

Product environmental attributes – THE ECO DECLARATION

The declaration may be published only when all rows and/or fields marked with an * are filled-in (n.a. for not applicable). Additional information regarding each item may be found under P14.

Brand *	Think	Logo	
Company name *	Lenovo		
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Internet site *	http://www.lenovo.com/social_responsibility/us/en/environment	t.html	
Additional information	The latest version of this document can be found at http://www.lenovo.com/social_responsibility/us/en/datasheets_notebooks.html		

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 *	Personal Computer				
Commercial name *	ThinkCentre X1				
Model number *	10HT, 10JW, 10KE, 10JX, 10JY, 10KF, 10K0, 10HU				
Issue date *	2015-11-27				
Intended market *	🔀 Global 📃 Europe 📃 Asia, Pacific & Japan 📃 Americas 🗌 Other				
Additional information	Energy Star 6.1 Qualified; EPEAT Gold; Greenguard; ULE Gold; TUV Greenmark; TCO Certified; TCO Edge Certified				

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

Quality	Control	Requireme	nt met
Item		Yes	No
QC1 *	The company enforces an internal quality control scheme to ensure the correctness of this eco declaration	\boxtimes	
QC2 *	The company is a member of an eco declaration system that enforces regular independent quality contro such as organized by IT-Företagen (see www.itecodeclaration.org).	ol 🔀	

Model number *	10HT, 10JW, 10KE, 10JX, 10JY, 10KF, 10K0	, 10HL	J
Issue date *	2015-11-27	Logo	

Lenovo

Product	environmental attributes - Legal requirements	Require	ment	met
Item		Yes	No	n.a.
P1	Hazardous substances and preparations			
P1.1*	Products do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavalent chromium, 0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). (See legal reference and Note B1)			
P1.2*	Products do not contain Asbestos (see legal reference). Comment: Legal reference has no maximum concentration value.	\square		
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1- trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum concentration values.			
P1.4*	Products do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% polychlorinated terphenyl (PCT) in preparations (see legal reference).	\square		
P1.5*	Products do not contain more than 0.1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).	\boxtimes		
P1.6*	Textile and leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS), Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference). Comment: Legal reference has no maximum concentration values.			
P1.7*	Textile and leather parts with direct skin contact do not contain more than 0.003% Azo colorants that split aromatic amines. (See legal reference and Note B1)			\square
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as pentachlorophenol and derivatives (see legal reference). Comment: Legal reference has no maximum concentration values.			
P1.9*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5 microgram/cm ² /week (see legal reference). Comment: Max limit in legal reference when tested according to EN1811:1998.			
P1.10*	REACH Article 33 information about substances in articles is available at (add URL or mail contact): http://www.lenovo.com/social_responsibility/us/en/materials.html	\square		
P2	Batteries			
P2.1*	If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains more than 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be marked with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is provided in user manual. (See legal reference)			
P2.2*	Button cells used in the product do not contain more than 2% by weight of mercury. Other batteries or accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference)	\square		
P2.3*	Batteries and accumulators are easily removable by either users or service providers (as dependent on the design of the product). Exception: Batteries that are permanently installed for safety, performance, medical or data integrity reasons do not have to be "easily removable". (See legal reference)			
P3	Safety, EMC connection to the telephone network and labeling			
P3.1*	The product complies with legally required safety standards as specified (see legal reference).	\square		
P3.2*	The product complies with legally required standards for electromagnetic compatibility (see legal reference).			
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it complies with legally required standards for radio and telecommunication devices (see legal reference).			
P3.4*	The product is labeled to show conformance with applicable legal requirements (see legal reference).	\boxtimes		
P4	Consumable materials			
P4.1*	If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (see legal reference and Note B1).			
P4.2*	If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).			\boxtimes
P4.3*	If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).			
P5	Product packaging			
P5.1*	Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium and hexavalent chromium by weight of these together.			
P5.2*	Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference).	\boxtimes		
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montrea Protocol (see legal reference). Comment: Legal reference has no maximum concentration values.			

Note B1: Restriction applies to the homogeneous material, unless other specified and expressed in weight %.

