



ECMA/TC38-TG3/2015/026 (Rev. 1 – 15 April 2015)

# Annex B2 - Product environmental attributes Workstations and Servers

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	Log	0		
Company name *	Lenovo				
Contact information *	Lenovo Global Environmental Affairs		ODOVO		
e-mail address	Alvin L Carter		Lenovo		
	alcarter@lenovo.com				
Internet site *	http://www.lenovo.com/social_responsibility/us/en/environment	.html			
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 * Workstation					
Commercial name *	Thinkstation P330				
Model number *	30C7,30C8,30CA,30D1,30D2,30D4				
Issue date *	2018/5/9				
Intended market *	Global Europe Asia, Pacific & Japan Americas Other				
Additional information	ENERGY STAR® Qualified; EPEAT Gold Rating, GREENGUARD certified				

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.

Wodel number " Error		Error! Reference source not found.	Logo	Long		
Issue dat	e *	Error! Reference source not found.		Lend	JVC	<b>)</b> <sub>TM</sub>
Product	environi	mental attributes - Legal requirements		Require	ment	met
Item		<u> </u>		Yes	No	n.a.
P1	Hazardo	us substances and preparations				
P1.1*		do comply with current European RoHS Directive. (See legal reference and NOTE	B1)	$\boxtimes$		
P1.2*		do not contain Asbestos (see legal reference). t: Legal reference has no maximum concentration value.				
P1.3*	hydrobro trichloroe	do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), mofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachethane, 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% polychl (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	e 🔀		
P1.6*	(see lega	h direct and prolonged skin contact do not release nickel in concentrations above 0 il reference). tt: Max limit in legal reference when tested according to EN1811:2011-5.	,5 μg/cm²/wee	k 🔀		
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail ow.lenovo.com/social_responsibility/us/en/environment.html	contact):			
P2	Batteries					
P2.1*		duct contains a battery or an accumulator, the battery/accumulator is labeled with t nformation on proper disposal is provided in user manual. (See legal reference)	he disposal			
P2.2*	Batteries reference	or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadm	ium. (See lega	ıl 🔀		
P2.3*	Batteries	and accumulators are readily removable. (See legal reference)		X		
P3	Conform	nity verification & Eco design (ErP)				
P3.1*	The prod	uct is CE-marked to show conformance with applicable legal requirements (see leg	gal reference).	$\boxtimes$		
		aration of Conformity can be requested at (add link or e-mail address):				
P3.2*	•	uct complies with the Eco design requirements for energy-related products, Il reference).		$\boxtimes$	Ш	
	` •	l information is;  given in item P15 or added to this document,				
		available at (add URL):				
P5	Product	packaging				
P5.1*	Packagir	ig and packaging components do not contain more than 0,01% lead, mercury nt chromium by weight of these together.	r, cadmium ai	nd 🔀		
P5.2*	The pack used (see	aging materials are marked with abbreviations and numbers indicating the nature of elegal reference).	· ·	, 🔼		
P5.3*	(see lega	uct packaging material is free from ozone depleting substances as specified in the N il reference).	Iontreal Protoc	ol 🔀		
DC		t: Legal reference has no maximum concentration values.				_
P6		nt information				
P6.1*	intormation	on for recyclers/treatment facilities is available (see legal reference).		$\boxtimes$		

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 *	Error! Reference source not found.	Logo	Lonovo
Issue date *	Error! Reference source not found.		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			Щ_
P7.2*	Plastic materials in covers/housing have no surface coating.	$\boxtimes$	<u>Ц</u>	
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):			
P7.12	Material type: plastic Material type: metal Material type:  Insulation materials of external electrical cables are PVC free.			
				-
P7.13	Insulation materials of internal electrical cables are PVC free.			<u> </u>
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.	d		
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 1NOTE B2)	า 🗌		
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: Brominated Epoxy Resin, CAS #:			
	Alt. 2: Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g according ISO 1043-4:			
P7.18	Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in 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 13.5%.  or  b) The weight of recycled material is 138.2g.			

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 *	Error! Reference source not found.	Logo	Lonovo
Issue date *	Error! Reference source not found.		LEI IOVO.

Product environmental attributes - Market requirements (continued)		Requirement m	
Item	Yes	No	n.a.

