



## 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	1		
Contact information *	Lenovo DCG Storage Development			
e-mail address	Rick Lin			
	Lenovo Taiwan Branch			
	8F., No. 66, Sanchong Rd.,			
	Nangang Dist., Taipei City, Zipcode: 11502			
	Rlin12@lenovo.com			
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			

	based on product specification or test results based obtained from sample testing), that the product nts given in this declaration.
Type of product *	Data Storage
Commercial name *	DE120S
Model number *	7Y63
Issue date *	02/28/2020
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 *		7Y63	Logo	Lon		
Issue date *		02/28/2020		Lend	OVC	<b>)</b> <sub>TM</sub>
Product	environ	mental attributes - Legal requirements		Require	men	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*	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	$\boxtimes$		
P1.5*	Products	do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carb ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	on 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/cm <sup>2</sup> /weel	k 🔀		
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			
P2.2*		or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadm	iium. (See lega	I		
P2.3*	Batteries	and accumulators are readily removable. (See legal reference)				X
P2.4*	Docume	ntation includes the number of cycles the (secondary) battery can withstand. (See le	egal reference)		$\overline{\Box}$	$\overline{\boxtimes}$
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	Conforn	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				
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,	on declaration			
P5	Droduct	available at: https://www.lenovo.com/us/en/compliance/e	co-declaration			
P5.1*	Packagir	packaging ng and packaging components do not contain more than 0,01% lead, mercury	/, cadmium ar	nd 🔀		
P5.2*		ent chromium by weight of these together.	of the meterial	0)	_	
	used (se	kaging materials are marked with abbreviations and numbers indicating the nature of elegal reference).	•	,	<u>Ц</u>	
P5.3*	(see lega	luct packaging material is free from ozone depleting substances as specified in the Mal reference). In the control of the Mal reference has no maximum concentration values.	Iontreal Protoc	ol 🔀		
P6		nt information				
10	ricatille	iit iiioiiiiauoii				

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 *	7Y63	Logo	Lonovo
Issue date *	02/28/2020		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			<u>Ц</u>
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	$\boxtimes$		
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.		$\boxtimes$	Щ
P7.13	Insulation materials of internal electrical cables are PVC free.			
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 halogen as defined in IEC 61249-2-21. (See <sup>5</sup> NOTE B2)	1 <u> </u>		
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 #:			
	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			
	concentrations above 0,1%:			$\boxtimes$
	1. Chemical name: , CAS #: (See NOTE B4)	_		_
	2. Chemical name: , CAS #: " 3. Chemical name: , CAS #: "			
	·			
	Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:			$\square$
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been			$\boxtimes$
	assigned the following Risk phrases; and Hazard statements:			
D7 20*	The source(s) for these classifications is/are found at (add URL(s)): , (See note B5)  Postconsumer recycled plastic material content is used in the product (See Note B6):			
P7.20*	rostonisumer recycled plastic material content is used in the product (see Note Bo).		$\boxtimes$	Ш
	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.			
	-,go, o 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 <a href="http://www.ecma-international.org/publications/standards/Ecma-370.htm">http://www.ecma-international.org/publications/standards/Ecma-370.htm</a>.

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 *	<b>7Y63</b>	Logo	Lanava
Issue date *	02/28/2020		Lei IOVO.

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

	Material and su	bstance requirements	(continued)						
P7.21*	Biobased plastic	material content is used	in the product (See N	OTE B7):					
	If YES; at least of	ne of the two alternative	s below shall be answe	ered;					
	<ul> <li>a) Of total plastic parts' weight &gt; 25 g, the biobased plastic material content (calculated as a percentage of</li> </ul>								
	•	by weight) is %.							
	or b) The weight of the biobased plastic material is g.								
P7.22*	Light sources are free from mercury, i.e. less than 0,1 mg/lamp.								
' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	U	d specify: Number of lan	, , ,	um mercury content pe					
P7.23*	If product include	es an integral display, the	e total mercury content	in the integrated displa	ay: mg 🗌 🔀				
P8	Batteries								
P8.1*	Battery chemical	composition:							
P9		ption (See NOTE B8)							
P9.1	For the product t	he following power level		ons are reported:					
Energy mo	de *	Power level at	Power level at	Power level at	Reference/Standard for energy				
Deels (On		100 V AC	115 V AC	230 V AC	modes and test method *				
Peak (On-	max)	<b>510</b> W	<b>510</b> W	<b>507</b> W	Full load				
Categor	y								
EPS No-lo		W	W	W					
	ower supply /								
	igged in the wall								
	lisconnected from								
the produc	ι.)	W	W	W					
_	ergy Consumption		VV	***					
ETEC *	- <b>37</b>	kWh/year	kWh/year	kWh/year					
	ergy Consumption	•	•	,					
External P	ower Supply Efficie	ency Level (International	Efficiency Marking Pro	otocol) * :					
Display res	solution * :	negapixels							
Default tim	e to enter energy	save mode: minut	tes						
P9.2*	Information abou	t the energy save function	on is provided with the	product.					
P9.3	Energy efficiency	class (monitors only):							
P10	Emissions								
	Noise emission	<ul> <li>Declared according to</li> </ul>	ISO 9296 (See NOTE	B9)					
P10.1	Mode	Mode description			t A-weighted sound power level, L <sub>WA,c</sub> (B)				
	Idle	* 35% loading		* 6.3					
	Operation	* 35% loading		* 6.4					
	Other mode	Declared A-weighted sound	d pressure level (dB)	8.5 (operator position	on desktop – idle)				
		$L_{pAm}$							
	Other mode	Declared A-weighted sound	d pressure level (dB)	8.5 (operator position	on desktop – operating)				
		$L_{pAm}$							
	Measured accord	ding to: 🔀 ISO 7779 🗌	ECMA-74						
		Other	(only if not covered by	ECMA-74)					
	Electromagneti								
P10.4		y meets the requirement	t for low frequency elec	ctromagnetic 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;

