
Gold 6244	150W	3.6GHz, 8 cores, DDR4-2933, Turbo, Hyper-threading
Gold 6242	150W	2.8GHz, 16 cores, DDR4-2933, Turbo, Hyper-threading
Gold 6240	150W	2.6GHz, 18 cores, DDR4-2933, Turbo, Hyper-threading
Gold 6240M	150W	2.6GHz, 18 cores, DDR4-2933
Gold 6240Y	150W	2.6GHz, 18 cores, DDR4-2933, Turbo, Hyper-threading
Gold 6238	140W	2.1GHz, 22 cores, DDR4-2933
Gold 6238M	140W	2.1GHz, 22 cores, DDR4-2933
Gold 6238T	125W	1.9GHz, 22 cores, DDR4-2933, Turbo, Hyper-threading
Gold 6234	130W	3.3GHz, 8 cores, DDR4-2933
Gold 6230	125W	2.1GHz, 20 cores, DDR4-2933, Turbo, Hyper-threading

Gold 6230N	125W	2.3GHz, 20 cores, DDR4-2933
Gold 6230T	125W	2.1GHz, 20 cores, DDR4-2933
Gold 6226	125W	2.7GHz, 12 cores, DDR4-2933
Gold 6222V	115W	1.8GHz, 20 cores, DDR4-2400
Gold 6212U	165W	2.4GHz, 24 cores, DDR4-2933
Gold 6210U	150W	2.5GHz, 20 cores, DDR4-2933
Gold 6209U	125W	2.1GHz, 20 cores, DDR4-2933
Gold 5222	105W	3.8GHz, 4 cores, DDR4-2933, Turbo, Hyper-threading
Gold 5220	125W	2.2GHz, 18 cores, DDR4-2666, Turbo, Hyper-threading
Gold 5220S	125W	2.7GHz, 18 cores, DDR4-2666
Gold 5220T	105W	1.9GHz, 18 cores, DDR4-2666
Gold 5218	125W	2.3GHz, 16 cores, DDR4-2666, Turbo, Hyper-threading
Gold 5218B	125W	2.3GHz, 16 cores, DDR4-2666, Turbo, Hyper-threading
Gold 5218N	105W	2.3GHz, 16 cores, DDR4-2666, Turbo, Hyper-threading
Gold 5218T	105W	2.1GHz, 16 cores, DDR4-2666
Gold 5217	115W	3.0GHz, 8 cores, DDR4-2666, Turbo, Hyper-threading
Gold 5215	85W	2.5GHz, 10 cores, DDR4-2666, Turbo, Hyper-threading
Gold 5215L	85W	2.5GHz, 10 cores, DDR4-2666, Turbo, Hyper-threading
Gold 5215M	85W	2.5GHz, 10 cores, DDR4-2666, Turbo, Hyper-threading
Silver 4216	100W	2.1GHz, 16 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4215	85W	2.5GHz, 8 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4214	85W	2.2GHz, 12 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4214R	100W	2.4GHz, 12 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4214Y	85W	2.2GHz, 12 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4210	85W	2.2GHz, 10 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4210R	100W	2.4GHz, 10 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4209T	70W	2.2GHz, 8 cores, DDR4-2400, Turbo, Hyper-threading
Silver 4208	85W	2.1GHz, 8 cores, DDR4-2400, Turbo, Hyper-threading
Bronze 3206R	85W	1.9GHz, 8 cores, DDR4-2133, Turbo, Hyper-threading
Bronze 3204	85W	1.9GHz, 6 cores, DDR4-2133, Turbo, Hyper-threading
W-3275	205W	2.5GHz, 28 cores, DDR4-2933
W-3275M	205W	2.5GHz, 28 cores, DDR4-2933
W-3265	205W	2.7GHz, 24 cores, DDR4-2933

W-3265M	205W	2.7GHz, 24 cores, DDR4-2933
W-3245	205W	3.2GHz, 16 cores, DDR4-2933
W-3245M	205W	3.2GHz, 16 cores, DDR4-2933
W-3235	180W	3.3GHz, 12 cores, DDR4-2933
W-3225	160W	3.7GHz, 8 cores, DDR4-2666
W-3223	160W	3.5GHz, 8 cores, DDR4-2666

Note: Not all CPU SKUs are supported on P720

Note: Some CPUs are only available as certs only. See Technical Solutions Team for usage.

