

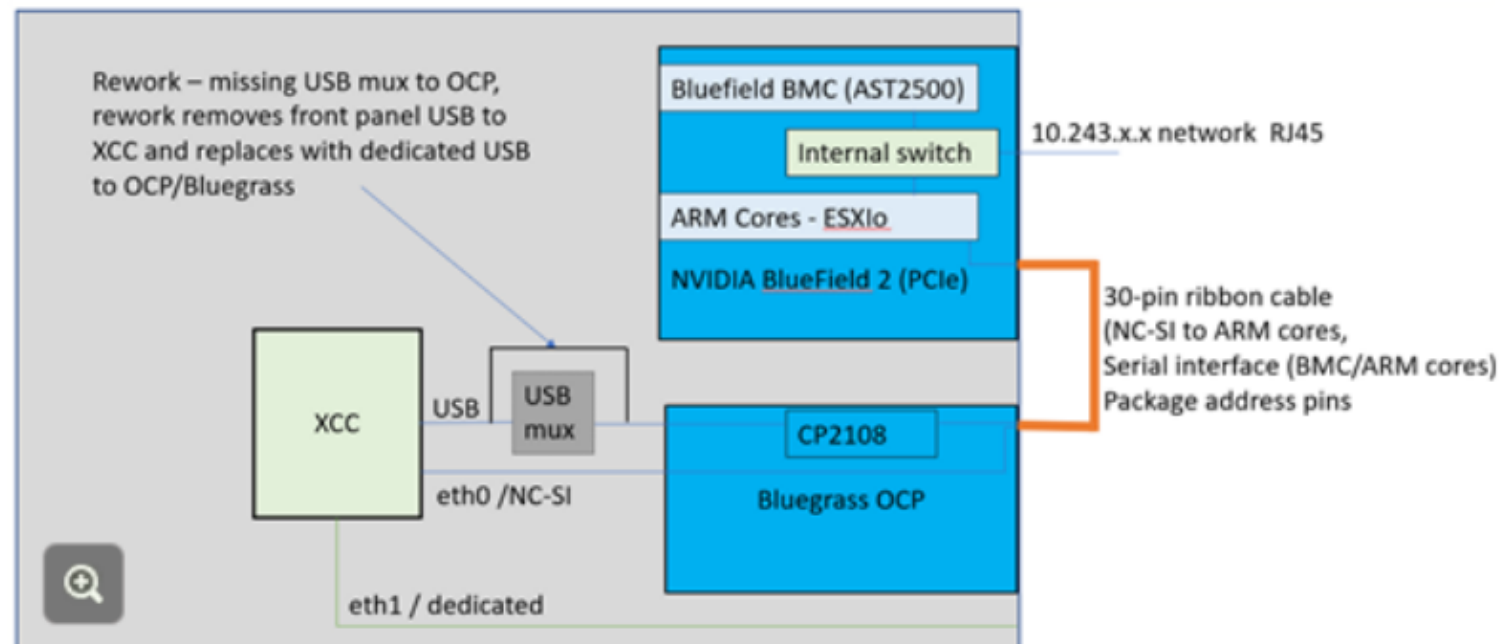
# Product overview

VMware vSphere Distributed Services Engine on ThinkAgile VX

Lenovo

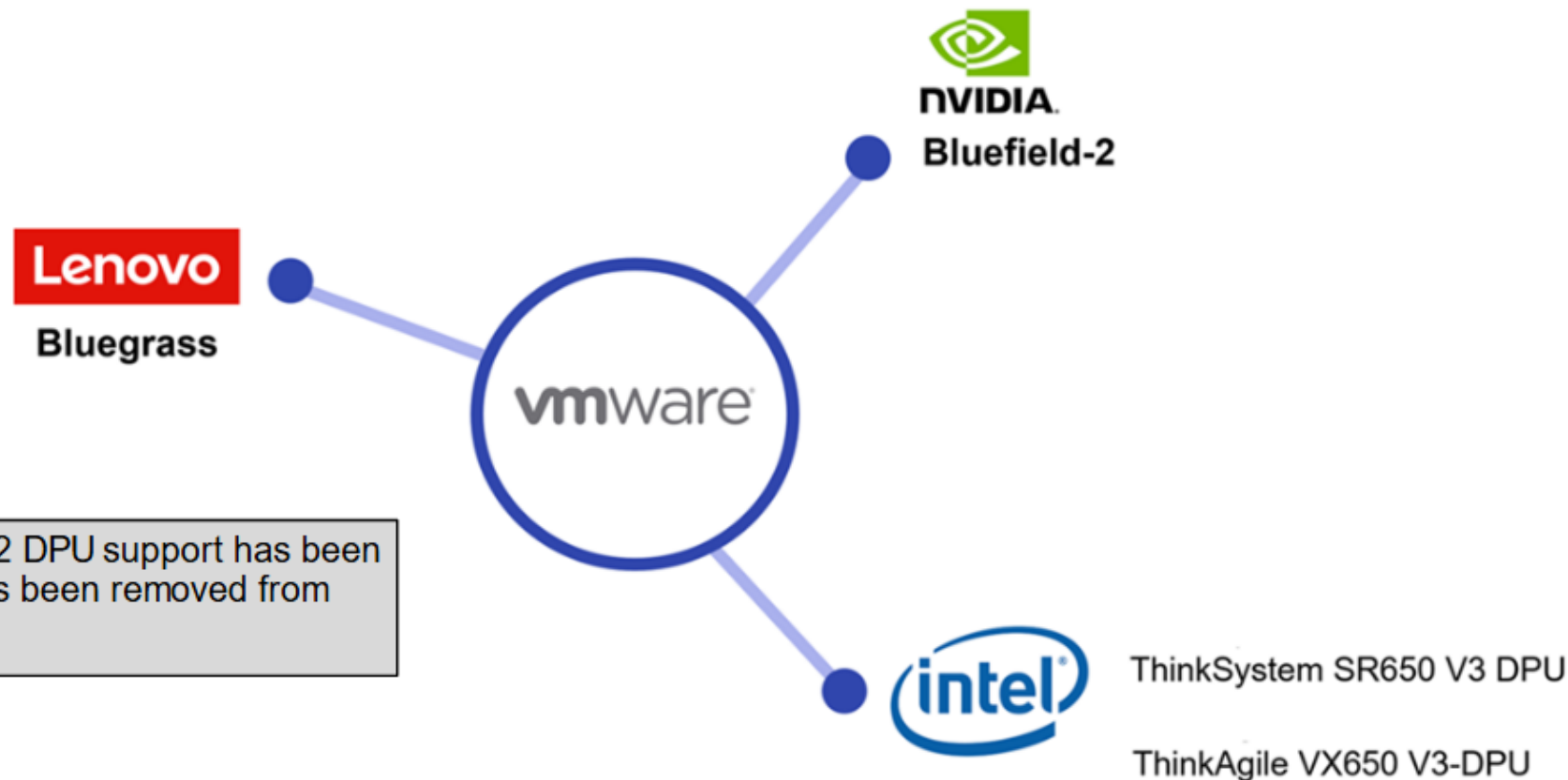
# vSphere Distributed Services Engine on ThinkAgile VX overview

