



### 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	1 010 0110		
	Lenovo Taiwan Branch	Lenovo		
	8F., No. 66, Sanchong Rd.,			
	Nangang Dist., Taipei City, Zipcode: 11502			
	Rlin12@lenovo.com			
Internet site *	https://www.lenovo.com/us/en/sustainability-resources/			
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 *	ThinkSystem DM5100F			
Model number *	7D3K			
Issue date *	11/18/2022			
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

woder number *		7D3K	Lenc	WC	
Issue date *		11/18/2022	Lenc		тм
Product environmenta		mental attributes - Legal requirements	Require	ment	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*		s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), omofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1-	X		
		ethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum			
		ration values.			
P1.4*	<ul> <li>Products do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated terphenyl (PCT) in preparations (see legal reference).</li> </ul>				
P1.5*		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).			
P1.6*		th direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm²/week	$\boxtimes$		
		al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.			
P1.7*		Article 33 information about substances in articles is available at (add URL or mail contact):  vww.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure	$\boxtimes$		
DO			•		
<b>P2</b> P2.1*	Batterie			$\overline{}$	
P2.1"	symbol.	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)			Ш
P2.2*	Batteries reference	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See legal e)			
P2.3*	Batteries	and accumulators are readily removable. (See legal reference)	$\boxtimes$		
P2.4*	Docume	Occumentation includes the number of cycles the (secondary) battery can withstand. (See legal reference)			Ī
P2.5*		ternal batteries of a notebook computer cannot be "accessed and replaced by a nonprofessional			$\boxtimes$
Do		e related text is present and legible on the external packaging (see legal reference)			
<b>P3</b> P3.1*	The prod	nity verification & Eco design (ErP) duct is CE-marked to show conformance with applicable legal requirements (see legal reference).			
		laration of Conformity can be requested at:			
	https://v	vww.lenovo.com/us/en/compliance/eu-doc for EU			
		vww.lenovo.com/us/en/compliance/uk-doc for UK			
P3.2*		duct complies with the Eco design requirements for energy-related products, al reference).			
	, ,	d information is; given in item P15 or added to this document,			
	declarat	available at: https://www.lenovo.com/us/en/compliance/eco-			
P5		packaging	•		
P5.1*		ng and packaging components do not contain more than 0,01% lead, mercury, cadmium and			
	hexavale	ent chromium by weight of these together.			
P5.2*	used (se	kaging materials are marked with abbreviations and numbers indicating the nature of the material(s) e legal reference).		Ш	
P5.3*		luct packaging material is free from ozone depleting substances as specified in the Montreal Protocol al reference).	I		
		nt: Legal reference has no maximum concentration values.			
		nt information	•	•	

Information for recyclers/treatment facilities is available (see legal reference).

P6 P6.1

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 number *		7D3K	Logo	Lon		
Issue date *		11/18/2022		Len	OVC	D <sub>TH</sub>
	- Enviro	mental attributes - Market requirements (See General NOTE GN bonnental conscious design	pelow)	Require		
Item		tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	N/A
<b>P7</b> P7.1*		Disassembly, recycling t have to be treated separately are easily separable				
P7.1*		naterials in covers/housing have no surface coating.			<del>-</del>	
		<u> </u>			<del>-</del>	Щ.
P7.3*		arts > 100 g consist of one material or of easily separable materials.			<u></u>	Щ
P7.4*		arts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.			Ц_	
P7.5		arts are free from metal inlays or have inlays that can be removed with commonly a	vailable tools.	$\boxtimes$		
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).				
	Product					
P7.7*		g can be done e.g. with processor, memory, cards or drives		$\boxtimes$		
P7.8*	. 0	g can be done using commonly available tools		$\boxtimes$		
P7.9	Spare pa	rts are available after end of production for: 5 years				
P7.10	Service is	s available after end of production for: 5 years				
	Material	and substance requirements		·		
P7.11*	Material	cover/housing material type (e.g. plastics, metal, aluminum): type: <i>Metal (Steel)</i> Material type: <i>PC ABS</i> Materia	I type:			
P7.12	Insulation	n materials of external electrical cables are PVC free.			$\boxtimes$	
P7.13		n materials of internal electrical cables are PVC free.			$\boxtimes$	
P7.14	weight (1 polyvinyl	plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) br 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 in 25% post-consumer recycled content.	retardants, ar	ıd		
P7.15		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	en 🗌		
P7.16	Flame re Marking:	tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4:				
P7.17		nemical specifications of flame retardants in printed circuit boards > 25 g (without co additive) , TBBPA (reactive) (See NOTE B3), Other: chemical name:	mponents): CAS #:			
		nemical specifications of flame retardants in printed circuit boards (without compone g ISO 1043-4:	nts) > 25 g			
P7.18	concentr	ame retarded plastic parts > 25 g contain the following flame retardant substances ations above 0,1%: cal name: , CAS #: (See NOTE B4)	s/preparations	in 🔲		

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 <a href="http://www.ecma-international.org/publications/standards/Ecma-370.htm">http://www.ecma-international.org/publications/standards/Ecma-370.htm</a>.