 $see \ \underline{http://www.ecma-international.org/publications/standards/Ecma-370.htm}$ 

Model number *		7Y63					Logo	Long	V/0	
Issue date *		02/28/2020						Leno	VU	тн
Product	environn	nental attribut	es - Market requiren	ments (conti	nued)			Require	ment	met
Item			•	•	•			Yes	No	N/A
P12	Ergonor	mics for comput	ing products							
P12.1*	The disp	lay meets the er	gonomic requirements o	of ISO 9241-30	7 for visual disp	olay technolo	gies.			$\boxtimes$
P12.2*	The phys	sical input device	meets the requirements	ts of ISO 9995	and ISO 9241-4	<b>1</b> 10.				
P13	Packagi	ng and docume	ntation							
P13.1*	Product Product Product	packaging mater packaging mater packaging mater	ial type(s): PE Foam ial type(s): Corrugate ial type(s): PE Film ial type(s): Wood ial type(s): Laminated L	weight (kg): weight (kg): weight (kg): weight (kg): LDPE/EPE we	4.08 0.25 8.85					
P13.2*	Product	plastic primary pa	ackaging is free from PV	VC.				$\boxtimes$		
P13.3*		luct primary correr recovered fibe	rugated fiberboard pack r content: <b>35</b> %	kaging, specify	the contained	percentage	of minimum	post-		
P13.4*		media for user ar ronic, Paper,	nd product documentation Other	on (tick box):						
P13.5	Ùser and		s item if paper documer entation on paper media		e:					
	•	hlorine-free								
		al chlorine-free								
	Processe	ed chlorine-free								
P14		ry programs								
P14.1	The prod	duct meets the re	quirements of the follow	ving voluntary p	rogram(s):					
	ENERG` Eco-labe Eco-labe		Criteria version: Criteria version: Criteria version:	D	ate: ate: ate:	Product	category: category: category:			
P15	Addition	nal information (	See NOTE B10)							
P9		•	computer products; a	•						
	the info supplier informa Accoun	rmation contain r's knowledge a tion. The inform t Representative	no representations, gued in this document. A vailable at the time of a ation provided here is a for more information.	All information completion, as approximate n.	provided by s nd supplier sh and provided	supplier in t all have no	his document obligation to	t is provided i update such	based	d on
P9	See Energy Star Qualified Enterprise Servers for the latest information: <a href="https://www.energystar.gov/products/data-center-equipment/enterprise-servers">https://www.energystar.gov/products/data-center-equipment/enterprise-servers</a>									

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))	DE120S	Logo	
Contact Address (3.1 (b) )			
Model Number (3.1 (c))	7Y63		Lenovo
Issue Date	02/28/2020		
Additional information			

Product e	environmental attributes (EU) 2019/424 – Annex II points 3.1 and 3.3						
1.a	Is product considered 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 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							
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**

Commercial name (3.2 (b) )	DE120S	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))	7Y63	
Issue Date	02/28/2020	
Additional information		

Product e	environmental attributes (EU) 2019/424 – Annex II points 3.2 and 3.3		
A.1	Is product considered to be in scope of ErP Lot 9 🔀 in scope 🗌 out of scope Product is out of scope as:		
A.2	Data Storage type		
(3.2 (a) )	Large Data Storage Product Other:		
A.3 (3.2 (d))	Year of manufacture: 2018		
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		
	10% 20% 91.8 50% 94.2 100% 92.9 Average		
A.5 (3.2 (f))	Power factor at 50 % of the rated load level (rounded to three decimal places)  0.981		
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	Information on the secure data deletion tool(s)		
(3.2 (h))	(a) instructions on how to use the functionality:		
	Follow SecureDataDeletion README starting with SANtricity 11.50.3R1P1,		
	https://datacentersupport.lenovo.com/us/zc/products/storage/lenovo-storage/thinksystem- de120s/7y63/documentation		
	(b) techniques used:		
	Python script to purge all user data		
	(c) supported secure data deletion standard (if any):		
	OR - Reference to other information: SecureDataDeletion README and run .py accordingly via https://drive.google.com/open?id=1EZ1QLbbM4w8zeUIRwJ-J8iF-AS2VwKOt		
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		
	above 25 above 25		
B.2	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/us/zc/products/storage/lenovo-storage/thinksystem- de120s/7y63/documentation		
	(b) the type and number of fastening technique(s) to be unlocked; <i>Refer to the installation guide</i> .		
	(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		
2.0			
	Reference to information on last available firmware:		
	https://datacentersupport.lenovo.com/us/zc/products/storage/lenovo-storage/thinksystem-de120s/7y63/downloads/driver-list/		
	After EOL'ed, firmware would be available at:		
	https://download.lenovo.com/eol/index.html		
Additional	information		
1			