

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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	Lenovo Taiwan Branch	Lenovo
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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 *	DE6000H			
Model number *	7Y80			
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.

modern	umber *	7Y80 Logo				
lssue da	ite *	02/28/2020	Lene		Тм	
Produc	t environ	mental attributes - Legal requirements	Require	ment	met	
Item			Yes	No	N/A	
P1	Hazardo	ous substances and preparations				
P1.1*	Product	s do comply with current European RoHS Directive. (See legal reference and NOTE B1)	\square			
P1.2*		s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.	\square			
P1.3*	hydrobro trichloro	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), omofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1- ethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum ration values.				
P1.4*		s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated /I (PCT) in preparations (see legal reference).	\boxtimes			
P1.5*	Product	s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the ontaining at least 48% per mass of chlorine in the SCCP (see legal reference).	e 🖂			
P1.6*	Parts wi (see leg	th direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm²/week al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.				
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail contact): www.lenovo.com/us/en/sustainability-resources				
P2	Batterie	S				
P2.1*		oduct contains a battery or an accumulator, the battery/accumulator is labeled with the disposal Information on proper disposal is provided in user manual. (See legal reference)	\boxtimes			
P2.2*	Batterie	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See legal e)	\boxtimes			
P2.3*	Batterie	s and accumulators are readily removable. (See legal reference)	\boxtimes			
P2.4*	Docume	ntation includes the number of cycles the (secondary) battery can withstand. (See legal reference)			Π	
P2.5*	When internal batteries of a notebook computer cannot be "accessed and replaced by a nonprofessional					
P3		nity verification & Eco design (ErP)				
P3.1*		duct is CE-marked to show conformance with applicable legal requirements (see legal reference). claration of Conformity can be requested at: <u>https://www.lenovo.com/us/en/compliance/eu-doc</u>	\boxtimes			
P3.2*	•	duct complies with the Eco design requirements for energy-related products, al reference).	\square			
	Require	d information is; given in item P15 or added to this document, available at: https://www.lenovo.com/us/en/compliance/eco-declaration	\boxtimes			
	Product	t packaging				
P5						
P5 P5.1*	Packagi	ng and packaging components do not contain more than 0,01% lead, mercury, cadmium and ant chromium by weight of these together.	d 🔀			
-	Packagi hexaval The pac	ent chromium by weight of these together. kaging materials are marked with abbreviations and numbers indicating the nature of the material(s				
P5.1*	Packagi hexaval The pac used (se The prod (see leg	ent chromium by weight of these together. kaging materials are marked with abbreviations and numbers indicating the nature of the material(s ee legal reference). duct packaging material is free from ozone depleting substances as specified in the Montreal Protoco al reference).	s) 🔀			
P5.1* P5.2*	Packagi hexaval The pac used (se The prod (see leg Comme	ent chromium by weight of these together. kaging materials are marked with abbreviations and numbers indicating the nature of the material(s ee legal reference). duct packaging material is free from ozone depleting substances as specified in the Montreal Protoco	s) 🔀			

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 n	umber *	7¥80	Logo			
Issue da	ite *	02/28/2020		Len	OVC	D
Product	t environ	mental attributes - Market requirements (See General NOTE GN	below)			
		onmental conscious design		Require		
Item		tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	N/A
P7.1*		Disassembly, recycling at have to be treated separately are easily separable				
P7.2*		naterials in covers/housing have no surface coating.			╞	╶╞┽
P7.3*		arts > 100 g consist of one material or of easily separable materials.			╞	╞
P7.4*						
P7.5	•	arts are free from metal inlays or have inlays that can be removed with commonly a	available tools		╞	╶╞┽
P7.6*	-	re easily separable. (This requirement does not apply to safety/regulatory labels).			╞	╞
17.0	Product					
P7.7*		ng can be done e.g. with processor, memory, cards or drives				
P7.8*		ng can be done using commonly available tools			Ħ	Ħ
P7.9		arts are available after end of production for: 5 years				Ħ
P7.10		s available after end of production for: 5 years				Ħ
	Material	and substance requirements				
P7.11*	Product	cover/housing material type (e.g. plastics, metal, aluminum):	al type:			
P7.12	Insulatio	n materials of external electrical cables are PVC free.	2.		\times	
P7.13	Insulatio	n materials of internal electrical cables are PVC free.			\square	
P7.14	weight (´ polyvinyl	plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) b 1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine i in 25% post-consumer recycled content.	e retardants, a	nd		
P7.15		ircuit boards, PCBs (without components) are low halogen: all \square PCBs > 25 g \square ed in IEC 61249-2-21. (See ⁵ NOTE B2)	are low halog	en	\square	
P7.16		tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4:				\boxtimes
P7.17		nemical specifications of flame retardants in printed circuit boards > 25 g (without c additive) , TBBPA (reactive) (See NOTE B3), Other: chemical name:	omponents): , CAS #:			
	accordin	nemical specifications of flame retardants in printed circuit boards (without compon- g ISO 1043-4: Only MIDPLANE,440.7MMX81.7MM,6.38MM" includes halogen. gen free.		s 🖂		
P7.18	concentr 1. Chemi 2. Chemi	ame retarded plastic parts > 25 g contain the following flame retardant substance ations above 0,1%: ical name: , CAS #: (See NOTE B4) ical name: , CAS #: " ical name: , CAS #: "	es/preparations	in		
		nemical specifications of flame retardants in plastic parts > 25 g according ISO 104				
P7.19		; parts > 25 g, flame retardant substances/preparations above 0,1% are used which I the following Risk phrases; and Hazard statements:	h have been			
D7 00*			See note B5)			
P7.20*	lfYES;a a) Oft ape	sumer recycled plastic material content is used in the product (See Note B6): It least one of the two alternatives below shall be answered; otal plastic parts' weight > 25 g, the postconsumer recycled plastic material conter ercentage of total plastic by weight) is %.	nt (calculated as	\$		
	or b) The	e weight of recycled material is g.				