CAS #:

, CAS #:

The source(s) for these classifications is/are found at (add URL(s)):

If YES; at least one of the two alternatives below shall be answered;

a percentage of total plastic by weight) is

The weight of recycled material is

Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:

Postconsumer recycled plastic material content is used in the product (See Note B6):

In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been

and Hazard statements:

Of total plastic parts' weight > 25 g, the postconsumer recycled plastic material content (calculated as

(See note B5)

Chemical name:
 Chemical name:

assigned the following Risk phrases;

P7.19

P7.20\*

or

b)

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 *	7D3K	Logo	Len	01/6	
Issue date *	11/18/2022		Len		ТН
Product environn	nental attributes - Market requirements (continued)		Requir	emen	t met
Item			Yes	No	N/A

		stance requirements					
P7.21*	Biobased plastic	material content is used	in the product (See No	OTE B7):			$\boxtimes$
	<ul> <li>If YES; at least one of the two alternatives below shall be answered;</li> <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> <li>or</li> <li>b) The weight of the biobased plastic material is g.</li> </ul>						
	, ,		· · · · · · · · · · · · · · · · · · ·				
P7.22*	If mercury is used	free from mercury, i.e. I specify: Number of lan	nps: and maxim	um mercury content pe			
P7.23*	If product includes an integral display, the total mercury content in the integrated display: mg						
P8	Batteries						
P8.1*		composition: Li-ion, Ma	ignesium Dioxide Litl	nium			
P9		otion (See NOTE B8)					
P9.1		e following power level			7		
Energy mo	de *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Standard for e modes and test method *	nergy	$\boxtimes$
Peak (On-I	mayl	W 100 V AC	W TIS VAC	W 230 V AC	Full load		
r can (On-i	max)	V V	V V	V V	7 un rodu		
Categor	<u>y</u>						
EPS No-loa		W	W	W			
	ower supply /						
	igged in the wall						
the product	isconnected from						
PTEC *	,	W	W	W			$\boxtimes$
	ergy Consumption						
ETEC *		kWh/year	kWh/year	kWh/year			$\boxtimes$
	ergy Consumption						
External Po	ower Supply Efficie	ncy Level (International	Efficiency Marking Pro	otocol) * :			$\boxtimes$
Display res	olution * : n	negapixels					$\boxtimes$
Default time	e to enter energy s	ave mode: minut	es				$\boxtimes$
P9.2*	Information about	the energy save function	on is provided with the	product.			$\boxtimes$
P9.3	Energy efficiency	class (monitors only):					X
P10	Emissions Noise emission	<ul> <li>Declared according to</li> </ul>	ISO 9296 (See NOTE	(RQ)	1	•	
P10.1		Mode description	100 3230 (000 140 12	Statistical upper limit A-weighted sound power level, $L_{WAG}$ (B)			
	Idle	* 35% loading		* 6.3			
		* 35% loading		* <b>6.4</b>			Ħ
'		Declared A-weighted sound	d pressure level (dB)	7.2 (operator position desktop – idle)			
0		$L_{pAm}$	<b>,</b>	7.2 (operator positio	m desktop – idie)		
		d pressure level (dB)	7.2 (operator position	on desktop – operating)			
	Measured accord	ing to: X ISO 7779	ECMA-74				
	ivicasureu accoru	Other	-	ECMA 74)			
	Electromagnetic		(only if not covered by	ECIVIA-14)			
P10.4		meets the requirement	for low frequency elec	tromagnetic fields of th	e following voluntary		
1 10.4	program(s):	mooto the requirement	. 131 13W Hoquerloy Cloc	a omagnotio notas of th	C 10.10.17 III VOIGITICITY		

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 <a href="http://www.ecma-international.org/publications/standards/Ecma-370.htm">http://www.ecma-international.org/publications/standards/Ecma-370.htm</a>

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

Model number *		7D3K					Logo	Long	VO	
Issue date *		11/18/2022						Leno	VO.	н
Product 6	environn	nental attributes	- Market requirem	ents (conti	nued)			Requirer	nent	met
Item			•	•	•			Yes	No	N/A
P12	Ergonor	nics for computing	products					•		•
P12.1*	The disp	ay meets the ergon	omic requirements of	ISO 9241-30	7 for visual displa	ay technolog	jies.			$\boxtimes$
P12.2*	The phys	ical input device me	ets the requirements	of ISO 9995	and ISO 9241-41	10.				$\boxtimes$
P13		ng and documenta								
P13.1*	Product packaging material type(s): Corrugate Product packaging material type(s): PE foam Product packaging material type(s): Wood Product packaging material type(s): Laminated LDPE/EPE weight (kg): 0.21  weight (kg): 0.81 weight (kg): 0.21									
P13.2*	Product	olastic primary packa	aging is free from PV	C.				$\boxtimes$		
P13.3*										
P13.4*	Specify media for user and product documentation (tick box):									
P13.5	(Please only complete this item if paper documentation used) User and product documentation on paper media is chlorine-free:  If Yes, please specify:									
	Totally chlorine-free  Elemental chlorine-free  Processed chlorine-free									
P14	Volunta	y programs								
P14.1	The proc	uct meets the requir	ements of the followi	ng voluntary	orogram(s):					
	Eco-labe Eco-labe	l:	Criteria version: Criteria version: Criteria version:	[	Date: Date: Date:	Product of Product of Product of	ategory:			
<b>P15</b>		al information (See			the tested are	lunt namfinu				
P9	Energy consumption of computer products; description of the tested product configuration:  NOTE: Supplier makes no representations, guarantees, assurances or warranties whether express or implied, regarding the information contained in this document. All information provided by supplier in this document is provided based on supplier's knowledge available at the time of completion, and supplier shall have no obligation to update such information. The information provided here is approximate and provided for informational purposes only. See a Lenovo Account Representative for more information.  See Energy Star Qualified Enterprise Servers for the latest information: <a href="https://www.energystar.gov/products/data">https://www.energystar.gov/products/data</a> center equipment/enterprise servers									

