

### Annex B2 - Product environmental attributes Servers/Data Storage Products

The declaration may be published only when all rows and/or fields marked with \* are filled-in (N/A for not applicable). Additional information regarding each item may be found under P15.

Brand *	Lenovo ThinkSystem	Logo
Company name *	Lenovo	
Contact information *	Lenovo DCG Storage Development	
e-mail address	Rick Lin	
	Lenovo Taiwan Branch	Lenovo
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	Nangang Dist., Taipei City, Zipcode: 11502	
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Internet site *	https://www.lenovo.com/us/en/about/sustainability	
Additional information	The latest version of this document can be found at:	
	http://www.lenovo.com/ecodeclaration	

The company declares (based on product specification or test results based obtained from sample testing), that the product conforms to the statements given in this declaration.				
Type of product *	Data Storage			
Commercial name *	D3284			
Model number *	6413			
Issue date *	01/15/2020			
Intended market *	🔀 Global 🛛 Europe 🛛 Asia, Pacific & Japan 🔀 Americas 🗌 Other			
Additional information				

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

#### About Annex B2

Annex B2 reflects Product environmental attributes relevant for Computers and Computer Monitors. The following items from the ECMA-370 Main body are not shown in the template: P4.1 – P4.3 Consumable materials P9.1 TEC and Print speed

P10.2 - P10.3 Chemical emissions from printing products

P11.1 - P11.3 Consumable materials for printing products.

	umber *	6413 Logo				
Issue date *		01/15/2020	Len	-enovo		
Produc	t environ	mental attributes - Legal requirements	Require	men	t met	
Item			Yes	No	N/A	
P1		ous substances and preparations				
P1.1*	Products	s do comply with current European RoHS Directive. (See legal reference and NOTE B1)	$\boxtimes$			
P1.2*		s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.				
P1.3*	Products hydrobro trichloro	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), omofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1- ethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum ration values.				
P1.4*		s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated /l (PCT) in preparations (see legal reference).	$\boxtimes$			
P1.5*	Products	s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	ie 🔀			
P1.6*	Parts wi (see leg	th direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm²/wee al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	k 🔀			
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail contact): ww.lenovo.com/us/en/sustainability-resources	$\square$			
P2	Batterie	s				
P2.1*		oduct contains a battery or an accumulator, the battery/accumulator is labeled with the disposal Information on proper disposal is provided in user manual. (See legal reference)			$\boxtimes$	
P2.2*		s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See lega	al 🗌		$\boxtimes$	
P2.3*		s and accumulators are readily removable. (See legal reference)			$\square$	
P2.4*	Docume	ntation includes the number of cycles the (secondary) battery can withstand. (See legal reference	) []	Ē		
P2.5*	When in	ternal batteries of a notebook computer cannot be "accessed and replaced by a nonprofessional e related text is present and legible on the external packaging (see legal reference)				
P3		nity verification & Eco design (ErP)				
P3.1*		duct is CE-marked to show conformance with applicable legal requirements (see legal reference). daration of Conformity can be requested at: <u>https://www.lenovo.com/us/en/compliance/eu-doc</u>	$\boxtimes$			
P3.2*		duct complies with the Eco design requirements for energy-related products, al reference).	$\boxtimes$			
	Require	d information is; given in item P15 or added to this document, available at: https://www.lenovo.com/us/en/compliance/eco-declaration				
P5	Product	packaging				
P5.1*	Packagi	ng and packaging components do not contain more than 0,01% lead, mercury, cadmium an ent chromium by weight of these together.	nd 🔀			
P5.2*	The pac	kaging materials are marked with abbreviations and numbers indicating the nature of the material e legal reference).	(s)			
P5.3*	The prod (see leg	Juct packaging material is free from ozone depleting substances as specified in the Montreal Protoc al reference). nt: Legal reference has no maximum concentration values.	ol 🔀			
	Treatme	nt information				
P6	noutine					

NOTE B1 Restriction applies to the homogeneous material, unless other specified and expressed in weight %. Stating "Yes" means that the product is compliant with the mandatory requirements.

