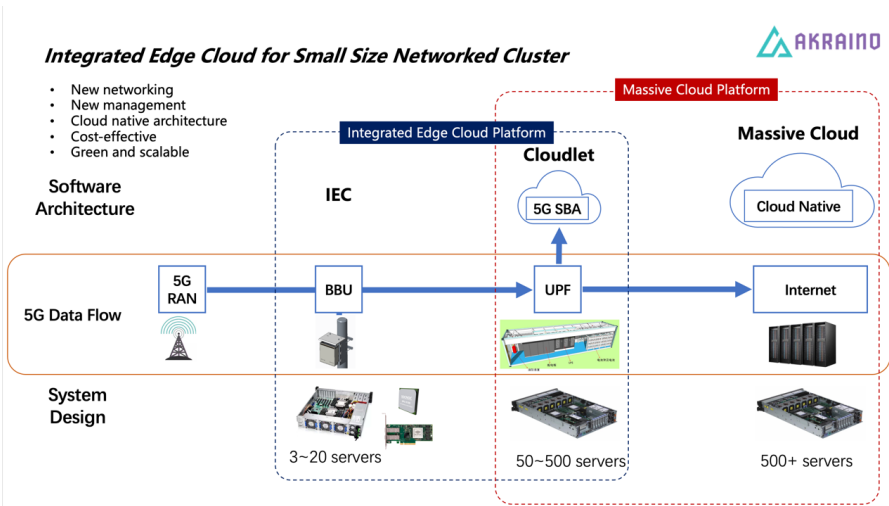# Release 7 Documentation for IEC Type 5: Composable Integrated Edge Cloud (IEC) Server Blueprint FamilyR7 Datasheet Document of IEC Type 5: Composable Integrated Edge Cloud (IEC) Server Blueprint Family
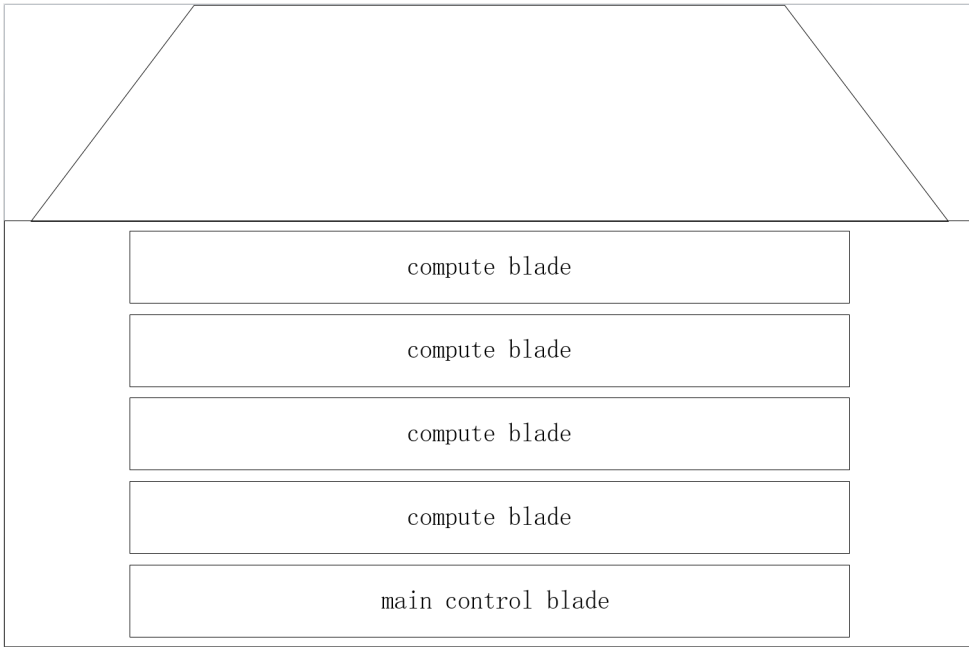
Introduction

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 Cluster

The compute blade and the main control blade connect to the backplane through PCIe to form a miniaturized server cluster.

compute blade	
compute blade	
compute blade	
compute blade	
main control blade	

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	ubuntu20.04	N/A
docker	N/A	apt-get install docker.io
swarm	N/A	docker pull swarm
portainer	N/A	docker pull portainer