



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			
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	langang 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 *	DM600S			
Model number *	7Y43			
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

Model number *		7Y43	Logo	Lan		
Issue date *		01/15/2020		Lend) _{TM}
Product	environ	mental attributes - Legal requirements		Require	men	t met
Item				Yes	No	N/A
P1		ous substances and preparations				
P1.1*	Products	do comply with current European RoHS Directive. (See legal reference and NOTE	B1)	\boxtimes		
P1.2*		do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.		\boxtimes		
P1.3*	hydrobro trichloroe	do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), omofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrach ethane, methyl bromide (see legal reference). Comment: Legal reference has no mation values.				
P1.4*		do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychol (PCT) in preparations (see legal reference).	lorinated			
P1.5*	Products	odo not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 cart ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	oon atoms in th	e 🔀		
P1.6*	(see lega	h direct and prolonged skin contact do not release nickel in concentrations above 0 al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	,5 μg/cm²/weel	(
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail oww.lenovo.com/us/en/sustainability-resources	contact):			
P2	Batterie	s				
P2.1*		duct contains a battery or an accumulator, the battery/accumulator is labeled with t Information on proper disposal is provided in user manual. (See legal reference)	he disposal			\boxtimes
P2.2*	Batteries reference	or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadme)	ium. (See lega	I		
P2.3*	Batteries	and accumulators are readily removable. (See legal reference)				\boxtimes
P2.4*	Docume	ntation includes the number of cycles the (secondary) battery can withstand. (See le	egal reference)			X
P2.5*		ternal batteries of a notebook computer cannot be "accessed and replaced by a nor 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 leg- laration of Conformity can be requested at: https://www.lenovo.com/us/en/complian		\boxtimes		
P3.2*	The prod	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, available at: https://www.lenovo.com/us/en/compliance/e	an declaration			
P5	Product	packaging	co-deciaration			
P5.1*	Packagir	ng and packaging components do not contain more than 0,01% lead, mercury cent chromium by weight of these together.	/, cadmium an	d 🔀		
P5.2*	The pack	Raging materials are marked with abbreviations and numbers indicating the nature of elegal reference).	of the material(s) 🔀		
P5.3*	The prod (see lega	luct packaging material is free from ozone depleting substances as specified in the Mal reference).	Iontreal Protoc	ol 🔀		
D6		nt: Legal reference has no maximum concentration values. nt information				
P6	reatme	III IIIIOIIIIauofi				

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.

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

P6.1*

Model number *	7Y43	Logo	Lanava
Issue date *	01/15/2020		Lei IOVO.

Product	environmental attributes - Market requirements (See General NOTE GN below)			
		Require	ment	met
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	Yes	No	N/A
P7	Design, Disassembly, recycling			
P7.1*	Parts that have to be treated separately are easily separable			
P7.2*	Plastic materials in covers/housing have no surface coating.	\boxtimes		
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.	\boxtimes		
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.			
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.	\boxtimes		
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	\boxtimes		
	Product lifetime			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives			
P7.8*	Upgrading can be done using commonly available tools			
P7.9	Spare parts are available after end of production for: 5 years			
P7.10	Service is available after end of production for: 5 years			
	Material and substance requirements			
P7.11*	Product cover/housing material type (e.g. plastics, metal, aluminum):			
	Material type: Metal (Steel) Material type: PC ABS Material type:			
P7.12	Insulation materials of external electrical cables are PVC free.	<u>_</u>	\boxtimes	
P7.13	Insulation materials of internal electrical cables are PVC free.		\boxtimes	
P7.14	External plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) bromine and 0,1%			
	weight (1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants, and polyvinyl chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in parts containing			
	more than 25% post-consumer recycled content.	,		
P7.15	Printed circuit boards, PCBs (without components) are low halogen: all PCBs > 25 g are low haloger	, <u> </u>	\boxtimes	
	as defined in IEC 61249-2-21. (See ⁵ NOTE B2)	_		_
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: Marking:			
P7.17	Alt. 1: Chemical specifications of flame retardants in printed circuit boards > 25 g (without components):			
	TBBPA (additive) , TBBPA (reactive) (See NOTE B3), Other: chemical name: , CAS #:			\boxtimes
	Alt. 2: Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g			
	according ISO 1043-4: Only MIDPLANE,440.7MMX81.7MM,6.38MM" includes halogen. All other PCBs			
	are halogen free.			
P7.18	Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in	ı		
	concentrations above 0,1%: 1. Chemical name: , CAS #: (See NOTE B4)			
	2. Chemical name: , CAS #: "(SSSTVSTEBT)			
	3. Chemical name: , CAS #: "			
	Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:			
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been			
	assigned the following Risk phrases; and Hazard statements:			
	The source(s) for these classifications is/are found at (add URL(s)): , (See note B5)			
P7.20*	Postconsumer recycled plastic material content is used in the product (See Note B6):		\boxtimes	
	If YES; at least one of the two alternatives below shall be answered;			
	a) Of total plastic parts' weight > 25 g, the postconsumer recycled plastic material content (calculated as			
	a percentage of total plastic by weight) is %.			
	or			
	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 http://www.ecma-international.org/publications/standards/Ecma-370.htm.