Model nu	umber *	6413	Logo			
Issue date *		01/15/2020		Len	ovc	
Product		mental attributes - Market requirements (See General NOTE GN	below)			
		nmental conscious design		Require		
Item <b>P7</b>		tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	N/A
P7.1*		Disassembly, recycling t have to be treated separately are easily separable				
P7.2*		aterials in covers/housing have no surface coating.			⊢⊢	⊢⊢
P7.3*		arts > 100 g consist of one material or of easily separable materials.			╞	╞
P7.4*		arts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.			╞	╞
P7.5	-	arts are free from metal inlays or have inlays that can be removed with commonly a	available tools.		⊢⊢	⊢⊢
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).			∺	╞
	Product					
P7.7*		ig can be done e.g. with processor, memory, cards or drives				
P7.8*	Upgradir	ig can be done using commonly available tools			Ē	Ē
P7.9	Spare pa	rts are available after end of production for: 5 years				
P7.10	Service i	s available after end of production for: <b>5</b> years				Ē
	Material	and substance requirements				
P7.11*		cover/housing material type (e.g. plastics, metal, aluminum):				
P7.12		type: Metal (Steel) Material type: PC ABS Materia n materials of external electrical cables are PVC free.	al type:			
P7.12		n materials of external electrical cables are PVC free.				╞
P7.14		plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) b	romino and 0.19			<u> </u>
F7.14	weight (´ polyvinyl	1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine i n 25% post-consumer recycled content.	e retardants, an	nd 🔼		
P7.15	Printed c	ircuit boards, PCBs (without components) are low halogen: all PCBs > 25 g ed in IEC 61249-2-21. (See <sup>5</sup> NOTE B2)	are low haloge	n	$\square$	
P7.16	Flame re Marking:	tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4:		$\boxtimes$		
P7.17	<u>Alt. 1: </u> Ch TBBPA	nemical specifications of flame retardants in printed circuit boards > 25 g (without c (additive) , TBBPA (reactive) ((See NOTE B3), Other: chemical name:	omponents): ,CAS #:	$\boxtimes$		
		nemical specifications of flame retardants in printed circuit boards (without compone g ISO 1043-4:	ents) > 25 g			$\square$
P7.18	concentr 1. Chemi 2. Chemi	ame retarded plastic parts > 25 g contain the following flame retardant substance ations above 0,1%: ical name: , CAS #: (See NOTE B4) ical name: , CAS #: " ical name: , CAS #: "	es/preparations i	in		
		nemical specifications of flame retardants in plastic parts > 25 g according ISO 104				
P7.19	•	parts > 25 g, flame retardant substances/preparations above 0,1% are used which the following Risk phrases; and Hazard statements:	n have been			
			See note B5)			
P7.20*	lfYES;a a) Oft ape or	sumer recycled plastic material content is used in the product (See Note B6): t least one of the two alternatives below shall be answered; otal plastic parts' weight > 25 g, the postconsumer recycled plastic material content ercentage of total plastic by weight) is %.	t (calculated as			
	b) The	weight of recycled material is g.				

GENERAL NOTE Standard references should direct to the latest version of a standard. If an older version of a standard is used, section P15 shall be used for explanation.

NOTE B2 IEC 61249-2-21 defines maximum limits of 900 ppm for each of the substances chlorine and bromine and a maximum limit of 1500ppm of these substances combined. The standard does not address fluorine, iodine and astatine which are included in the group of halogens.

NOTE B3 and B4 A Guidance document on Chemical substances is available; see <u>http://www.ecma-international.org/publications/standards/Ecma-370.htm</u>.

NOTE B5 If a certain substance has been assigned a certain risk phrases / hazard statement in the referenced source, this does not necessarily mean the substance has been tested for all of the hazards referred to by a certain customer.

NOTE B6 Applies to a product containing plastic parts whose combined weight exceeds 100 g with the exception of printed circuit boards, cables, connectors and electronic components and bio-based plastic material.