Figure 3 below lists the power ratings for the various add-in cards supported across P920 and P720. Note that not all cards are supported on both platforms.
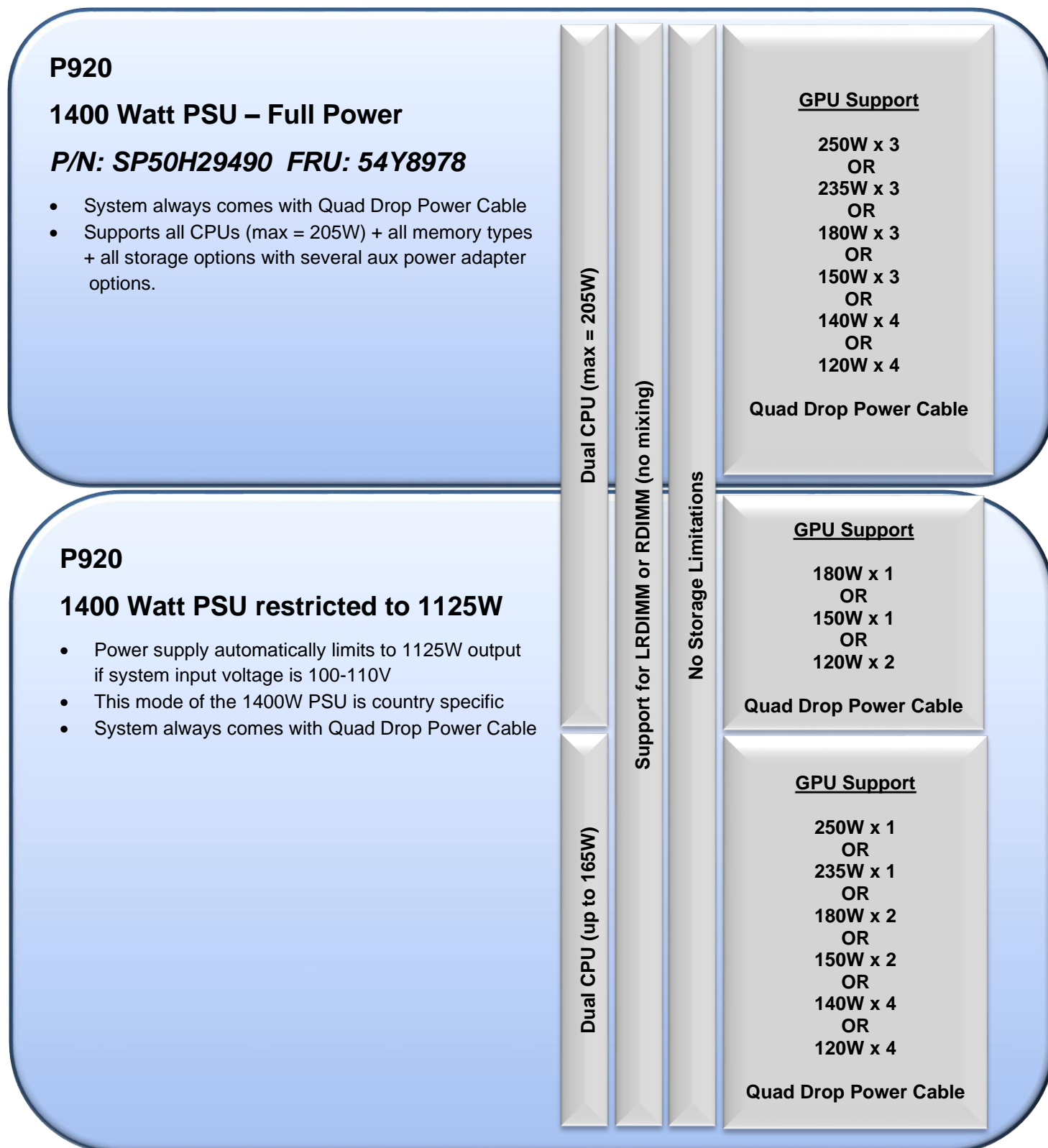
Figure 3 - Add-in Card Power Ratings

