

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					
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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 *	DE4000F					
Model number *	7Y76					
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 n	umber *	7Y76 Logo							
lssue da	ate *	02/28/2020	Leng	JVC					
Produc	t environ	mental attributes - Legal requirements	Require	ment	t 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)	\boxtimes						
P1.2*		s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.	\square						
P1.3*	Products 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*	Product	s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated /l (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 intaining at least 48% per mass of chlorine in the SCCP (see legal reference).							
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): ww.lenovo.com/us/en/sustainability-resources	\square						
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)		F	F				
P2.5*	When in	When internal batteries of a notebook computer cannot be "accessed and replaced by a nonprofessional user", the related text is present and legible on the external packaging (see legal reference)							
P3	Conform	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).	\boxtimes						
	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						
P5	Droduct	t packaging							
P5.1*	Packagi	ng and packaging components do not contain more than 0,01% lead, mercury, cadmium and ent chromium by weight of these together.	1 🖂						
P5.2*	The pac	kaging materials are marked with abbreviations and numbers indicating the nature of the material(s))						
P5.3*	The pro	used (see legal reference). The product packaging material is free from ozone depleting substances as specified in the Montreal Protocol (see legal reference). Comment: Legal reference has no maximum concentration values.							
P6		Int information							

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 *		7¥76	Logo			
Issue da	ite *	02/28/2020		Len	ovc	DTH
Product		mental attributes - Market requirements (See General NOTE GN b	· ·			
		nmental conscious design		Require		
Item		tory to fill in. Additional information regarding each item may be found under P14. Disassembly, recycling		Yes	No	N/A
P7.1*		t have to be treated separately are easily separable				
P7.2*		aterials in covers/housing have no surface coating.			╞	╞
P7.3*		arts > 100 g consist of one material or of easily separable materials.			╞	╞
P7.4*	7.4* Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.				H	H
P7.5		arts are free from metal inlays or have inlays that can be removed with commonly a	vailable tools.		H	∺
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).			H	⊢⊢
	Product	lifetime				
P7.7*		g can be done e.g. with processor, memory, cards or drives		\square		
P7.8*	Upgradir	ig can be done using commonly available tools				
P7.9	Spare pa	rts are available after end of production for: 5 years				
P7.10	Service i	s available after end of production for: 5 years				
		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> Material	l type:			
P7.12	Insulatio	n materials of external electrical cables are PVC free.			\boxtimes	
P7.13	Insulatio	n materials of internal electrical cables are PVC free.			\boxtimes	
P7.14	weight (' 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 n 25% post-consumer recycled content.	retardants, an	d 🗖		
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 haloge	n 🗌	\boxtimes	
P7.16	Marking:	tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4:				\square
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 #:			\boxtimes
	according are halo	nemical specifications of flame retardants in printed circuit boards (without compone g ISO 1043-4: Only MIDPLANE,440.7MMX81.7MM,6.38MM" includes halogen. A gen free.	All other PCBs			
P7.18	concentr 1. Chemi 2. Chemi	ame retarded plastic parts > 25 g contain the following flame retardant substances ations above 0,1%: ical name: , CAS #: (See NOTE B4) ical name: , CAS #: " ical name: , CAS #: "	s/preparations i	n		
		nemical specifications of flame retardants in plastic parts > 25 g according ISO 1043				\boxtimes
P7.19	•	parts > 25 g, flame retardant substances/preparations above 0,1% are used which	have been			\boxtimes
	0	I the following Risk phrases; and Hazard statements: ree(s) for these classifications is/are found at (add URL(s)):	a nota PE)			
P7.20*		sumer recycled plastic material content is used in the product (See Note B6):	ee note B5)		\boxtimes	
	a) Oft ape or	t least one of the two alternatives below shall be answered; otal plastic parts' weight > 25 g, the postconsumer recycled plastic material content ercentage of total plastic by weight) is %.	(calculated as			

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 *	Model number * 7Y76		Lenovo			
Issue date *	02/28/2020		LEIIUVU			
Product environmental attributes - Market requirements (continued) Requirement me						