Model number *	6413	Logo	
Issue date *	01/15/2020		LEHOVO

Product environmental attributes - Market requirements (continued)

Item

Requirement metYesNoN/A

	Material and su	bstance requirements (	(continued)					
P7.21*		material content is used		DTE B7):				
	If YES; at least one of the two alternatives below shall be answered;							
	<ul> <li>a) Of total plastic parts' weight &gt; 25 g, the biobased plastic material content (calculated as a percentage of total plastic by weight) is %.</li> </ul>							
	or							
	b) The weight of the biobased plastic material is g.							
P7.22*		e free from mercury, i.e. I	, , ,					
P7.23*		d specify: Number of lan es an integral display, the		im mercury content per in the integrated display	er lamp: mg ay: mg 🗌 🕅 🕅			
P8	Batteries	o an mograf dioplay, inc						
P8.1*	Battery chemical	composition:						
P9	-	ption (See NOTE B8)						
P9.1		he following power levels	s or energy consumptio	ons are reported:				
Energy mo		Power level at	Power level at	Power level at	Reference/Standard for energy			
		100 V AC	115 V AC	230 V AC	modes and test method *			
Peak (On-r	max)	W	W	<b>1940</b> W	Full load			
Category	y							
EPS No-loa	ad	W	W	W				
	ower supply /							
	igged in the wall							
the product	isconnected from							
PTEC *	)	W	W	W				
= .	ergy Consumption							
ETEC *		kWh/year	kWh/year	kWh/year				
	ergy Consumption		Efficience Madine Des	ta a a 1) * .				
		ency Level (International	Efficiency Marking Pro					
Display res		negapixels						
	e to enter energy							
P9.2*		t the energy save function	on is provided with the	product.				
P9.3		class (monitors only):						
P10	Emissions	- Declared according to		PO)				
P10.1	Mode	Mode description	100 9290 (See NOTE		it A-weighted sound power level, <i>L<sub>WA,c</sub></i> (B)			
	Idle	* Idle		* 8.0				
	Operation	* Typical loading		* 8.0				
	Other mode	Declared A-weighted sound	l pressure level (dB) $L_{p\Delta m}$	67 (operator position	on desktop – idle)			
	Other mode	Declared A-weighted sound			on desktop – operating)			
	Measured accord	ding to: 🔀 ISO 7779 🗌	ECMA-74					
		Other	only if not covered by	ECMA-74)				
	Electromagneti	c emissions						
P10.4	• •	y meets the requirement	for low frequency elec	tromagnetic fields of th	ne following voluntary			
	program(s):							

NOTE B7 The following is to be excluded from the calculation of percentage: printed circuit boards, labels, cables, connectors and electronic components and postconsumer recycled plastic

NOTE B8 A Guidance document on Energy Efficiency is available;

see <a href="http://www.ecma-international.org/publications/standards/Ecma-370.htm">http://www.ecma-international.org/publications/standards/Ecma-370.htm</a> NOTE B9 A Guidance document on Acoustic Noise is available;

see http://www.ecma-international.org/publications/standards/Ecma-370.htm

Model nu	mber *	6413				Logo			
Issue dat	e *	01/15/2020				-	Lenc	)VO	тн
Product	environr	nental attribut	es - Market requirer	nents (continue	ed)		Require	ment	tmet
Item				•			Yes	No	N/A
P12		mics for compu							
P12.1*	The disp	lay meets the er	gonomic requirements c	of ISO 9241-307 fo	r visual display technol	ogies.			$\boxtimes$
P12.2*	The phy	sical input device	e meets the requirement	s of ISO 9995 and	ISO 9241-410.				$\boxtimes$
P13	Packagi	ng and docume	entation						
P13.1*	Product		ial type(s): <i>Corrugate</i> ial type(s): <i>LDPE</i> ial type(s): <i>EPE</i>	weight (kg): 3.7 weight (kg): 0.0 weight (kg): 1.2	5				
P13.2*			ackaging is free from P	/C.			$\boxtimes$		
P13.3*		luct primary cor er recovered fibe	rugated fiberboard pack r content: 22 %	kaging, specify th	e contained percentag	e of minimum			
P13.4*		media for user ar ronic, XPaper,	nd product documentatio	on (tick box):					
P13.5	Ùser and		is item if paper documer entation on paper media						
		hlorine-free al chlorine-free							
		ed chlorine-free					님		
P14 P14.1		ry programs	and a second	de a contra					
P14.1	The proc	suct meets the re	equirements of the follow	ling voluntary proc	ram(s).				
	ENERG	Y STAR®	Criteria version:	Date	: Product	category:			
	Eco-labe	el:	Criteria version:	Date	: Product	category:			
	Eco-labe	el:	Criteria version:	Date	: Product	category:			
P15	Additio	nal information	(See NOTE B10)						
P9	Energy	consumption of	f computer products; o	description of the	tested product config	guration:			
	the info supplied informa	rmation contain r's knowledge a tion. The inform	no representations, go ed in this document. A vailable at the time of nation provided here is e for more information	All information pr completion, and approximate an	ovided by supplier in supplier shall have no	this documer obligation to	nt is provided pupdate such	based	don
P9	See Ene	ergy Star Qualifi	ed Enterprise Servers .gov/products/data_ce	for the latest info					

NOTE B10 Additional lines may be inserted to declare further items, by positioning the cursor at the far right of the row and hitting the <Enter> key.