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

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

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

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

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

Model number *	7Y80	Logo	
Issue date *	02/28/2020		LEHOVO

Product environmental attributes - Market requirements (continued)

Item

Requirement metYesNoN/A

		bstance requirements				_			
P7.21*	Biobased plastic	material content is used	l in the product (See N	OTE B7):]			
	 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 								
	b) The weight of the biobased plastic material is g.								
P7.22*	Light sources ar	e free from mercury, i.e. d specify: Number of lan	less than 0,1 mg/lamp	um mercury content pe	er lamp: mg]			
P7.23*	If product include	es an integral display, the	e total mercury content	t in the integrated displa	ay: mg 🗌 🗌 🔀	1			
P8	Batteries								
P8.1*	•	I composition: Magnesiu	Im Dioxide Lithium]			
P9		ption (See NOTE B8)							
P9.1		he following power level				_			
Energy mo	ode *	Power level at	Power level at	Power level at	Reference/Standard for energy]			
Peak (On-	maxl	100 V AC W	115 V AC W	230 V AC	modes and test method *				
reak (OII-	illax)	VV	VV	12/0 //	Fuirioau				
Categor	<u>y</u>								
EPS No-lo		W	W	W					
	ower supply /								
	ugged in the wall disconnected from								
the produc									
PTEC *		W	W	W		Г			
Typical En	ergy Consumption								
ETEC *		kWh/year	kWh/year	kWh/year]			
	ergy Consumption			- (1) *		1			
		ency Level (International	Efficiency Marking Pro						
Display res		megapixels							
	e to enter energy	save mode: minut	tes						
P9.2*		ut the energy save function	on is provided with the	product.					
P9.3	Energy efficiency	y class (monitors only):				ſ			
P10	Emissions Noise emission	- Declared according to	ISO 9296 (See NOTE	E B9)					
P10.1	Mode	Mode description			it A-weighted sound power level, $L_{WA,c}$ (B)	_			
	Idle	* 35% loading		* 7.2					
	Operation	* 80% loading		* 8.5					
	Other mode	Declared A-weighted source L _{pAm}	d pressure level (dB)	(operator po	sition desktop – idle)				
	Other mode	Declared A-weighted sound L _{pAm}	d pressure level (dB)	(operator po	sition desktop – operating)				
		1	1						
	Measured accor	ding to: 🔀 ISO 7779 🔄 Other	ECMA-74 (only if not covered by	ECMA-74)					
	Electromagneti			· · · · · · · · · · · · · · · · · · ·					
P10.4	Computer displa	y meets the requirement	t for low frequency elec	ctromagnetic fields of th	ne following voluntary	\langle			

