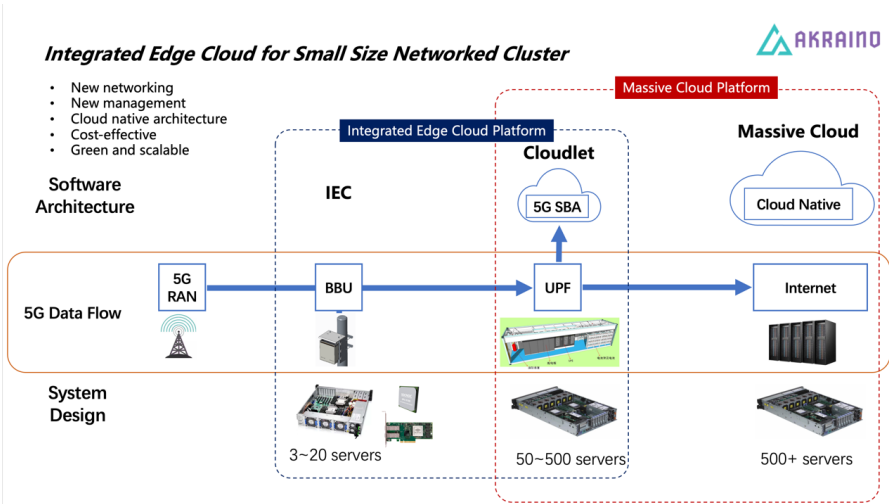


# R6 Datasheet Document of IEC Type 5: Composable Integrated Edge Cloud (IEC) Server Blueprint Family

## Introduction

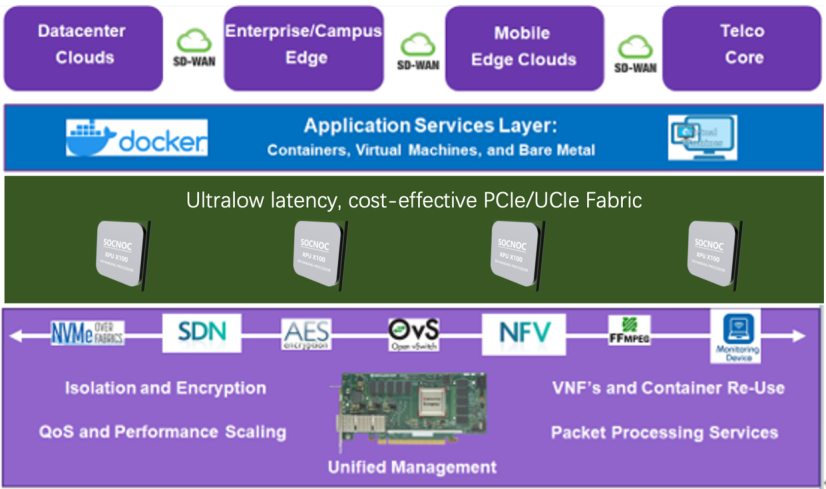
*Goal: An innovative architecture for small-size edge cloud using data processor*

To meet the demanding increase of 5G data and the utilize the advantage of low latency and high bandwidth of 5G technologies, the number of small-size datacenter is increasing dramatically. Research shows there shall be more than 2.8 million cloudlet datacenters with less than 200 servers connected near the 5G tower. In IEC Type 5 project, we will build an innovative architecture for small-size edge cloud computing using latest and greatest data processor.



## PCIe Extending DPU Cluster

Since DPU is PCIe-compatible device, we can further combine DPU and PCIe Networking together. In R6, we introduce a hardware layer or physical link /fabric layer between the DPU and the CPUs as below. With this layer, we extend the DPU cluster size and also use the DPU management features as well.



## Hardware Requirements

- Hardware Requirements

3xarm64 server:

Arch	AARCH64
Processor model	1 x processor, each 24 x A53 cores
RAM	32GB DDR4-2400 ECC
Storage	10*2.5 inch SAS/SATA/SSD or 8*2.5 inch NVMe SSD
XPU Fabric	1x16GbE20GT/s PCIe Net
Network	2x1GbE port (RJ45)
Power Supply	15watts (100~240V AC240V DC)
Scale	420 mm x 240 mm x 86.1 mm

ARM Server satisfies the Arm Server Ready certified.

## Software Prerequisites

item	comments	method
os	centos7	N/A
docker	N/A	apt-get install <a href="https://docs.docker.com/engine/installation/linux/docker-engine-centos/">docker.io</a>
swarm	N/A	docker pull swarm
portainer	N/A	docker pull portainer