## Legal references Europe Annex B2

Reference	Declaration item
Directive 2011/65/EU (RoHS Directive)* * Specific exemptions apply for certain products and applications.	P1.1, P3.1
Regulation (EC) 1907/2006 (REACH Regulation), annex XVII	P1.2, P1.4, P1.6, P1.7
Regulation (EC) 2037/2000, 2038/2000, 2039/2000 (Marketing and use of Ozone layer depleting substances)	P1.3, P5.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
Directive 2006/66/EC (Battery and accumulators Directive), as amended.* * These provisions shall not apply where, for safety, performance, medical or data integrity reasons, continuity of power supply is necessary and requires a permanent connection between the appliance and the battery or accumulator.	P2.1, P2.2, P2,3, P8.1
Directive 2014/35/EU (Low Voltage Directive)	P3.1
Directive 2014/30/EU (EMC Directive)	P3.1
Directive 2014/53/EU (RE Directive)	P3.1
Regulation (EC) 801/2013 amending Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment, and amending Regulation (EC) No 642/2009 with regard to ecodesign requirements for televisions	P3.1, P3.2
Commission Regulation (EC) No 278/2009 of 6 April 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for no-load condition electric power demand and average active efficiency of external power supplies	P3.1, P3.2, P9.1
COMMISSION REGULATION (EU) No 617/2013 of 26 June 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for computers and computer servers	P2.4, P2.5, P3.1, P3.2, P7.23, P9.1
Regulation (EC) No 1272/2008 (CLP Regulation)	P7.19
Directive 2004/12/EC (Packaging Directive)	P5.1
Decision 97/129/EC (Secondary packaging legislation)	P5.2
Directive 2012/19/EU (WEEE directive)	P6.1
Implementing Regulation (EU) 2019/290 establishing the format for registration and reporting of producers of electrical and electronic equipment to the register.	
Commission Implementing Regulation 2017/699 establishing a common methodology for the calculation of the weight of electrical and electronic equipment (EEE) placed on the national market in each Member State and a common methodology for the calculation of the quantity of waste electrical and electronic equipment (WEEE) generated by weight in each Member State.	

# Lenovo ErP Lot9 Information Sheet - Servers & Storage Products-

As required by COMMISSION REGULATION (EU) 2019/424 of 15 March 2019 laying down ecodesign requirements for servers and data storage products pursuant to Directive 2009/125/EC of the European Parliament and of the Council and amending Commission Regulation (EU) No 617/2013. (ErP Lot9)

### Products scope of this sheet: Servers & storage products

This document is only valid in connection with the IT Eco Declaration of the specific Product.

### SERVERS

General information			
Commercial name (3.1 (b))	D3284	Logo	
Contact Address (3.1 (b) )			
Model Number (3.1 (c))	6413		Lenovo
Issue Date	01/15/2020		
Additional information			

Product	environmental attributes (EU) 2019/424 – Annex II points 3.1 and 3.3
1.a	Is the product consider to be in scope of ErP Lot 9 🔄 in scope 🗌 out of scope, product is out of scope as:
1.b (3.1 (a))	Server type       Rack Server       High Performance Computing (HPC)         Tower Server       Multi Node Server         Blade Server       Data Storage product (Please go to "DATA STORAGE PRODUCTS" section
1.c (3.1 (d))	Year of manufacture:
1.d (3.1 (p))	Product model part of a server product family? No Yes
1.e (3.1 (n))	Information on the secure data deletion functionality <ul> <li>(a) instructions on how to use the functionality:</li> <li>(b) techniques used:</li> <li>(c) supported secure data deletion standard (if any):</li> </ul> OR - Reference to other information:
1.f (3.1 (o))	Blade servers? No Yes list of recommended combinations with compatible chassis:
Recyclin	g Data
2.a (3.3 (a))	Indicative weight range at component level, of the following critical raw materials:       (a) Cobalt in the batteries       (b) Neodymium in the HDDs         Indicative weight range at component level, of the following critical raw materials:       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g       Iess than 5 g       Iess than 5 g         Isst than 5 g
2.b (3.3 (b))	Instructions on the disassembly operations <ul> <li>(a) the type of operation;</li> <li>(b) the type and number of fastening technique(s) to be unlocked;</li> <li>(c) the tool(s) required.</li> </ul>
	OR - Reference to other information:
2.c	Firmware Reference to information on last available firmware:
Additiona	I information
1	