Requirement metYesNoN/A

	Material and su	bstance requirements	(continued)						
P7.21*		material content is used		IOTE 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 								
	, .	of the biobased plastic r							
P7.22*	If mercury is use	e free from mercury, i.e. d specify: Number of lar	nps: and maxim	num mercury content pe			\boxtimes		
P7.23*	If product include	es an integral display, th	e total mercury conten	t in the integrated displa	ay: mg		\boxtimes		
P8	Batteries								
P8.1*	Battery chemical	composition: Magnesiu	Im Dioxide Lithium						
P9		ption (See NOTE B8)							
P9.1		he following power level							
Energy mo	de *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Standard for modes and test method *	energy	\boxtimes		
Peak (On-	max)	462 W	458 W	445 W	Full load				
Categor	<u>y</u>								
EPS No-lo		W	W	W					
(External power supply / charger plugged in the wall outlet but disconnected from the product.)									
PTEC *	,	W	W	W	-		\square		
Typical En	ergy Consumption								
ETEC * Annual En	ergy Consumption	kWh/year	kWh/year	kWh/year			\square		
External P	ower Supply Efficie	ency Level (International	I Efficiency Marking Pr	rotocol) * :			\boxtimes		
Display res	solution * :	megapixels					\boxtimes		
Default tim	e to enter energy	save mode: minu	tes				\boxtimes		
P9.2*	Information abou	it the energy save function	on is provided with the	e product.			\boxtimes		
P9.3	Energy efficiency	/ class (monitors only):							
P10	Emissions	- Declared according to	ISO 9296 (See NOT	E B9)					
P10.1	Mode	Mode description			it A-weighted sound power	level, LwA.c	(B)		
	Idle	* 35% loading		* 6.3			ή		
	Operation	* 35% loading		* 6.4			Ē		
	Other mode	Declared A-weighted soun	d pressure level (dB)	8.5 (operator position desktop – idle)					
	Other mode	Declared A-weighted soun L_{pAm}	d pressure level (dB)	8.5 (operator position desktop – operating)					
	Measured according to: ISO 7779 ECMA-74 Other (only if not covered by ECMA-74)								
	Electromagneti								
P10.4	Computer displa program(s):	y meets the requiremen	t for low frequency ele	ctromagnetic fields of th	ne following voluntary				
					· · · · ·				

Item

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 *	7Y76				Logo			
Issue date *		02/28/2020				Leno	VO,	н	
Product	environr	nental attribu	tes - Market requiren	nents (continu	ed)		Require		met
ltem							Yes	No	N/A
P12		mics for compu							
P12.1*	The disp	olay meets the e	gonomic requirements o	of ISO 9241-307	or visual display te	chnologies.			\boxtimes
P12.2*	The phy	sical input devic	e meets the requirement	s of ISO 9995 ar	d ISO 9241-410.				\boxtimes
P13	Packagi	ing and docum	entation						
P13.1*	Product Product Product	packaging mate packaging mate packaging mate	rial type(s): <i>PE Foam</i> rial type(s): <i>Corrugate</i> rial type(s): <i>PE Film</i> rial type(s): <i>Wood</i> rial type(s): <i>Laminated I</i>	weight (kg): 0. weight (kg): 4. weight (kg): 0. weight (kg): 8.	08 25 35				
P13.2*			backaging is free from P				\boxtimes		
P13.3*		duct primary con	rugated fiberboard packer content: 35 %	kaging, specify t	ne contained perc	entage of minimum			
P13.4*		media for user a ronic, Paper,	nd product documentatic	on (tick box):					
P13.5	User and		is item if paper documer entation on paper media						
	,	hlorine-free al chlorine-free							
	Process	ed chlorine-free							
P14	Volunta	ry programs							
P14.1	The proc	duct meets the re	equirements of the follow	ving voluntary pro	gram(s):				
	Eco-labe Eco-labe	el:	Criteria version: Criteria version: Criteria version:	Da Da Da	e: Pi	roduct category: roduct category: roduct category:			
P15			(See NOTE B10)						
P9	NOTE: S the info supplied informa	Supplier makes rmation contail r's knowledge a tion. The inform	f computer products; of no representations, gu ned in this document. A vailable at the time of nation provided here is the for more information	uarantees, assu All information p completion, and approximate a	rances or warrant rovided by suppl supplier shall ha	ties whether expres lier in this docume ave no obligation to	nt is provided o update such	based	lon
P9	See Ene	ergy Star Qualif	ied Enterprise Servers r.gov/products/data_ce	for the latest in		ers			

