

Annex 2.2. Technical specifications of Server and Network Hardware for the cyber-resilient compute hyperconverged infrastructure for the Central Election Commission (CEC) of Ukraine

1. The list of Network Hardware that are necessary for the deployment of the cyber-resilient compute hyperconverged infrastructure is provided in Table 1.

Table 1 Requested Network Hardware

#	PN	Item	Q-ty
1.	N9K-C93180YC-FX3	Nexus 9300 48p 1/10/25G, 6p 40/100G, MACsec, SyncE	2
2.	CON-SNT-N9KC93X3	SNTC-8X5XNBD Nexus 9300 48p 1/10/25G, 6p 40/100G, MAC, 60 month	2
3.	NXOS-AD-XF	NX-OS Advantage License for Nexus 9300 (10G+) Platforms	2
4.	CON-ECMU-N9SWADXF	SWSS UPGRADES NX-OS Advantage Lice, 60 month	2
5.	NXK-AF-PI	Dummy PID for Airflow Selection Port-side Intake	2
6.	MODE-NXOS	Mode selection between ACI and NXOS	2
7.	NXOS-CS-10.6.1F	Nexus 9300, 9500, 9800 NX-OS SW 10.6.1 (64bit) Cisco Silicon	2
8.	NXK-ACC-KIT-1RU	Nexus 3K/9K Fixed Accessory Kit, 1RU front and rear removal	2
9.	NXA-FAN-35CFM-PI	Nexus Fan, 35CFM, port side intake airflow	8
10.	NXK-MEM-16GB	Additional memory of 16GB for Nexus Switches	2
11.	NXA-PAC-650W-PI	Nexus NEBs AC 650W PSU - Port Side Intake	4
12.	CAB-C13-CBN	Cabinet Jumper Power Cord, 250 VAC 10A, C14-C13 Connectors	4
13.	DCN-OTHER	Select if this product will NOT be used for AI Applications	2
14.	C1-SUBS-OPTOUT	OPT OUT FOR "Default" DCN Subscription Selection	2
15.	QSFP-100G-AOC2M	100GBASE QSFP Active Optical Cable, 2m	2
16.	SFP-25G-SR-S	25GBASE-SR SFP Module	32

2. The list of Server Hardware that are necessary for the deployment of the cyber-resilient compute hyperconverged infrastructure is provided in Table 2.

Table 2 Requested Server Hardware

#	PN	Item	Q-ty
1.	7D9CCTO1WW	Server : ThinkSystem SR645 V3-3yr Base Warranty	8
2.	BLK4	ThinkSystem V3 1U 10x2.5" Chassis	8
3.	BFYA	Operating mode selection for: "Maximum Efficiency Mode"	8
4.	BL0H	Data Center Environment 25 Degree Celsius / 77 Degree Fahrenheit	8
5.	C2AQ	AMD EPYC 9335 32C 210W 3.0GHz Processor	16
6.	BQ26	ThinkSystem SR645 V3/SR635 V3 Performance Heatsink (Neptune Air)	16
7.	C18D	Platform Secure Boot	8
8.	CBND	ThinkSystem SR645 V3/SR665 V3 64GB TruDDR5 6400MHz (2Rx4) RDIMM-A v2	128
9.	5977	Select Storage devices - no configured RAID required	8
10.	BC4V	Non RAID NVMe	8
11.	C0ZP	ThinkSystem 2.5" U.2 VA 6.4TB Mixed Use NVMe PCIe 5.0 x4 HS SSD	80
12.	BRQX	ThinkSystem 1U 2.5" 10 NVMe Gen5 Backplane	8
13.	BM8X	ThinkSystem M.2 SATA/x4 NVMe 2-Bay Adapter	8
14.	BTTX	M.2 SATA	8
15.	CACA	ThinkSystem M.2 VA 960GB Read Intensive SATA 6Gb NHS SSD	16
16.	BK1H	ThinkSystem Broadcom 57414 10/25GbE SFP28 2-port PCIe Ethernet Adapter	16
17.	BYBJ	ThinkSystem Finisar Dual Rate 10G/25G SR SFP28 Transceiver	32
18.	BLKF	ThinkSystem V3 1U x16/x16 BF PCIe Gen4 Riser1	8
19.	BLK9	ThinkSystem V3 1U MS LP+LP BF Riser Cage	8
20.	BLKH	ThinkSystem 1100W 230V Titanium Hot-Swap Gen2 Power Supply	16
21.	6400	2.8m, 13A/100-250V, C13 to C14 Jumper Cord	16
22.	BH9M	ThinkSystem V3 1U Performance Fan Option Kit v2	64
23.	BLKD	ThinkSystem 1U V3 10x2.5" Media Bay w/ Ext. Diagnostics Port	8
24.	B8LC	ThinkSystem Toolless Slide Rail Kit v2 with 1U CMA	8