## DATA STORAGE PRODUCTS

Commercial name (3.2 (b) )	D3284	Logo
Contact Address (3.2 (b) )	Lenovo DCG Storage Development Rick Lin Lenovo Taiwan Branch 8F., No. 66, Sanchong Rd., Nangang Dist., Taipei City, Zipcode: 11502 Rlin12@lenovo.com	Lenovo
Model Number (3.2 (c))	6413	
Issue Date	01/15/2020	
Additional information		

Product e	environmental attributes (EU) 2019/424 – Annex II points 3.2 and 3.3
A.1	Is the product consider to be in scope of ErP Lot 9 🔀 in scope 🗌 out of scope Product is out of scope as:
A.2	Data Storage type 🛛 🛛 Online Data Storage Product 🗌 Small Data Storage Product
(3.2 (a) )	Large Data Storage Product 🗌 Other:
A.3 (3.2 (d) )	Year of manufacture: 2016
A.4	PSU efficiency at 10 % (if applicable), 20 %, 50 % and 100 % of rated output power
(3.2 (e) )	(expressed in % and rounded to the first decimal place):       Multi-output       Single-output         10%       20%       92.5       50%       94.2       100%       93.2       Average
A.5 (3.2 (f) )	Power factor at 50 % of the rated load level 0.991
A.6 (3.2 (g))	Operating condition class A1 A2 A3 A4 (as defined in Table 6 or ErP lot 9)
(0.2 (9))	Exception comments
	This product has been tested in order to verify that it will function within the boundaries
A.6	(such as temperature and humidity) of the declared operating condition class. Information on the secure data deletion tool(s)
(3.2 (h) )	(a) instructions on how to use the functionality:
	Follow Storage Manager Guide chapter 3 of repurposing the system and secure deletion steps:
	https://datacentersupport.lenovo.com/tw/zh/products/storage/lenovo-storage/thinksystem- ds6200/4619/documentation/userguide
	(b) techniques used:
	Using INIT (Initialization process), Linear mode with RAID 1 to Zero out the drives
	(c) supported secure data deletion standard (if any):
	OR - Reference to other information: can also use oneCLI.exe to erase via
	https://datacentersupport.lenovo.com/us/en/solutions/Invo-center
RECYCL	ING DATA
B.1	Indicative weight range at component (a) Cobalt in the batteries (b) Neodymium in the HDDs
(3.3 (a) )	level, of the following critical raw materials:
	between 5 g and 25 g between 5 g and 25 g
B.2	above 25 above 25
(3.3 (b) )	(a) the type of operation; <i>Refer to the installation guide, use reverse process.</i>
	https://datacentersupport.lenovo.com/tw/zh/products/storage/lenovo-
	storage/d3284/6413/documentation/userguide
	<ul> <li>(b) the type and number of fastening technique(s) to be unlocked; <i>Refer to the installation guide.</i></li> <li>(c) the tool(s) required. <i>Phillips screwdriver, Flat blade screw driver, Hex driver, Torx driver, and Allen wrenches of</i></li> </ul>
	appropriate size
	OR - Reference to other information:
B.3	Firmware
	Reference to information on last available firmware: https://datacentersupport.lenovo.com/uu/en/products/storage/lenovo-storage/d3284/6413/downloads/driver-list/
	nips.//datacentersupport.ienovo.com/daten/products/storage/ienovo-storago/dozo+ro-ro/downloads/driver-list/
	After EOL'ed, firmware would be available at:
	https://download.lenovo.com/eol/index.html
Additional	information
Auunional	