Max Power Rating	Card Name	Card Type	Aux Power Connectors Required (if any)
320W	RTX 3080	Graphics Card (2.5 Slot)	8-pin + 8-pin (PCIe)
300W	RTX A6000	Graphics Card (Dual Slot)	8-pin (EPS) to dual 8-pin (PCIe)
	Tesla M60	Physics Card (Dual Slot)	8-pin (EPS) to dual 8-pin (PCIe)
295W	RTX 8000, RTX 6000	Graphics Card (Dual Slot)	8-pin + 6-pin (PCIe)
265W	RTX 5000	Graphics Card (Dual Slot)	8-pin + 6-pin (PCIe)
250W	RTX 2080	Graphics Card (Dual Slot)	8-pin + 6-pin (PCIe)
	RTX 2080 Super	Graphics Card (Triple Slot)	
250W	P6000	Graphics Card (Dual Slot)	8-pin (PCIe)
250W	GV100	Graphics/Compute Card (Dual Slot)	8-pin (PCIe)
235W	GP100	Graphics/Compute Card (Dual Slot)	8-pin (PCIe)
230W	RTX A5000	Graphics Card (Dual slot)	8-pin (PCIe)
215W	RTX 2070 Super	Graphics Card (Triple Slot)	8-pin + 6-pin (PCIe)
210W	RTX 2070	Graphics Card (Dual Slot)	8-pin (PCIe)
180W	P5000, GTX 1080	Graphics Card (Dual Slot)	8-pin (PCIe)
170W	RTX 2060	Graphics Card (Dual Slot)	8-pin (PCIe)
160W	RTX 4000	Graphics Card (Single Slot)	8-pin (PCIe)
150W	GTX 1070	Graphics Card (Dual Slot)	8-pin (PCIe)
140W	RTX A4000	Graphics Card (Single slot)	6-pin (PCIe)
120W	GTX 1060	Graphics Card (Dual Slot)	6-pin (PCIe)
105W	P4000	Graphics Card (Single Slot)	6-pin (PCIe)
75W (or less)	NVS810, NVS510, NVS315, NVS310	Graphics Card (Single Slot)	None
	P2200, P2000, P1000, P600, P400		
	P620		
	T400, T600, T1000		

WX3200	Graphics Card (Single Slot)	None
Broadcom 9460-8i Broadcom 9440-8i	Storage Controller (Single Slot)	None
I210-T1, I350-T2, I350-T4, Bitland BN8E88, 7260 Wifi, X540-T2 X710-DA2, Aquantia 5G,	Networking (Single Slot)	None
Thunderbolt	High Speed Bus (Single Slot)	None

Section 3 – P920 Power Configurations

P920 has a single 1400W power supply which is unique to the platform and cannot be used on other platforms.

P920

1400 Watt PSU – Full Power

P/N: SP50H29490 FRU: 54Y8978

- System always comes with Quad Drop Power Cable
- Supports all CPUs (max = 205W) + all memory types + all storage options with several aux power adapter options.

Dual CPU (max = 205W)

Support for LRDIMM or RDIMM (no mixing)

No Storage Limitations

GPU Support

250W x 3
OR
235W x 3
OR
180W x 3
OR
150W x 3
OR
140W x 4
OR
120W x 4

Quad Drop Power Cable

P920

1400 Watt PSU restricted to 1125W

- Power supply automatically limits to 1125W output if system input voltage is 100-110V
- This mode of the 1400W PSU is country specific
- System always comes with Quad Drop Power Cable

Dual CPU (up to 165W)

GPU Support

180W x 1
OR
150W x 1
OR
120W x 2

Quad Drop Power Cable

GPU Support

250W x 1
OR
235W x 1
OR
180W x 2
OR
150W x 2
OR
140W x 4
OR
120W x 4

Quad Drop Power Cable

P920

1400 Watt PSU – Full Power

[PSU-OCP/OVP updated]

P/N: SP50H29608 FRU: 5P50V03187

- System always comes with Quad Drop Power Cable
- Supports all CPUs (max = 205W) + all memory types + all storage options with several aux power adapter options.

Dual CPU (max = 165W)

RDIMMs Only

Onboard Intel – Max 4 HDDs**

GPU Support

295W x 3

**Note: See Section 4 for unique cabling and HDD requirements.

Dual CPU (max = 205W)

Support for LRDIMM or RDIMM

No Storage Limitations

GPU Support

300W (non-M60) x 2
OR
295W x 2
OR
265W x 3
OR
250W x 3
OR
180W x 3
OR
160W x 3
OR
120W x 4
OR
75W x 5

P920

1400 Watt PSU restricted to 1125W

- Power supply automatically limits to 1125W output
  If system input voltage is 100-110V
- This mode of the 1400W PSU is country specific
- System always comes with Quad Drop Power Cable

Dual CPU (max = 150W)

Dual CPU (max = 165W)

Dual CPU (max = 205W)

Support for LRDIMM or RDIMM

No Storage Limitations

GPU Support

**295W x 1
OR
300W x 1**

GPU Support

**265W x 1
OR
180W x 2
OR
160W x 3
OR
120W x 4**

GPU Support

**180W x 1
OR
160W x 1
OR
120W x 2
OR
75W x 5**
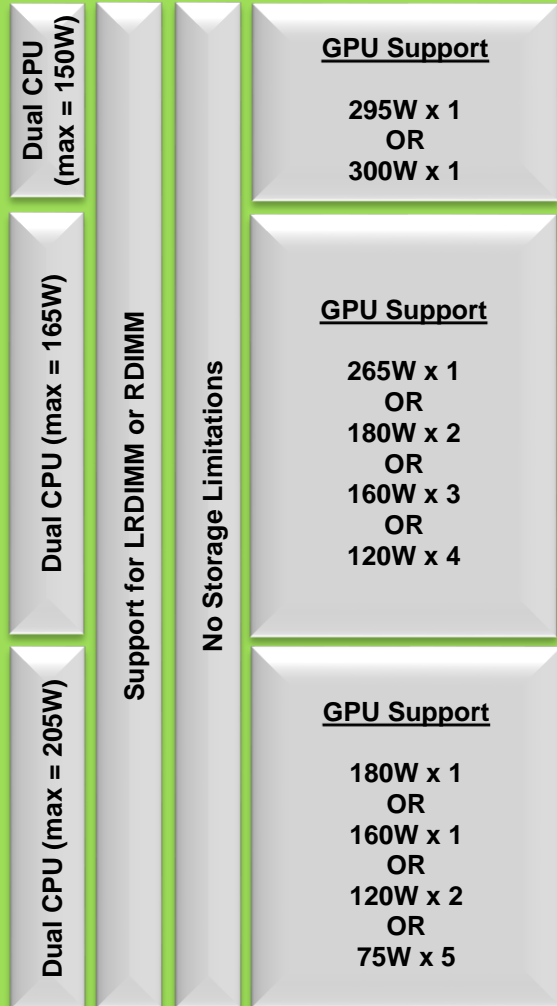
P920 Power Supply Configuration Notes:

- To utilize slots 6, 7, and 8, dual CPUs must be installed.
- There are 3 dedicated 12V rails for auxiliary power (2 intended for the lower PCIe slots, 1 intended for the upper PCIe slots).
- Quad drop power cable consists of four connectors:
    - 6-pin + 8-pin (6+2) for use in the upper PCIe x16 slots
    - Dual 8-pin (6+2) for use in the lower PCIe x16 slots
- 1400W PSU is mechanically unique to the P920 chassis and cannot be used in other platforms.
- PSU will automatically operate in 1125W (restricted) mode if the system line input is 100-110V. For other supported system line input voltages, the PSU will operate at the full 1400W.
- **For configurations that are not listed above but appear to be feasible, please work with the Technical Solutions Team to have the configuration validated/vetted.**
- Officially supported configurations could still be limited by additional factors not defined within this document.
- List of restricted mode (1125W) countries with 100-110V input
    - Anguilla
    - Belize[1]
    - Colombia
    - Cuba[1]
    - Guam
    - Haiti
    - Jamaica
    - Japan
    - Saba
    - Sint Eustatius[1]
    - Sint Maaten
    - Saint Vincent and the Grenadines[2]
    - Taiwan
    - Virgin Islands (British)
   - Virgin Islands (USA