	Material and sub	stance requirements	(continued)						
P7.21*	Biobased plastic	material content is used	terial content is used in the product (See NOTE B7):						
	a) Of total plastic total plastic			ered; naterial content (calcula	ted as a percentage of				
	or b) The weight of	of the biobased plastic r	naterial is g.						
P7.22*	Light sources are	free from mercury, i.e.	less than 0,1 mg/lamp						
DO		I specify: Number of lan	nps: and maxim	um mercury content pe	r lamp: mg				
P8.1*	Battery chemical	composition: Lithium N	Manganoso Diovido						
			nanganese bioxide						
<b>P9</b>		otion (See NOTE B8) ne following power level	e or energy consumpti	one are reported:					
Energy mod		Power level at	Power level at	Power level at	Reference/Standard for energy				
Lilorgy mod		100 V AC	115 V AC	230 V AC	modes and test method *				
Peak (On-n	nax)	<b>107.4</b> W	<b>158.72</b> W	<b>161.99</b> W	Full load				
Category	<u>/</u>								
Short Idle S Enabled	State - WOL	45.34W	44.76W	<b>46.31</b> W	Use for ENERGY STAR V6 registration (P <sub>idle</sub> )				
Long Idle S Enabled	State - WOL	42.73W	42.69W	<b>42.34</b> W	Use for ENERGY STAR V6 registration (P <sub>idle</sub> )				
Sleep (S3)	- WOL Enabled	1.31W	1.31W	1.27W	Use for ENERGY STAR V6 registration(P <sub>sleep</sub> )				
Sleep (S3) - WOL Disabled		W	W	W	Reference				
Off (S5) - W	VOL Enabled	0.83W	0.82W	0.82W	Use for ENERGY STAR V6 registration(Poff)				
Off (S5) - V	VOL Disabled	W	W	W	Use for ErP				
		W	W	W	Reference				
		W	W	W	Reference				
EPS No-loa (External power su	ad upply / charger plugged in the connected from the product.)	W	W	W					
PTEC *	ergy Consumption	<b>24.97</b> W	<b>24.73</b> W	25.29W					
ETEC * Annual Energy Consumption		kWh/year	kWh/year	kWh/year	ETEC = (8760/1000) x (Poff x 0.25 + P <sub>sleep</sub> x 0.35 + P <sub>long_idle</sub> x 0.10+ P <sub>short_idle</sub> x 0.30)				
					ed; P <sub>idle</sub> : Idle State - WOL Enabled				
External Po	wer Supply Efficie	ncy Level (International	Efficiency Marking Pro	otocol) * :					
Display reso	Display resolution * : megapixels								
Default time	Default time to enter energy save mode: 25 minutes								
P9.2*	0.2* Information about the energy save function 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 description		• • • • • • • • • • • • • • • • • • • •	t A-weighted sound power level, L <sub>WA,c</sub> (B)				
		* idle		*2.8					
	Operation	* oper		* 2 8					

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;

 $see \hspace{0.1cm} \underline{\text{http://www.ecma-international.org/publications/standards/Ecma-370.htm}$ 

Other mode	Declared A-weighted sound pressure level (dB) $L_{p { m Am}}$	18(operator position desktop – idle)		
Other mode	Declared A-weighted sound pressure level (dB) $L_{p { m Am}}$	18(operator position desktop – operating)		
Measured accor	ding to: 🔀 ISO 7779 🔲 ECMA-74			
Other (only if not covered by ECMA-74)				