Model nu	imber *	10HT, 10JW, 10KE, 10JX, 10JY, 10KF, 10K0, 10HU			
Issue dat	te *	2015-11-27 Logo	Lend	ovo.	
			Require		
Item		atory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.
P6 P6.1*		nt information on for recyclers/treatment facilities is available (see legal reference).			
P7	Design				
	Disasse	mbly, recycling			
P7.1*	Parts that	t have to be treated separately are easily separable	\square		
P7.2*	Plastic m	naterials in covers/housing have no surface coating.		\boxtimes	
P7.3*	Plastic p	arts >100g consist of one material or of easily separable materials.	\boxtimes		
P7.4*	Plastic p	arts >25g have material codes according to ISO 11469 referring ISO 1043			
P7.5	Plastic p	arts are free from metal inlays or have inlays that can be removed with commonly available tools.		Ē	Π
P7.6*	-	re easily separable. (This requirement does not apply to safety/regulatory labels).		H	
	Product				
P7.7*		ig can be done e.g. with processor, memory, cards or drives			
P7.8*		g can be done using commonly available tools			
P7.9.					
P7.10		arts are available after end of production for: 5 years			
F7.10		s available after end of production for: 5 years			
P7.11*		and substance requirements cover/housing material type:			
		type: ABS Material type: ABS+PC Material type: PC			
P7.12		I cable insulation materials of power cables are PVC free.	\square		
P7.13		I cable insulation materials of signal cables are PVC free			\exists
P7.14		/housing plastic parts >25g are free from chlorine and bromine.	<u> </u>		
P7.15	Note B2)				
P7.16	Marking:	tarded plastic parts >25g in covers / housings are marked according ISO 1043-4:			
P7.17	Alt. 1		_	_	_
		I specifications of flame retardants in printed circuit boards >25g (without components): additive) , TBBPA (reactive) , Other; chemical name: , CAS #:			
	Alt. 2	I specifications of flame retardants in printed circuit boards (without components) >25g according			
	ISO 1043	3-4: Brominated Epoxy Resin See P14			
P7.18		etarded plastic parts >25g contain the following flame retardant substances/preparations i ations above 0.1%:	n 🖂		
		ent: No legal limits exist, this is a market requirement.			
		ical name: , CAS #:			
	2. Chem	ical name: , CAS #:			
		ical name: , CAS #:			
	Alt. 2	Lancaifications of flows rotardants in plastic parts >255 according ISO 1042 4:			
	Chemica	I specifications of flame retardants in plastic parts >25g according ISO 1043-4:			
P7.19		arts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, 6, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)			
P7.20		plastic parts' weight >25g, recycled material content is 34.3% .			
P7.21		plastic parts' weight >25g, biobased material content is 0%.			
P7.22	Light sou	irces are free from mercury	\square		
		y is used specify: Number of lamps: and max. mercury content per lamp: mg			
P8	Batterie				
P8.1*	-	hemical composition: Lithium Ion/Lithium Manganese Dioxide			
P8.2	Batteries	meet the requirements of the following voluntary program/s: US Call2Recycle, EPBA, JBRC			

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Note B2: IEC61249-2--21 has maximum limits for chlorine and bromine but does not address fluorine, iodine and astatine which are included in the group of halogens.

Note B3: 'Starting from January 2009, Risk phrases can be replaced by Hazard phrases according to the Globally Harmonized System (GHS), mandatory by December 2010.