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	

Control information					
Commercial name (3.1 (b))	ThinkSystem DM5100F	Logo			
Contact Address (3.1 (b) )	Lenovo DCG Storage Development				
	Rick Lin				
	Lenovo Taiwan Branch				
	8F., No. 66, Sanchong Rd.,	Lanava			
	Nangang Dist., Taipei City, Zipcode: 11502	Lenovo.			
	Rlin12@lenovo.com				
Model Number (3.1 (c) )	7D3K				
Issue Date	11/18/2022				
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	Server type Rack Server High Performance Computing (HPC)
(3.1 (a))	☐ 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	Product model part of a server product family? No Yes
(3.1 (p))	List of all model configurations that are represented by the model:
1.e	Information on the secure data deletion functionality
(3.1 (n))	(a) instructions on how to use the functionality:
	(b) techniques used:
	(c) supported secure data deletion standard (if any):  OR - Reference to other information:
1.f	Blade servers? No Yes
(3.1 (o))	list of recommended combinations with compatible chassis:
Recyclin	
2.a	Indicative weight range at component level, of the (a) Cobalt in the batteries (b) Neodymium in the HDDs
(3.3 (a))	following critical raw materials:
	between 5 g and 25 g between 5 g and 25 g
	above 25 g
2.b	Instructions on the disassembly operations
(3.3 (b))	(a) the type of operation;
	(b) the type and number of fastening technique(s) to be unlocked;
	(c) the tool(s) required.
	OR - Reference to other information:
2.c	Firmware
	Reference to information on last available firmware:
Additiona	l information

### **DATA STORAGE PRODUCTS**

Commercial name (3.2 (b) )	ThinkSystem DM5100F	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))	7D3K	
Issue Date	11/18/2022	
Additional information		

Product 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 (3.2 (a))	Data Storage type  Online Data Storage Product  Small Data Storage Product  Large Data Storage Product  Other:
A.3 (3.2 (d))	Year of manufacture: 2023
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 Single-output 10% 90.4 20% 94.7 50% 96.1 100% 95.2 Average 94.1
A.5 (3.2 (f) )	Power factor at 50 % of the rated load level (rounded to three decimal places)  0.990
A.6 (3.2 (g))	Operating condition class A1 A2 A3 A4 (as defined in Table 6 or ErP lot 9)
	Exception comments
	This product has been tested in order to verify that it will function within the boundaries (such as temperature and humidity) of the declared operating condition class.
A.6	Information on the secure data deletion tool(s)
(3.2 (h))	<ul> <li>(a) instructions on how to use the functionality: Follow DM series security hardening guide for ontap9 via https://download.lenovo.com/storage/lenovo_dm_series_security_hardening_guide_for_ontap9.pdf from datacenter support</li> <li>(b) techniques used:</li> </ul>
	ONTAP 9 feature:  1) Securely purges the deleted files on vol1 on SVM vs1: cluster1::> volume encryption secure-purge start -vserver vs1 -volume vol1
	<ol> <li>Overridden by entering the following command: (Starting from Ontap 9.7)     cluster1::*&gt; options -option-name encryption.data_at_rest_encryption.disable_by_default true</li> </ol>
	(c) supported secure data deletion standard (if any): Secure Erase/block Erase/Crypto Erase, Sanitize
	OR - Reference to other information:
RECYCL	ING DATA
B.1 (3.3 (a))	Indicative weight range at component (a) Cobalt in the batteries (b) Neodymium in the HDDs level, of the following critical raw
	materials: Less than 5 g Less than 5 g
	between 5 g and 25 g between 5 g and 25 g
B.2	above 25 above 25 Instructions on the disassembly operations
(3.3 (b))	(a) the type of operation; Refer to the installation guide, use reverse process.  https://datacentersupport.lenovo.com/tw/zh/products/storage/lenovo-storage/thinksystem-dm5100h/7d3k/documentation
	<ul> <li>(b) the type and number of fastening technique(s) to be unlocked; Refer to the installation guide.</li> <li>(c) the tool(s) required. Phillips screwdriver, Flat blade screw driver, Hex driver, Torx driver, and Allen wrenches of appropriate size</li> </ul>
	OR - Reference to other information:
B.3	Firmware
	Deference to information on lost available firmware:
	Reference to information on last available firmware: