



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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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 *	DE6000F				
Model number *	7Y79				
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 *		7Y79	Logo	Lon			
Issue date *		02/28/2020		Len	JVC) _{TM}	
Product	Product environmental attributes - Legal requirements R				ement	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*	Products do not contain Asbestos (see legal reference). Comment: Legal reference has no maximum concentration value.						
P1.3*	v						
P1.4*		do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlor (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).	oon atoms in th	ie 🔀			
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/wee	k 🔀			
P1.7*		Article 33 information about substances in articles is available at (add URL or mail oww.lenovo.com/us/en/sustainability-resources	contact):	\boxtimes			
P2	Batterie	·					
P2.1*	If the pro	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	ium. (See lega	al 🔀			
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		\top	\Box	
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)	nprofessional				
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					
P3.2*	The prod	duct complies with the Eco design requirements for energy-related products, al reference).		\boxtimes			
	Required	d information is; given in item P15 or added to this document, available at: https://www.lenovo.com/us/en/compliance/e	no doclaration				
P5	Product	packaging	-co-u c ciai au011				
P5.1*	Packagii	ng and packaging components do not contain more than 0,01% lead, mercury cent chromium by weight of these together.	, cadmium ar	nd 🔀			
P5.2*	The pac	Reging materials are marked with abbreviations and numbers indicating the nature of elegal reference).	of the material(s) 🔀			
P5.3*	The prod	e legal reference). luct packaging material is free from ozone depleting substances as specified in the N al reference). nt: Legal reference has no maximum concentration values.	ontreal Protoc	ol 🔀			
P6		nt information					
ru	rreaune	iii iiioiiiauoli					

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 *	7Y79	Logo	Lanava
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			
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.	\boxtimes		
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	\boxtimes		
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: <i>Metal (Steel)</i> Material type: <i>PC ABS</i> Material type:			
P7.12	Insulation materials of external electrical cables are PVC free.		\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 halogen		\boxtimes	
	as defined in IEC 61249-2-21. (See ⁵ NOTE B2)	ш		
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	\boxtimes		Ш
P7.18	is halogen free. Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in			
F1.10	concentrations above 0.1%:			
	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:			
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:			
	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 *	7Y79	Logo	Lanava
Issue date *	02/28/2020		Lei IOVO.

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

D7 04*		bstance requirements		OTE DZ\.						
P7.21*	Biobased plastic	material content is used	in the product (See N	OTE B7):						
		one of the two alternative								
		stic parts' weight > 25 g,	the biobased plastic m	aterial content (calcula	ted as a percentage of					
	•	by weight) is %.								
	or b) The weight of the biobased plastic material is g.									
P7.22*										
1 7.22	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*	If product includes an integral display, the total mercury content in the integrated display: mg									
P8	Batteries									
P8.1*		composition: Magnesiu	ım Dioxide Lithium							
P9	•	ption (See NOTE B8)								
P9.1		he following power level	s or energy consumption	ons are reported:						
Energy mo	de *	Power level at	Power level at	Power level at	Reference/Standard for energy					
3,		100 V AC	115 V AC	230 V AC	modes and test method *					
Peak (On-	max)	462 W	458 W	445 W	Full load					
0-1										
Categor		1	1	T						
EPS No-loa		W	W	W						
	ower supply / ligged in the wall									
	lisconnected from									
the product										
PTEC *	,	W	W	W						
Typical En	ergy Consumption									
ETEC *		kWh/year	kWh/year	kWh/year						
	ergy Consumption		-							
External Po	ower Supply Effici	ency Level (International	Efficiency Marking Pro	otocol) * :						
Display res	olution * :	megapixels								
Default tim	e to enter energy	save mode: minu	tes							
P9.2*	Information abou	it the energy save function	on is provided with the	product.						
P9.3		y class (monitors only):	· · · · · · · · · · · · · · · · · · ·	<u> </u>						
P10	Emissions	, class (e.mers e),								
. 10		- Declared according to	ISO 9296 (See NOTE	B9)						
P10.1	Mode	Mode description	(t A-weighted sound power level, L _{WA,c} (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 deskton – idle)					
	Other mode	L_{pAm}	, , , , , , , , , , , , , , , , , , , ,	o.o (operator positio	on acsitop – late)					
	Other mode	Declared A-weighted soun	d pressure level (dB)	8.5 (operator position	on desktop – operating)					
	L_{pAm}									
	Measured accor	ding to: X ISO 7779	ECMA-74	•						
		Other	(only if not covered by	FCMA-74)						
	Electromagneti		(Sing it flot obvoice by	LOMA IT						
P10.4		y meets the requirement	t 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 http://www.ecma-international.org/publications/standards/Ecma-370.htm

NOTE B9 A Guidance document on Acoustic Noise is available;

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

woder number		7Y79				Logo	Leno	1/0	
Issue date *		02/28/2020					Lenc		TM
Product	environn	mental attributes	- Market requiren	ments (con	tinued)		Require	ment	met
Item							Yes	No	N/A
P12	Ergonor	mics for computing	g products						
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.								\boxtimes
P12.2*	The phys	sical input device m	eets the requirement	ts of ISO 999	5 and ISO 9	241-410.			\boxtimes
P13	Packagi	ing and document	ation						
P13.1*	Product Product Product Product	packaging material packaging material packaging material	type(s): Corrugate type(s): PE Film type(s): Wood type(s): Laminated L): 4.08)): 0.25)): 8.85	0.01			
P13.2*	Product	plastic primary pacl	kaging is free from P\	VC.			\boxtimes		
P13.3*		duct primary corruger recovered fiber co		kaging, spec	cify the conta	ained percentage of minimun	n post-		
P13.4*			product documentation	on (tick box):					
P13.5	Ùser and	•	tem if paper documer ation on paper media	,					
	,	hlorine-free al chlorine-free							
	Processo	ed chlorine-free							
P14	Volunta	ry programs							
P14.1			irements of the follow	ving voluntar	y program(s)	:			
	Eco-labe Eco-labe	el:	Criteria version: Criteria version: Criteria version:		Date: Date: Date:	Product category: Product category: Product category:			
P15		nal information (Se							
P9						d product configuration:			
	the info	rmation contained	in this document. A	All informati	on provided	or warranties whether expre I by supplier in this docume or shall have no obligation t	nt is provided	based	

information. The information provided here is approximate and provided for informational purposes only. See a Lenovo

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.

Account Representative for more information.

See Energy Star Qualified Enterprise Servers for the latest information: https://www.energystar.gov/products/data_center_equipment/enterprise_servers

P9

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

02/28/2020

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

SERVERS

Issue Date

Additional information

General information			
Commercial name (3.1 (b))	DE6000F	Logo	
Contact Address (3.1 (b))			
Model Number (3.1 (c))	7Y79		enovo

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	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 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

27.117.01.01.01.01.01.01.01.01.01.01.01.01.01.		
Commercial name (3.2 (b))	DE6000F	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))	7Y79	
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 consider edto 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 Single-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		
A.6	(rounded to three decimal places) Operating condition class A1 A2 A3 A4		
(3.2 (g))	(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 Secure Data Deletion README, starting from SANtricity 11.50.3R1P1 via		
	https://datacentersupport.lenovo.com/us/zc/products/storage/lenovo-storage/thinksystem-		
	de6000f/7y79/documentation		
	(b) techniques used:		
	Python script to purge all user data		
	(c) supported secure data deletion standard (if any):		
	OR - Reference to other information: Go through SecureDataDeletion README and run .py accordingly via		
	https://drive.google.com/open?id=1EZ1QLbbM4w8zeUIRwJ-J8iF-AS2VwKOt		
	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:		
	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-		
	de6000f/7y79/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/us/zc/products/storage/lenovo-storage/thinksvstem-de6000f/7v79/downloads/driver-list/		
	After EOL'ed, firmware would be available at:		
	https://download.lenovo.com/eol/index.html		
Additional	information		
Additional			