The VMware vSphere Distributed Services Engine (DSE) is a three-way project (project name: Monterey) involving Lenovo, VMware, and NVIDIA. The NVIDIA BlueField-2 SmartNIC or DPU (data processing unit) is a type of networking card that offloads tasks from server CPUs to make data center applications more efficient. The ThinkSystem OCP Enablement Kit for Distributed Services Engine (code name: Bluegrass) OCP card was developed by Lenovo, and the solution has cables to connect the components. This project aims to improve the performance, manageability, and security of enterprise data centers through the latest networking technologies.



## Phase one launch support platform

In the phase one launch, Lenovo provides Intel-based ThinkSystem V3 and ThinkAgile V3 servers equipped with the ThinkSystem OCP Enablement Kit for Distributed Services Engine:



**Note:** ThinkSystem V2 and ThinkAgile V2 DPU support has been withdrawn, and all related information has been removed from this course.

## Supported ThinkSystem and ThinkAgile models

This table shows the Lenovo models supported in phase one – note that they are all Customer to Order (CTO) models.

Due to restrictions made by VMware, field upgrades are not supported.

MT	CTO	Marketing Name
7D6W	7D6WCTO4WW	ThinkAgile VX650 V3-DPU Integrated System
7D6W	7D6WCTO5WW	ThinkAgile VX650 V3-DPU Certified Node
7D6W	7D6WCTO6WW	ThinkAgile VX650 V3-DPU SAP HANA Certified Node
7D75	7D75CTO4WW	ThinkSystem SR650 V3 DPU – one-year warranty
7D76	7D76CTO4WW	ThinkSystem SR650 V3 DPU – three-year warranty

## Component part numbers and marketing names

	Supplier	Feature code	FRU P/N	L1 P/N	Marketing name
BlueField-2	NVIDIA	BRPK	03GX901	SBB7A52992	<b>Long name:</b> ThinkSystem NVIDIA BlueField-2 25 GbE SFP56 2-Port PCIe Ethernet DPU w/BMC & Crypto
Bluegrass	Lenovo	BSH7	03GX844	SBB7A52873	<b>Long name:</b> ThinkSystem OCP Enablement Kit for Distributed Services Engine <b>Short FRU name:</b> OCP Enablement Kit for vSphere DSE
NC-SI cable	Amphenol	BSLP	03LD179	SBB7A71467	<b>Long name:</b> ThinkSystem Adapter NC-SI cable – 270 mm <b>Short FRU name:</b> Cable BG FPGA20 - BF2 20
Serial Cable	Amphenol	BSLQ	03KM313	SBB7A71468	<b>Long name:</b> ThinkSystem Motherboard serial cable – 400 mm <b>Short FRU name:</b> Cable BG FPGA 12 - Anarky BMC

## Reference resources

Refer to the following VMware and NVIDIA links for reference information:

- [Project Monterey eBook](#)
- [Introducing VMware vSphere Distributed Services Engine and Networking Acceleration by Using DPUs](#)
- [NVIDIA BlueField-2 DPU User Guide](#)
- [Using vSphere Lifecycle Manager with VMware vSphere Distributed Services Engine](#) → New
- [Evolve your Data Center with VMware vSphere Distributed Services Engine on Lenovo](#) → New