#	PN	Item	Q-ty
25.	B2PC	Lenovo 5m LC-LC OM4 MMF Cable	32
26.	BPKQ	TPM 2.0 with Secure Boot	8
27.	B7XZ	Disable IPMI-over-LAN	8
28.	BXBP	ThinkSystem V3 1U Security Bezel	8
29.	BA2X	ThinkSystem 1U Intrusion Cable	8
30.	BRPJ	XCC Platinum	8
31.	C2BD	ThinkSystem SR645 V3 MB W/IO,Turin,Oahu,1U	8
32.	C8WR	SR645 V3 Laser service indicator	8
33.	BK15	High voltage (200V+)	8
34.	B8KJ	ThinkSystem 1U 10x2.5" NVMe HDD Type Label	8
35.	BPK3	ThinkSystem WW Lenovo LPK	8
36.	BQF4	ThinkSystem SR645 V3 Service Label for WW	8
37.	BQF1	ThinkSystem SR645 V3 Agency Label	8
38.	BQF0	ThinkSystem SR645 V3 model name Label	8
39.	AWF9	ThinkSystem Response time Service Label LI	8
40.	B97B	XCC Label	8
41.	BQPS	ThinkSystem logo Label	8
42.	B4X9	UA Server Carton Label	8
43.	AUTQ	ThinkSystem small Lenovo Label for 24x2.5"/12x3.5"/10x2.5"	8
44.	BPDF	ThinkSystem 1100W Ti Power rating Label WW	8
45.	BTKV	ThinkSystem Power Y Cable, MicroHi 2X8 to MiroHi 2X6/Sideband 1X7, 430/430mm	8
46.	BZPP	ThinkSystem SR645 V3, PCIe Gen5 Cable ,MCIOX8 -RA MCIOX8, 650mm	8
47.	BPCH	ThinkSystem SR630 V3 PCIe5.0 Cable from MB to BP, left-exit, 580mm	8
48.	C237	ThinkSystem 580mm PCIe Gen5 Cable	8
49.	BXGT	ThinkSystem SR645 V3, Gen5 NVMe Cable , MCIO 8X-MCIO 8X, 820mm	8
50.	BR6H	Cable52	8
51.	BRQ3	ThinkSystem V3 2U WH CBL, 20Pin, 320mm,Tin-plated	8
52.	C236	ThinkSystem 740mm PCIe Gen5 Cable	8
53.	BE0C	N+1 Redundancy Without Over-Subscription	8
54.	BU1E	Top Choice flag	8
55.	B8NB	ThinkSystem 1U MS LP Riser Filler	8
56.	B989	ThinkSystem V2 1U Package	8
57.	BQ2K	ThinkSystem 1U MS PSU duct	8
58.	AUWG	Lenovo ThinkSystem 1U VGA Filler	8
59.	B984	ThinkSystem 1U PLV Top Cover Sponge	8
60.	B8NK	ThinkSystem 1U Super Cap Holder Dummy	8
61.	C257	ThinkSystem SR6445 V3/SR665 V3 Absolut-RoW RoT Module for Turin MLK	8
62.	A2HP	Configuration ID 01	8
63.	5374CM1	Configuration Instruction	8
64.	BC4W	Non RAID NVMe Placement	8
65.	A2JX	Controller 01	8
66.	A2HP	Configuration ID 01	8
67.	7S0XCT05WW	XClarity Controller Platin-FOD	8
68.	SBCV	Lenovo XClarity XCC2 Platinum Upgrade (FOD)	8
69.	1341	Lenovo XClarity Pro, Per Managed Endpoint w/5 Yr SW S&S	8
70.	3444	Registration only	8
71.	5WS7C00909	5Yr Premier NBD Resp SR645 V3	8
72.	5PS7C00924	5Yr KYD Add-On SR645 V3	8