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 *	7Y80				Logo				
Issue date *		02/28/2020			Lenovo			тн		
Product	environ	nental attribut	es - Market requiren	nents (continued)			Re	quire	ment	met
ltem								Yes	No	N/A
P12		mics for comput								
P12.1*	The disp	play meets the er	gonomic requirements o	f ISO 9241-307 for visual	display technolo	gies.				\square
P12.2*	The phy	sical input device	e meets the requirements	s of ISO 9995 and ISO 92	241-410.					\boxtimes
P13		ing and docume								
P13.1*	Product Product Product Product	packaging mater packaging mater packaging mater packaging mater	ial type(s): <i>PE Foam</i> ial type(s): <i>Corrugate</i> ial type(s): <i>PE Film</i> ial type(s): <i>Wood</i> ial type(s): <i>Laminated L</i> ial type(s): <i>PP Harden I</i>	weight (kg): 4.05 weight (kg): 10.21 weight (kg): 0.25 weight (kg): 10.20 LDPE/EPE weight (kg): 0 Plastic weight (kg): 0						
P13.2*			ackaging is free from PV					\square		
P13.3*		duct primary correct fibe		aging, specify the conta	ined percentage	of minimur	n post-			
P13.4*	Specify	media for user ar ronic,	nd product documentatio	on (tick box):						
P13.5	Úser an If Yes, p	d product docum lease specify:	is item if paper documer entation on paper media							
	-	hlorine-free al chlorine-free						H		
								H		
		ed chlorine-free								
P14 P14.1		ry programs	quirements of the follow	ving voluntary program(s):						
1 14.1	The proc			ing voluntary program(s).						
	ENERG	Y STAR®	Criteria version:	Date:	Product	category:				
	Eco-labe	el:	Criteria version:	Date:	Product	category:				
	Eco-labe		Criteria version:	Date:	Product	category:				
P15			(See NOTE B10)							
P9				lescription of the tested						
	the info supplie informa	rmation contain r's knowledge a tion. The inform	ed in this document. A vailable at the time of o	uarantees, assurances on All information provided completion, and supplie approximate and provie	by supplier in t er shall have no	his docume obligation	ent is pro to update	vided such	based	don
P9	See Ene	ergy Star Qualifi	ed Enterprise Servers	for the latest information Inter equipment/enterpl						

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))	DE6000H	Logo	
Contact Address (3.1 (b))			
Model Number (3.1 (c))	7Y80		Lenovo
Issue Date	02/28/2020		
Additional information			

Product	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
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:
Recyclin	
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 Image: Strain S g Iess than 5 g Iess than 5 g Iess than 5 g Image: Strain S g Iess than 5 g Iess than 5 g Iess than 5 g Image: Strain S g Iess than 5 g Iess than 5 g Iess than 5 g Image: Strain S g Iess than 5 g Iess than 5 g Iess than 5 g Image: Strain S g Iess than 5 g Iess than 5 g Iess than 5 g Image: Strain S g Iess than 5 g Iess than 5 g Iess than 5 g Image: Strain S g Iess than 5 g Iess than 5 g Iess than 5 g Image: Strain S g Iess than 5 g Iess than 5 g Iess than 5 g Image: Strain S g Iess than 5 g Iess than 5 g Iess than 5 g Image: Strain S g Iess than 5 g Iess than 5 g Iess than 5 g Image: Strain S g Iess than 5 g Iess than 5 g Iess than 5 g Image: Strain S g Iess than 5 g Iess than 5 g Iess than 5 g Image: Strain S g Iess than 5 g Iess than 5 g Iess than 5 g Image
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	I information

DATA STORAGE PRODUCTS

Commercial name (3.2 (b))	DE6000H	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))	7Y80	
Issue Date	02/28/2020	
Additional information		

	nvironmental 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	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
A.5	10% 20% 91.9 50% 94.4 100% 93.4 Average Power factor at 50 % of the rated load level 0000 </th
A.5 (3.2 (f))	(rounded to three decimal places)
A.6 $(2, 2, (n))$	Operating condition class $\Box A1 \Box A2 \boxtimes A3 \Box A4$
(3.2 (g))	(as defined in Table 6 or ErP lot 9)
	Exception comments
	\boxtimes 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: <i>Follow Secure Data Deletion README, starting from SANtricity</i> 11.50.3R1P1 via
	https://datacentersupport.lenovo.com/us/zc/products/storage/lenovo-storage/thinksystem-
	de6000h/7y80/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
RECYCL	ING DATA
B.1 (3.3 (a))	Indicative weight range at component (a) Cobalt in the batteries (b) Neodymium in the HDDs
(0.0 (a))	level, of the following critical raw materials: I less than 5 g less than 5 g
B.2	Instructions on the disassembly operations
(3.3 (b))	(a) the type of operation; <i>Refer to the installation guide, use reverse process.</i>
	https://datacentersupport.lenovo.com/us/zc/products/storage/lenovo-storage/thinksystem-
	de6000h/7y80/documentation
	(b) the type and number of fastening technique(s) to be unlocked; Refer to the installation guide .
	(c) the tool(s) required. <i>Phillips screwdriver, Flat blade screw driver, Hex driver, Torx driver, and Allen wrenches of appropriate size</i>
	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/thinksystem-de6000h/7y80/downloads/driver-list/
	After EOL'ed, firmware would be available at:
	https://download.lenovo.com/eol/index.html
Additional	information
Autional	