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[1] Officially listed as 110V and 220V

[2] Officially listed as 110V and 230V

Section 4 – P920 with Three 295W GPU's

In order to support up to three 295W GPU's in a P920 system, there are some unique cabling procedures that need to be done to prevent overcurrent situations from occurring. *Note: with this configuration, the system is limited to use of the lower drive bays only - 4x 2.5" or 2x2.5" + 2x 3.5" drives are supported.*
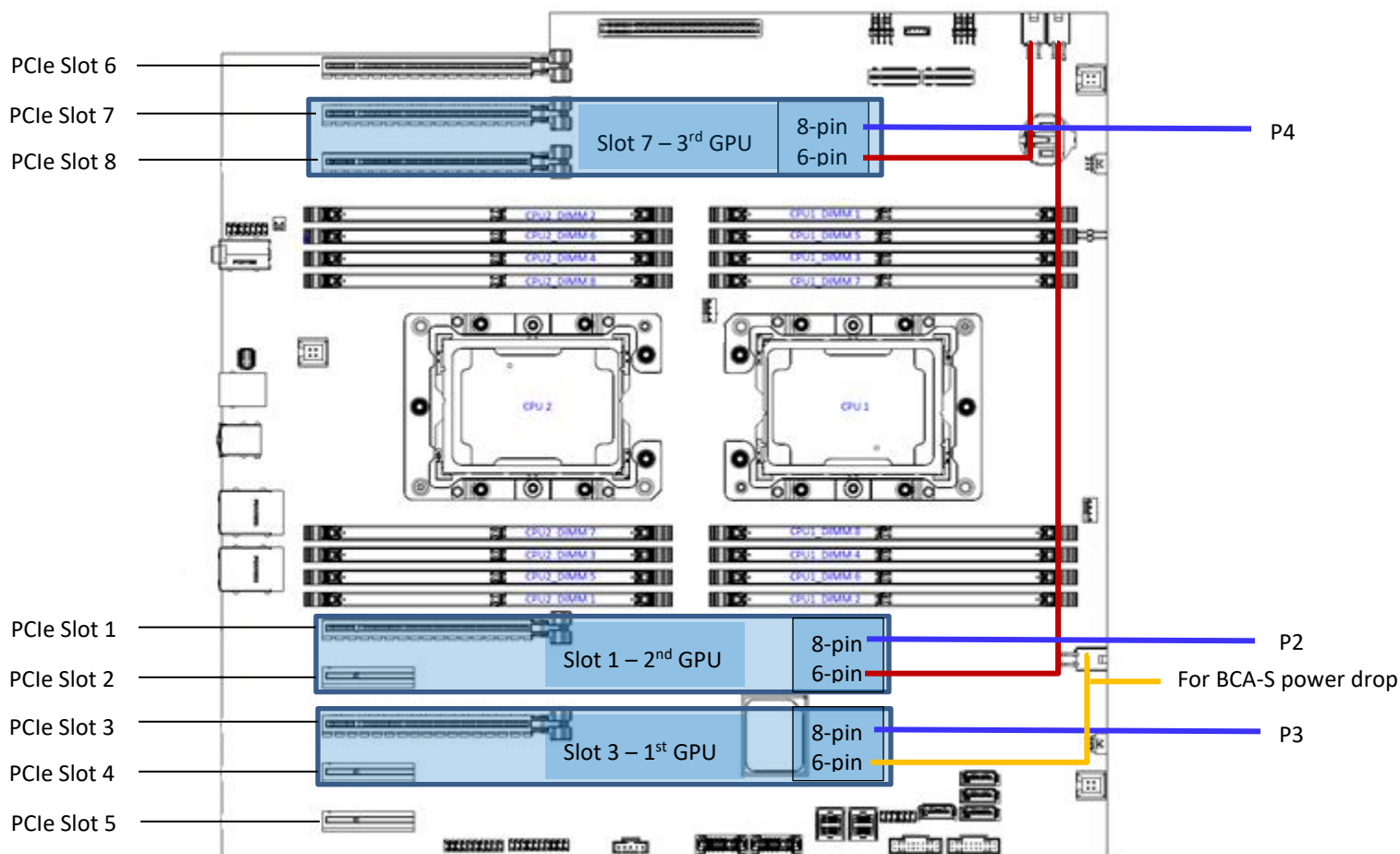
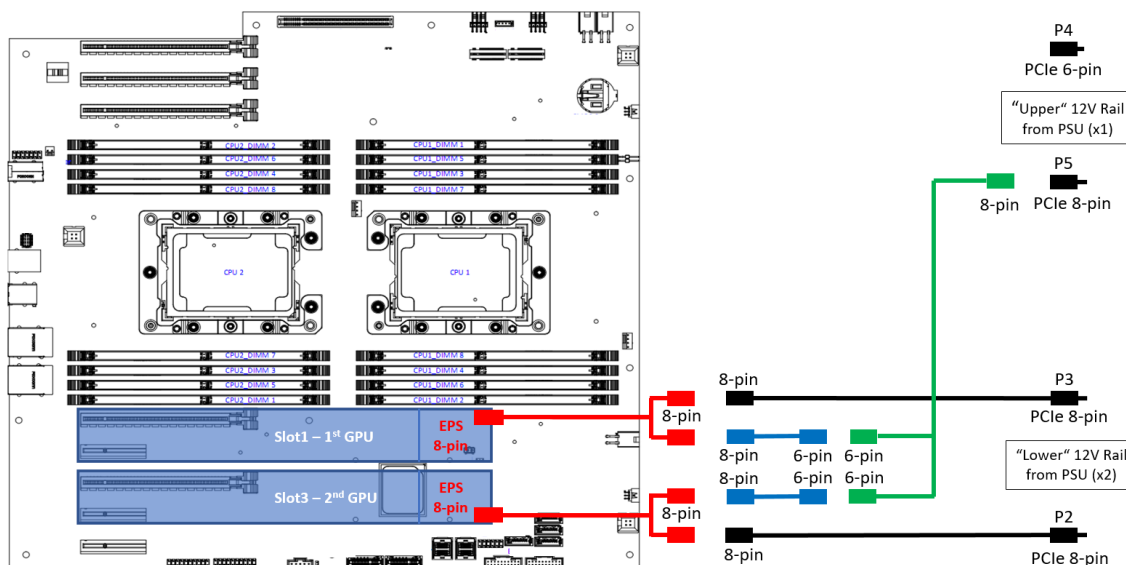Cable 1 – HDD PWR 2x2 to GFX PWR 2x3 cable, 500mm - FRU: 5C10U58229

Cable 2 – HDD PWR 2x2 to GFX PWR 2x3 + 2x2 cable, 500mm - FRU: 5C10U58230

Existing Power Drop – from PSU

Section 5 – P920 with dual RTX A6000

Use the following diagram to assist with configuring P920 with dual RTX A6000 adapters.

Power Cabling P920 + 2 x RTX A6000

Notes:

1. The RTX A6000 adapter has an EPS12V 8-pin connector, not to be confused with a PCIe 8-pin connector. This card ships with the EPS 8-pin to dual PCIe 8-pin splitter cable (Red Cable) listed above.

2. Part numbers for the other cables listed above:

   Blue Cable, PCIe 8-pin to PCIe 6-pin (100mm): FRU 00XL159
   Green Cable, PCIe 8-pin to dual PCIe 6-pin (250mm): FRU 01YW383

Section 6 – P720 Power Configurations

P720 has three available power supply capacities: 690W, 900W, and 1000W.

P720

690 Watt PSU

- Only single 6-pin aux power connection is active (GFX_PWR1). See Figure 1.
- Includes single 8-pin (6+2) drop cable for powering GPUs or other cards.
- Provides single dedicated 12V rail.
- If dual CPUs rated 120W-150W are used, then no auxiliary powered cards are supported.
- Only SATA and/or M.2 storage supported.

Dual CPU (120W to 150W)

Dual CPU (115W or less)

Support for RDIMM

No Storage Limitations

GPU Support

Bus Powered Cards Only! (75W or less)

GPU Support

180W x 1
OR
150W x 1
OR
140W x 1
OR
120W x 1

P720

900 Watt PSU

- Both onboard 6-pin aux power connections are active.
- Includes dual 8-pin (6+2) drop cables for powering GPUs or other cards.
- Provides 2 dedicated 12V rails.
- Higher density GPU configurations can be achieved with single CPU. See TSET team for validation.

Dual CPU (up to 165W)

Dual CPU (up to 150W)

Support for RDIMM

SATA /M.2 Only

No Storage Limitations

GPU Support

250W x 1
OR
235W x 1
OR
180W x 2
OR
150W x 2
OR
140W x 2
OR
120W x 2

P720

1000 Watt PSU

- Both onboard power connections are Active (GFX_PWR1 and GFX_PWR2).
- Includes dual 8-pin + 6-pin drop cables for powering GPUs or other cards.
- Provides 2 dedicated 12V rails.
- Some supported GPU configurations might require additional cabling (See Appendix).

| Dual CPU (up to 125W)		No Storage Limitations	GPU Support Up To 295W x 2
Dual CPU (up to 150W)	All RDIMM Memory	Onboard Intel Storage	GPU Support Up To 295W x 2 OR 300W x 2
			GPU Support Up To 265W x 2
Dual CPU (up to 165W)		No Storage Limitations	GPU Support Up To 300W x 1 AND 75W x2 OR Up To 180W x 2

P720 Power Supply Configuration Notes:

- In order to utilize Slot 1 (white), dual CPUs must be installed.
- The 1000W and 900W supply have 2 dedicated 12V rails and both onboard ports (GFX_PWR1 and GFX_PWR2) are active. See Figure 1.
- The 690W supply has a single dedicated 12V rail, and only one onboard port (GFX_PWR1) is active. See Figure 1.
- For the 690W supply, if dual CPUs rated 120W-150W are used, then no auxiliary powered cards can be supported (only bus powered cards of 75W or less are supported).
- P720 supports either the 690W, 900W, or 1000W power supply.
- **For configurations that are not listed above but appear to be feasible, please work with the Technical Solutions Team to have the configuration validated/vetted.**
- Officially supported configurations could still be limited by additional factors not defined within this document
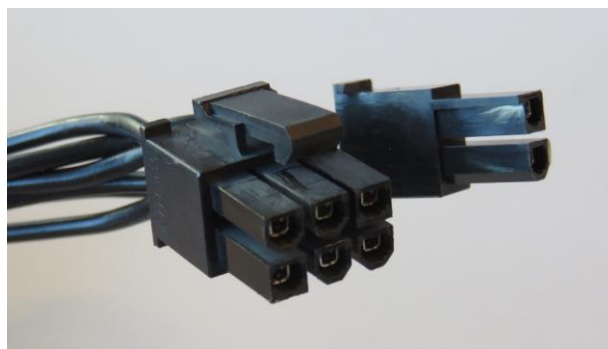
Section 7 – Appendix

This section contains additional useful information about the hardware used to power adapter cards in ThinkStation systems.

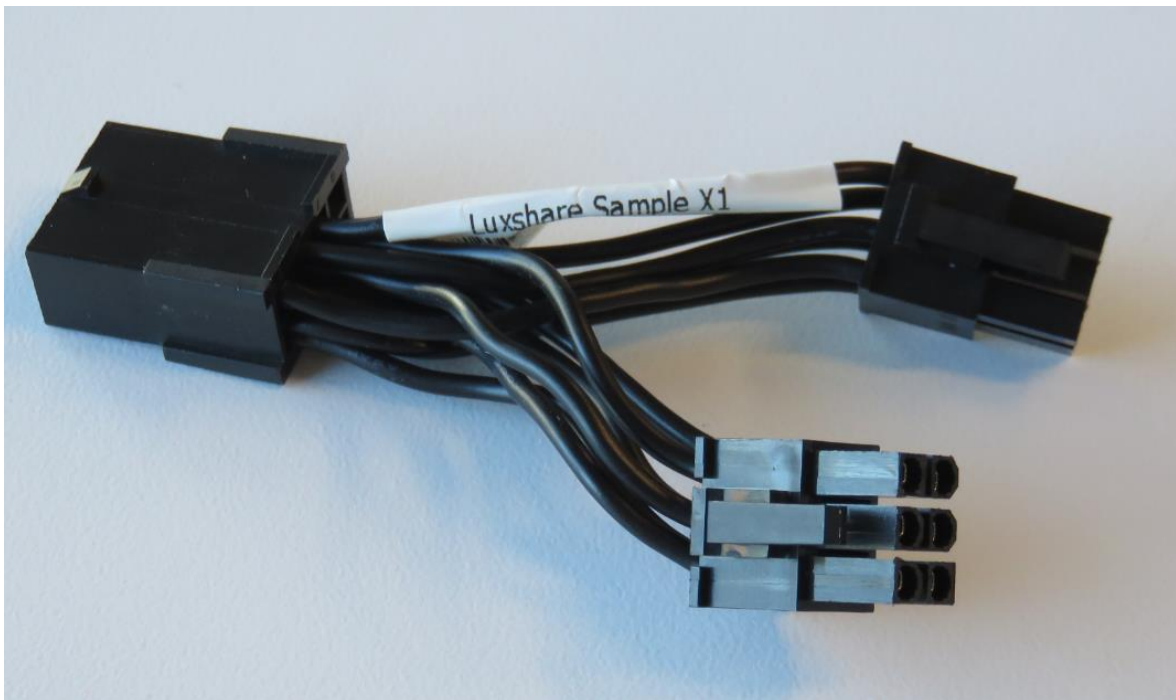## PCIE POWER CONNECTORS
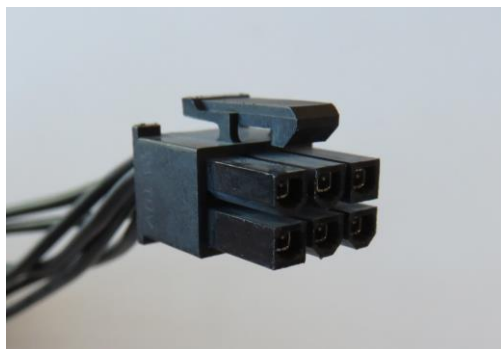
6-pin PCIe Power Connector

6+2 pin PCIe Power Connector

SUPPORTED PCIE POWER CABLE ADAPTERS

6-pin PCIe to 8-pin PCIe Converter, 100mm (FRU = 00XL159)

8-pin to dual 6-pin PCIe Splitter, 50mm (FRU = 04X2387)

6-pin to 8+6-pin PCIe Splitter, 250mm (FRU = 5C10U58233)

EPS 8-pin to dual PCIe 8-pin

Section 8 – Document Revision History

Version	Date	Author	Changes/Updates
1.0	11/8/2017	Cory Chapman	Initial launch release
1.1	12/11/2017	Cory Chapman	Updated CPU chart for Figure 2 to add more CPU detail.
1.2	2/12/2018	Cory Chapman	Updated P720 with 900W PSU info to match new power spec (v1.5). Added GV100 and P620 to adapter list in Figure 3.
1.3	4/18/2019	Cory Chapman	Added update to Section 2 regarding RTX class GPUs. Those GPUs are not covered by this document. Please reference the whitepaper "ThinkStation RTX GPU Support Matrix".
1.4	4/15/2020	Jason Moebs	Updated CPU chart to add Cascade Lake CPU's. Updated new 1400W and 1000W PSU's.
1.5	1/31/2021	Jim Pfaltzgraff	Added card widths Updated power bubble diagrams
1.6	7/26/2021	Jim Pfaltzgraff	Added new graphics cards Updated bubble charts Added section on P920 w/ dual RTX A6000 connections