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 *	7Y43	Logo	Lonovo
Issue date *	01/15/2020		Lei IOVO,

Product environmental attributes - Market requirements (continued)	Requi	remer	nt met
Item	Yes	No	N/A

		bstance requirements (
P7.21*	Biobased plastic	material content is used	in the product (See N	OTE B7):		\leq			
	 If YES; at least one of the two alternatives below shall be answered; a) Of total plastic parts' weight > 25 g, the biobased plastic material content (calculated as a percentage of total plastic by weight) is %. or 								
D7.00*									
P7.22*	U	Light sources are free from mercury, i.e. less than 0,1 mg/lamp. If mercury is used specify: Number of lamps: and maximum mercury content per lamp: mg							
P7.23*		es an integral display, the				X			
P8	Batteries		-						
P8.1*	Battery chemical	composition:				\overline{X}			
P9		ption (See NOTE B8)				_			
P9.1	For the product t	he following power levels	s or energy consumption	ons are reported:					
Energy mo	de *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Standard for energy modes and test method *				
Peak (On-i	max)	W	W	1130 W	Full load				
Category	v								
EPS No-loa		W	W	W					
	ower supply /								
	gged in the wall								
	isconnected from								
the product	I.)	W	W	W		7			
— -	ergy Consumption		VV	VV					
ETEC *	orgy Consumption	kWh/year	kWh/year	kWh/year	<u> </u>	₹			
Annual Ene	ergy Consumption	,	•	·					
External Po	ower Supply Efficie	ency Level (International	Efficiency Marking Pro	otocol) * :					
Display res	olution * :	megapixels				<			
Default time	e to enter energy	save mode: minut	es			₹ <u></u>			
P9.2*	Information abou	t the energy save function	on is provided with the	product.		<u> </u>			
P9.3	Energy efficiency	class (monitors only):				₫			
P10	Emissions								
		 Declared according to 	ISO 9296 (See NOTE	<u> </u>					
P10.1	Mode Idle	Mode description		• • • • • • • • • • • • • • • • • • • •	t A-weighted sound power level, LwA,c (B)	_			
	1	* 35% loading		* 7.2		<u></u>			
	Operation	* 80% loading	1	* 8.5	<u>L</u>				
	Other mode	Declared A-weighted sound $L_{p m Am}$	d pressure level (dB)	(operator pos	sition desktop – idle)				
	Other mode	Declared A-weighted sound $L_{p m Am}$	d pressure level (dB)	(operator position desktop – operating)					
	Measured accord	ding to: X ISO 7779	ECMA-74	•					
			only if not covered by	ECMA-74)					
	Electromagneti		<u> </u>	<u>,</u>					
P10.4		y meets the requirement	for low frequency elec	tromagnetic fields of th	e following voluntary	\boxtimes			
	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 http://www.ecma-international.org/publications/standards/Ecma-370.htm

NOTE B9 A Guidance document on Acoustic Noise is available;