Model numb	ber * 10HT	, 10JW, 10I	KE. 10JX.	10JY. 10	KF. 10K0.	10HL	1	
Issue date *		272015-11-27		,	,	Logo	Lenovo)_
Product en	nvironmental att	ributes - Market I	requirements (o	continued)			Requireme	nt met
Item							Yes N	o n.a.
	Energy consumpti							
9.1 F	For the product the	following power leve	els or energy cons	umptions are re	ported: See P14 (
Energy mode	e *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference / Stan method *	dard for e	energy modes and te	st
Peak (On-m	ax)	W	W	W	Full load			
Category	11	1	1	1	1			
	tate - WOL Enable	ed 22.668 W	22.476 W	24.204 W	Use for ENERG	Y STAR V	/6 registration(P _{idle})	
Long Idle St	tate - WOL Enable	d 9.240 W	9.276 W	9.900 W	Use for ENERG	Y STAR V	/6 registration(P _{idle})	
Sleep (S3) -	WOL Enabled	1.284 W	1.296 W	1.296 W	Use for ENERG	Y STAR V	/6 registration (P _{sleep}	
Off (S5) - W	OL Enabled	0.732 W	0.744 W	0.744 W			/6 registration(P _{off})	
EPS No-load		W	W	W				
(External por plugged in th	wer supply / charge ne wall outlet but d from the product.)	r	, vv					
PTEC * Typical Energy	gy Consumption	9.71 W	9.654 W	10.35 W				
TEC * Typical Energy	gy Consumption	1.6318 kWh/week	1.622 kWh/week	1.739 kWh/week				
ETEC * Annual Energ	gy Consumption	<i>I1: 85.09</i> kWh/year	11: 84.60 kWh/year	/1: 90.72 kWh/year	$E_{TEC} = (8760/100)$ + $P_{long_{Idle}} \times 0.15$		x 0.45 + P _{sleep} x 0.05 ₉ x 0.35)	
		Poff: Off Mode(St	5) - WOL Enabled; I	P _{sleep} : Sleep Mode	(S3) - WOL Enabled	; P _{idle} : Idle	e State - WOL Enabled	
Display resol	lution* : 2.07 Mega		-					
Print Speed	* : Ima	ages per minute						
		ve mode: 30 minutes	3					
		e energy save funct		th the product.				┑╵┝┥
P9.3* 1	The product meets ENERGY STAR® v	the energy requirem ersion: Version 6.1	ents of the followi	•				
	Others specify:							
	Emissions Noise emission – I	Declared according t	0 ISO 9296					
		ode description		Declared A-weighted sound power level L_{WAd}	d sound p er (B) Operator pos	ition 🔀 ktop 🔀	A-weighted evel L _{pAm} (dB) Bystander position (only if product is n operator attende	ot
	ldle *	HDD:Idle		* 2.8		1	5	
	Operation *	HDD: Operating		* 3.0		1		\dashv
	Other mode							
Ν	Measured according	g to: 🔀 ISO7779 🗌 Other	ECMA-74		• with L _{pAm} measur	ement die	tance m)	
P10.2 1	The product meets	the acoustic noise re					stance m)	
	no product meets			islowing volunt	al, program/s.			

Model nun	nber *	10HT, 10JW, 10KE, 10JX, 10JY, 10KF, 10K0, 10HU				
Issue date	*	2015-11-272015-11-272015-11-27 Logo	Le	no	10	
			_	_		
	environn	nental attributes - Market requirements (continued)			nent	
Item				res	No	n.a.
		al emissions from printing products				
P10.3*		formed according to ECMA-328 (ISO/IEC 28360) standard, other specify:				\boxtimes
P10.4	Typical e	emission rate (print phase) is (mg/h):				\boxtimes
		Dust Ozone Styrene Benzene TVOC				
P10.5		al emission requirements of the following voluntary program/s are met for :				\boxtimes
		Dust Ozone Styrene Benzene TVOC				
		nagnetic emissions				
P10.6	Compute program/	er display meets the requirement for low frequency electromagnetic fields of the following volunta /s:	ry	\boxtimes	Ш	
P11	Consum	nable materials for printing products				
P11.1*	A Safety	Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see P4.3	3).			\boxtimes
P11.2*	Paper co EN12281	ontaining post-consumer recycled fibers can be used, provided that it meets the requiremer 1.	nts of			\square
P11.3*	2-sided ((duplex) printing/copying is an integrated product function.				\mathbb{X}
P12	Ergonor	mics for computing products				
P12.1*	The disp	lay meets the ergonomic requirements of ISO 9241-307 for visual display technologies.		\times		
P12.2*	The phys	sical input device meets the requirements of ISO 9995 and ISO 9241-410.		\boxtimes		
P13		ing and documentation (PIC: Packing)				
P13.1*		packaging material type(s): Carton weight (kg): 1.385				
		packaging material type(s): EPE weight (kg): 0.875				
P13.2*		packaging material type(s): weight (kg): plastic packaging is free from PVC.		\boxtimes		
-				X		
P13.3*		media for user and product documentation (tick box): ic 🔀, Paper 🔀, Other 🔲				
P13.4*			11			
	fiber: 0		lea			
P14		nal information (See Note B4)				
		Supplior makes no conceptations, quarantees, assurances or warranties whether express or im-	nor holl	ording	tho	
		Supplier makes no representations, guarantees, assurances or warranties whether express or important is this desument. All information assurances or warranties in this desument is assurance.				
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Note B4: 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 B

