Photonic Resource Unit 1000 (PRU)

Key Benefits

- Latency – Direct connect, all photonic fabric provides the lowest possible latency allowing valuable machine resources to be directly connected in a machine cluster
- Distance – Photonics eliminates the distance and physical locality challenges in the data center
- Complexity – Removing stacked hierarchies of switches, protocols and overlays is the most direct way to remove complexity
- Efficiency – Grouping resources via direct connect around workloads resolves the stranded resource challenge
- Security – Workloads do not transgress over racks, spines and cores.
- OPEX – Increased resource efficiencies means getting more from less: Less power, less cooling, less space
- Better TCO – By decoupling the resource upgrade path from server upgrade path, users have a better fidelity of choice when and what to upgrade

Drut's Photonic Resource Unit 1000 is designed to host PCIe devices. The PRU 1000 supports connections to the PXC with one FIC 1000. A PRU 1000 supports up to four (4) PCIe 4.0 slots.

Users can fill the PRU 1000 with PCIe form factor devices such as GPUs, FPGAs, SmartNICs, NICs, IPUs, TPUs, and NVME storage cards.

PRU 1000 Advantages

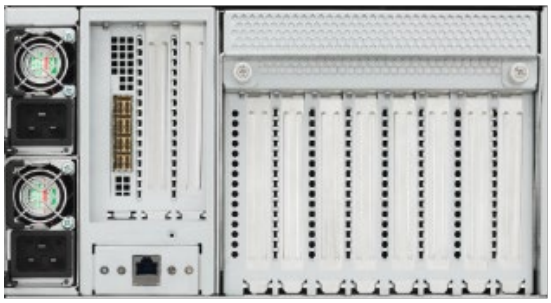
By disaggregating the data center resources via a photonic fabric, a number of architecture design advantages can be realized.

- **Heterogeneous Device Support**: The PRU 1000 allows users to deploy a mix of device types from various manufacturers and compose machines with these devices.
- **Discreet Upgrade Paths**: By deploying the data center around pools of resources, devices within the pool can be upgraded independent of the server/CPU complex.
- **Better Resource Utilization**: Composing machines of resources around workload requirements and using a direct connect photonic fabric results in better resource utilization versus traditional stacked switching architectures.
- **Attach/Detach Capability**: PRU 1000 enables PCIe resources to be hosted and dynamically attached and detached from services via Drut's Fabric Manager (DFM) Software.

200 Innovative Way, Suite 1360
Nashua, NH 03062

Ordering Information

Product: PRU 1000
Code: DRT-HW-PRU-1000
Description: Photonic Resource Chassis



PRU 1000 Specifications

PCIe Single Width Slots	One (1) PCIe 4.0 x16 FHFL
PCIe Double Width Slots	Four (4) GPU PCIe 4.0 x16 double-width FHFL (Up to 450W)
FIC 1000 Support	1
Power	Two (2) 1600W PSU Hot Swap 2100W +2100W redundant PSU (Optional)
Operating Temp	0°C ~ 35°C (32°F ~ 95°F)
Dimensions	174(H) x 320(W) x 466(D) mm
Weight	12.75 Kg / 28 Pounds
Fan	Four (4) 120mm x 38mm fans mounted to the front bezel of the chassis
Agency Compliance	AS/NZS CISPR32, class A EN 55032, class A EN 55024 EN 61000-3-2 EN 61000-3-3 FCC Part15B, class A RoHS Directive 2011/65/EU