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

Model nu	mber *	7Y43				Logo	Leno	MO	
Issue date	Issue date * 01/1						Lello	VU	тм
Product	environn	nental attribute	es - Market requirem	nents (continu	ed)		Require	ment	met
Item							Yes	No	N/A
P12	Ergonor	mics for computi	ing products						
P12.1*	The disp	lay meets the erg	onomic requirements of	f ISO 9241-307 f	or visual display techn	ologies.			
P12.2*	The phys	sical input device	meets the requirements	s of ISO 9995 an	d ISO 9241-410.				\boxtimes
P13		ng and documer							
P13.1*	Product Product Product Product	packaging materi packaging materi packaging materi packaging materi packaging materi	al type(s): PE Foam al type(s): Corrugate al type(s): PE Film al type(s): Wood al type(s): Laminated L al type(s): PP Harden F		.21 25 .20				
P13.2*	Product	plastic primary pa	ckaging is free from PV	/C.			\boxtimes		
P13.3*		duct primary corruer recovered fiber	ugated fiberboard pack content: 35 %	aging, specify t	ne contained percenta	age of minimum	post-		
P13.4*	Specify r		d product documentation Other	on (tick box):					
P13.5	Ùser and If Yes, p Totally c	d product docume lease specify: hlorine-free	s item if paper documen entation on paper media						
	Element	al chlorine-free							
	Processe	ed chlorine-free							
P14		ry programs							
P14.1	·	Y STAR® el:	quirements of the followi Criteria version: Criteria version: Criteria version:	ing voluntary pro Dat Dat Dat	e: Produ e: Produ	act category: act category: act category:			
P15		nal information (
P9			computer products; d	lescription of th	e tested product con	figuration:			
	NOTE: S the info supplier informa Accoun	Supplier makes r rmation containe r's knowledge av tion. The informa t Representative	no representations, gued in this document. A railable at the time of cation provided here is for more information.	larantees, assul Ill information p completion, and approximate al	rances or warranties rovided by supplier i I supplier shall have i nd provided for inform	whether expres in this documen no obligation to	t is provided l update such	based	d on
P9			ed Enterprise Servers t gov/products/data cer						

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))	DM600S	Logo	
Contact Address (3.1 (b))			
Model Number (3.1 (c))	7Y43		Lenovo
Issue Date	01/15/2020		
Additional information			

	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 uin 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 List of all model configurations that are represented by the model:
1.e (3.1 (n))	Information on the secure data deletion functionality (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 (3.1 (o))	Blade servers? No Yes list of recommended combinations with compatible chassis:
Recycling	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 less than 5 g between 5 g and 25 g above 25 g (b) Neodymium in the HDDs above 25 g
2.b (3.3 (b))	Instructions on the disassembly operations (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:
Additional	information

DATA STORAGE PRODUCTS

2.11.7.0.10.10.10.10		
Commercial name (3.2 (b))	DM600S	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))	7Y43	
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 (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: 2018		
A.4 (3.2 (e))	PSU efficiency at 10 % (if applicable), 20 %, 50 % and 100 % of rated output power (expressed in % and rounded to the first decimal place): Multi-output Single-output 10% 20% 91.9 50% 94.4 100% 93.4 Average		
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 (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 (3.2 (h))	Information on the secure data deletion tool(s) (a) instructions on how to use the functionality: https://download.lenovo.com/storage/lenovo_dm_series_security_hardening_guide_for_ontap9.pdf (b) techniques used: ONTAP 9 feature: 1) Securely purges the deleted files on vol1 on SVM vs1: cluster1::> volume encryption secure-purge start -vserver vs1 -volume vol1 2) Overridden by entering the following command: (Starting from Ontap 9.7) cluster1::*> options -option-name encryption.data_at_rest_encryption.disable_by_default true (c) supported secure data deletion standard (if any): Secure Erase/block Erase/Crypto Erase, Sanitize		
	OR - Reference to other information: https://www.netapp.com/us/media/tr-4569.pdf		
	ING DATA		
B.1 (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 less than 5 g less than 5 g		
B.2 (3.3 (b))	Instructions on the disassembly operations (a) the type of operation; Refer to the installation guide, use reverse process. https://datacentersupport.lenovo.com/tw/zh/products/storage/lenovo-storage/thinksystem- DM600S/TY43/documentation (b) the type and number of fastening technique(s) to be unlocked; Refer to the installation guide. (c) the tool(s) required. Phillips screwdriver, Flat blade screw driver, Hex driver, Torx driver, and Allen wrenches of 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/thinksystem-DM600S/7Y43/downloads/driver-list/component?name=Product%20Firmware After EOL'ed, firmware would be available at: https://download.lenovo.com/eol/index.html		
Additional	information		
1			