Reference	Declaration item
2002/95/EC (ROHS Directive)	P1.1, P4.1
REACH, Annex XVII	P1.6, P1.8, P4.2
REACH, Annex XVII	P1.4
REACH, Annex XVII	P1.2
REACH, Annex XVII	P1.7
REACH, Annex XVII	P1.9
Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000	P1.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
2006/66/EC (Battery and accumulators Directive)	P2.1, P2.2, P2,3, P3.4, P8.1
2006/95/EC (Low Voltage Directive)	P3.1, 3.4
2004/108/EEC (New EMC Directive)	P3.2, 3.4
1999/5/EC (R&TTE Directive)	P3.3, 3.4
"REACH" Regulation (1907/2006), annex VII	P1.10
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P4.3
REACH article 31, annex II	P4.3
2004/12/EC (Directive on packaging and packaging waste)	P5.1
(97/129/EC) (Commission Decision on Identification System for Packaging Materials	P5.2
2037/2000/EC Regulation on Substances that Deplete the Ozone Layer	P5.3
2002/96/EC (WEEE directive)	P3.4, P6.1
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P7.19

Lenovo ErP Lot3 Information Sheet - PC / Notebook -

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:

Desktop computer, integrated desktop computer, and notebook computer

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

Commercial name	ThinkCentre X1	Logo
Model Number	10HT, 10JW, 10KE, 10JX, 10JY, 10KF, 10K0, 10HU	Lenovo
Issue Date	2015-11-27	Lenovo
Additional information		

(4)	voor of monufactures	
(d)	year of manufacture:	2015
(e)	E TEC value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics disabled and if the system is tested with switchable graphics mode with UMA driving the display: (PIC: Env	
	Category (according to ErP Lot 3): <i>B</i> Etec: 158	
(f)	E TEC value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics enabled:	cards (dGfx) are
	Category (according to ErP Lot 3): Etec:	
(g)	idle state power demand (Watts);	9.9
(h)	sleep mode power demand (Watts);	1.27
(i)	sleep mode with WOL enabled power demand (Watts) (where enabled);	1.37
(j)	off mode power demand (Watts);	0.38
(k)	off mode with WOL enabled power demand (Watts) (where enabled);	0.81
(I)	internal power supply efficiency at 10 %, 20 %, 50 % and 100 % of rated output power (if applicable):	
	10% 20% 50% 100% Average	
(m)	external power supply efficiency (if applicable):	
	Average*: higher than 87%	
(0)	*internal note: show values for all available external power supplies	\.
(0)	the minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):
(p-1)	the measurement methodology used to determine information mentioned in points (I) - internal PS efficiency:	SU
	N/A	
(p-2)	the measurement methodology used to determine information mentioned in points (m) - external PS efficiency:	SU
	Average*:	
	Energy-star requirement by EPA 2.0	
(p-3)	the measurement methodology used to determine information mentioned in points (o) – loadingcycl batteries:	es
	N/A	

(p-4)				o determine information mentioned in maximum, idle, sleep, off mode roduct IT Eco Declaration:						
	IEC	62623 Edition 1.0 2	012-10	- Desktop and notebook computers - Measurement of energy consumption						
(q)	sequence	of steps for achievin	g a stab	le condition with respect to power demand::						
	Based on user manual									
(r)	description	of how sleep and/o	r off moo	de was selected or programmed:						
				Based on user manual						
(S)	sequence off mode:	of events required to	reach t	he mode where the equipment automatically changes to sleep and/or						
				Based on user manual						
(t)				efore the computer automatically reaches sleep mode, or another oplicable power demand requirements for sleep mode (in minutes):	15 mins					
(u)				ser inactivity in which the computer automatically reaches a demand requirement than sleep mode (in minutes):	30 mins					
(v)	the length	of time before the	display	sleep mode is set to activate after user inactivity (in minutes):	10 mins					
(w)	informatior	on the energy-savi	ng poter	ntial of power management functionality: Based on user manual						
(x)	user inform	nation on how to ena	ble the	power management functionality:						
				Based on user manual						
(z)		supply system, - inf		test voltage in V and frequency in Hz, — total harmonic distortion of the n and documentation on the instrumentation, set-up and circuits used						
				230V/50Hz						
Addition	Notebook Ba	attery Information:								
Yes		No	n/a	This notebook computer is operated by battery/ies that cannot be accesse by a non-professional user.	d and replaced					
(Battery replaceab	not user le)	(Battery user replaceable)		The battery[ies] in this product cannot be easily replace themselves	ed by users					
Additions	linformatio	-								
Auditiona	Il informatio	11								