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))	DE4000F	Logo						
Contact Address (3.1 (b))								
Model Number (3.1 (c))	7Y76		Lenovo					
Issue Date	02/28/2020							
Additional information								

Product	Product environmental attributes (EU) 2019/424 – Annex II points 3.1 and 3.3						
1.a	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 Zata 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 Indicative weight range at component level, of the following critical raw materials: Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Iess than 5 g Iess than 5 g Iss than 5 g Ies						
2.b (3.3 (b))							
	OR - Reference to other information:						
2.c	Firmware Reference to information on last available firmware:						
Additional	I information						
1							

DATA STORAGE PRODUCTS

Commercial name (3.2 (b))		DE4000F		Logo		
Contact Ad	dress (3.2 (b))	Lenovo DCG Storage De	evelopment			
		Rick Lin				
		Lenovo Taiwan Branch 8F., No. 66, Sanchong R	d			
		Nangang Dist., Taipei Ci		Lenovo		
		Rlin12@lenovo.com				
Model Num	ber (3.2 (c))	7Y76				
Issue Date		02/28/2020				
Additional	information					
Due due 4 a						
A.1			- Annex II points 3.2 and 3.3			
		der edto be in scope of ErF				
A.2 (3.2 (a))	Data Storage ty		e Data Storage Product 📃 Small Data Sto	prage Product		
	<u> </u>		e Data Storage Product 🚺 Other:			
A.3 (3.2 (d))	Year of manufac	cture:	2018			
A.4	PSU efficiency a	at 10 % (if applicable), 20 %	5, 50 % and 100 % of rated output power			
(3.2 (e))	(expressed in %	and rounded to the first de	cimal place): : 🔀 Multi-output 🛛 🗌 Single	-output		
	10% 20	0% 91.8 50% 94.2 100%	6 92.9 Average			
A.5 (3.2 (f))		50 % of the rated load leve	0.981			
(3.2 (I)) A.6	Operating condi	e decimal places)	1 A2 A3 A4			
(3.2 (g))		able 6 or ErP lot 9)				
		Exce	ption comments			
		—				
			his product has been tested in order to veri			
A.6	Information on	the secure data deletion	n as temperature and humidity) of the declar	red operating condition class.		
(3.2 (h))		ctions on how to use the fu				
	Follo	w Secure Data Deletion R	EADME, starting from SANtricity 11.50.3	R1P1 via		
			vo.com/us/zc/products/storage/lenovo-s	torage/thinksystem-		
		DOf/7y76/documentation iques used:				
		on script to purge all user	data			
	(c) suppo	orted secure data deletion s	tandard (if any):			
	OR - Reference	to other information: Go th	rough SecureDataDeletion README and	l run .pv accordingly via		
	https://drive.go		QLbbM4w8zeUIRwJ-J8iF-AS2VwKOt			
RECYCL	ING DATA					
B.1		t range at component	(a) Cobalt in the batteries	(b) Neodymium in the HDDs		
(3.3 (a))		owing critical raw				
	materials:		less than 5 g	less than 5 g		
			between 5 g and 25 g	between 5 g and 25 g		
D 0	In street of the	the discount of the second	above 25	Above 25		
B.2 (3.3 (b))		the disassembly operation the of operation the disassembly operation the second s	ons le installation guide, use reverse proces	s		
			vo.com/us/zc/products/storage/lenovo-s			
		00f/7y76/documentation				
			technique(s) to be unlocked; <i>Refer to the</i>			
	()	oi(s) required. Phillips scr opriate size	ewdriver, Flat blade screw driver, Hex dr	iver, Torx driver, and Allen wrenches of		
	appro					
	OR - Reference to other information:					
B.3	Firmware					
	Reference to inf	ormation on last available f	irmware:			
	https://datacentersupport.lenovo.com/us/zc/products/storage/lenovo-storage/thinksystem-de4000f/7y76/downloads/driver-list/					
	After EOL'ed, firmware would be available at: https://download.lenovo.com/eol/index.html					
	mps.//download					
Additional	information					
Autional						