Model number *	Error! Reference s	ource not found.				Logo	Long	N/0	
Issue date * Error! Reference source not found.						Lend	JVO	тм	
Product environr	nental attributes	- Market requiren	nents (con	tinued)			Require	ement	met
Item			•				Yes	No	n.a.
	nagnetic emission								
P10.4 Compute program		requirement for low f	frequency el	ectromagnetic field	ds of the foll	owing volunta	ary		
	mics for computing	g products							
P12.1* The disp	lay meets the ergor	nomic requirements of	f ISO 9241-3	307 for visual displ	ay technolo	gies.			$\boxtimes$
P12.2* The phy	sical input device m	eets the requirements	s of ISO 999	5 and ISO 9241-4	10.			X	
P13 Packagi	ng and documenta	ation							
Product Product	packaging material packaging material packaging material	type(s): <i>EPE</i> type(s): <i>HDPE</i>	weight (kg weight (kg weight (kg	): <b>0.21</b>					
P13.2* Product	plastic primary pack	aging is free from PV	/C.				$\boxtimes$		
	duct primary corruger recovered fiber co	ated fiberboard pack ontent: <b>70</b> %	aging, spec	ify the contained	percentage	of minimum	post-		
	media for user and ¡ ronic, ⊠Paper, ☐	oroduct documentatio Other	n (tick box):						
Ùser and		em if paper documen ation on paper media							
Element	hlorine-free al chlorine-free ed chlorine-free								
P14 Volunta	ry programs								
P14.1 The prod	duct meets the requ	rements of the follow	ing voluntar	y program(s):					
Eco-labe	Y STAR® el: <b>Greenguard</b> el: <b>EPEAT</b>	Criteria version: 6.1 Criteria version: Criteria version:	1	Date: Oct-2014 Date: Date:		category: Wor category: category:	rkstation		
	nal information (Se								
		ecific configuration							
informat knowled provided informat	ion contained in this ge available at the t here is approximat ion.	epresentations, guara document. All inform ime of completion, an e and provided for inf	iation provid id supplier s formational p	ed by supplier in the hall have no obligate ourposes only. See	nis documer ation to upda a Lenovo A	nt is provided internation	based on sup	plier's format	ion
		lotebooks & Tablet Condex.cfm?fuseaction=				code=CO		-	-

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
Regulation (EC) 1907/2006(REACH, 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 2013/56/EC (Battery and accumulators Directive) *  * 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 2006/95/EC (Low Voltage Directive)	P3.1
Directive 2004/108/EC (EMC Directive)	P3.1
Directive 1999/5/EC (R&TTE 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
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

### **Lenovo ErP Lot3 Information Sheet**

### - Workstation/Server -

As required by 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 (ErP Lot3).

#### **Products scope of this sheet:**

Workstation, mobile workstation, desktop thin client, small-scale server and computer server

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

Commercial name	Thinkstation P330	Logo		
Model Number	Error! Reference source not found.		Longyo	
Issue Date	2018/5/9		Lenovo.	
Additional information	ENERGY STAR® Qualified; EPEAT Gold Rating, GREENGUARD certified			

d)	Year of manufacture:	outes		Available on produc
e)	Internal/external power supply efficiency:			
	FSP210-20TGBAB: 10% 85.20% 20% 87.40% 50% 88.20% 100% 87.60% Average 87.10%			
	HK310-71PP: 10% 80.07% 20% 85.52% 50% 88.55% 100% 86.70% Average 85.21%			
	PA-2221-3VE: 10% 81.10% 20% 87.00% 50% 89.20% 100% 87.30% Average 86.15%			
	PCH015-EL0G: 10% 89.07% 20% 92.13% 50% 93.95% 100% 92.47% Average 91.91%			
	T			
)	Test parameters for measurements:  — test voltage in V and frequency in Hz			
	— total harmonic distortion of the electricity supply system			
	— information and documentation on the instrumentation, set-up and circuits used for electrical testing:			
	Test voltage in V and frequency in Hz 230V/50Hz			
	Total harmonic distortion of the electricity supply system $\leq 2\%$			
	Information and documentation on the instrumentation, set-up and circuits used for electrical testing			
	Instrument	Range Used	_	
	Type	Or ***	Make and Model **	
	AC Power Source	1~280VAC;1~550HZ;1000VA.	NF;EC1000S; SN:9152124	
	Digital Watch	Full range	CASIO; HS-70W; SN:208Q08R	
	Power Meter	0~600V;0~20A	YOKOGAWA;WT210;SN:91M944 560	
	Hygrothermograph	15~35°C/15~90%	testo; 608-H1,SN:1034895602	
	Thermal anemometer	0~20m/s,-20~70°C	Testo;425;SN:02591883	
	Light Measuring	1°;1-300cd/m²	Konica Minolta;LS-110;	
g)	Maximum power (Watts)			
<i>3</i> /	, , , , , , , , , , , , , , , , , , , ,			
(h)	Idle state power (Watts)			
,	(,			48.93
(i)	Sleep mode power (Watts)			
				1.17
)	Off mode power (Watts)			
				0.82
(l-1)	Measurement methodology used to determine information mentioned in points (e):			
,	80 PLUS test method		, , ,	
l-2)	Measurement methodology used to determine information mentioned in maximum, idle, sleep, off mode power as defined in Point P9.1 in the Product IT Eco Declaration:			
	IEC 62623 / IEC EN50564:2011 measurement methodology			
dditio	nal information			