

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

Annex B2 - Product environmental attributes Notebooks and Tablets

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	Logo			
Company name *	Lenovo				
Contact information * e-mail address	Lenovo Global Environmental Affairs Alvin L Carter alcarter@lenovo.com	Lenovo			
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 *	Notebook				
Commercial name *	hinkPad X12 Detachable/X12 Detachable LTE				
Model number *	20UV, 20UW				
Issue date *	2020/12/1				
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 *	20UV, 20UW Logo						
Issue da	te *	2020/12/1	Len	enovo				
Produc	t environ	mental attributes - Legal requirements	Require	men	t me			
Item			Yes	No	n.a.			
P1		ous substances and preparations						
P1.1*	Product	do comply with current European RoHS Directive. (See legal reference and NOTE B1)	\square					
P1.2*	Comme	s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.	\boxtimes					
P1.3*	hydrobr trichloro	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), pmofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1 ethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum ration values.						
P1.4*		Products do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated terphenyl (PCT) in preparations (see legal reference).						
P1.5*	Product	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).						
P1.6*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm ² /week (see legal reference). Comment: 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/about/sustainability	\square					
P2	Batterie	S						
P2.1*		bduct 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 referenc	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See le e)	igal 🔀					
P2.3*	Batterie	and accumulators are readily removable. (See legal reference)	\boxtimes					
P3	Confor	nity verification & Eco design (ErP)						
P3.1*	The pro	Juct is CE-marked to show conformance with applicable legal requirements (see legal reference laration of Conformity can be requested at: https://www.lenovo.com/us/en/compliance/eu-doc	e). 🔀					
P3.2*	The pro	luct complies with the Eco design requirements for energy-related products, al reference).	\boxtimes					
	· ·	d information is; given in item P15 or added to this document,	\boxtimes					
Dr	Duri	available at: https://www.lenovo.com/us/en/compliance/eco-declarati	on					
P5		packaging						
P5.1*	hexaval	ng and packaging components do not contain more than 0,01% lead, mercury, cadmium ent chromium by weight of these together.						
P5.2*	used (se	kaging materials are marked with abbreviations and numbers indicating the nature of the materi e legal reference).						
P5.3*	(see leg	luct packaging material is free from ozone depleting substances as specified in the Montreal Proi al reference). nt: Legal reference has no maximum concentration values.	ocol 🔀					
P6		nt information						
P6.1*		on for recyclers/treatment facilities is available (see legal reference).						

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 nu	ımber *	20UV, 20UW	Logo					
Issue dat	te *	2020/12/1		Lenc		м		
Product	environ	mental attributes - Market requirements (See General NOTE GN	below)					
		onmental conscious design		Require	ment i	net		
Item		tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.		
P7		Disassembly, recycling						
P7.1*		t have to be treated separately are easily separable				<u> </u>		
P7.2*		aterials in covers/housing have no surface coating.			\square			
P7.3*		Plastic parts > 100 g consist of one material or of easily separable materials. Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.						
P7.4*	-	\square						
P7.5	Plastic p	arts are free from metal inlays or have inlays that can be removed with commonly a	available tools.	\boxtimes				
P7.6*	Labels a	re easily separable. (This requirement does not apply to safety/regulatory labels).		\boxtimes				
	Product	lifetime						
P7.7*	Upgradir	ig can be done e.g. with processor, memory, cards or drives		\boxtimes				
P7.8*	Upgradir	g can be done using commonly available tools		\boxtimes				
P7.9	Spare parts are available after end of production for: 5 years							
P7.10	Service i	s available after end of production for: 5 years						
	Material	and substance requirements						
P7.11*		cover/housing material type (e.g. plastics, metal, aluminum):						
			al type: <mark>PA+Gla</mark>	ss Fiber				
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 (*	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	e retardants, ar	nd		\square		
	more that	chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine i n 25% post-consumer recycled content.	-					
P7.15	as define	ircuit boards, PCBs (without components) are low halogen: all PCBs > 25 g ⊠ ad in IEC 61249-2-21. (See 1NOTE B2)		en 🔀				
P7.16	Marking:					\square		
P7.17		nemical specifications of flame retardants in printed circuit boards > 25 g (without c			_	_		
	TBBF	A (additive), 🗌 TBBPA (reactive) (See NOTE B3), 🔀 Other: 168G2, CAS #: 9920	08-50-1	\bowtie				
		nemical specifications of flame retardants in printed circuit boards (without compone g ISO 1043-4: Brominated Epoxy Resin See P15	ents) > 25 g			\square		
P7.18	<u>Alt. 1: Fl</u>	ame retarded plastic parts > 25 g contain the following flame retardant substance	es/preparations	in				
		ations above 0,1%:				\boxtimes		
		ical name: , CAS #: (See NOTE B4)						
		ical name: , CAS #: " ical name: , CAS #: "						
		nemical specifications of flame retardants in plastic parts > 25 g according ISO 104	3-4: FR(40)	\boxtimes				
						_		
P7.19	In plastic	parts > 25 g, flame retardant substances/preparations above 0,1% are used which	n have been			\boxtimes		
	assigned	the following Risk phrases; and Hazard statements:		_				
			See note B5)					
P7.20*		sumer recycled plastic material content is used in the product (See Note B6):		\boxtimes				
	,	t least one of the two alternatives below shall be answered;						
		otal plastic parts' weight > 25 g, the postconsumer recycled plastic material conten ercentage of total plastic by weight) is 4.5% .	it (calculated as					
	or .							
	b) The	weight of recycled material is 13.4 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 *	20UV, 20UW	Logo	Lonovo
Issue date *	2020/12/1		LEHOVO

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

	Material and subs	stance requirements	(continued)		
P7.21*			d in the product (See N	NOTE B7):	
P7.22*		ree from mercury, i.e. specify: Number of la	. less than 0,1 mg/lamp mps: and maxin). num mercury content p	er lamp: mg
P8	Batteries	· ·		· · · · · ·	
P8.1*	Battery chemical c	omposition: Lithium	Ion/Lithium Mangane	se Dioxide	
P9	Energy consump	tion (See NOTE B8)			
P9.1	For the product the	e following power leve	els or energy consumpt	ions are reported:	
Energy mo	ode *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Standard for energy modes and test method *
Peak (On-	-max)	65 W	65 W	65W	Full load
Catego	ry <u>1</u>				
Short Idle Enabled	e State - WOL	3.8W	3.8W	4.05W	Use for ENERGY STAR V8 registration (P _{idle})
Long Idle Enabled	State - WOL	0.84W	0.88W	0.88W	Use for ENERGY STAR V8 registration (P _{idle})
Sleep (S3) - WOL Enabled	0.84W	0.88W	0.88W	Use for ENERGY STAR V8 registration(P _{sleep})
Off (S5) -	WOL Enabled	0.31W	0.32W	0.38W	Use for ENERGY STAR V8 registration(Poff)
Off (S5) -	WOL Disabled	0.31W	0.32W	0.38W	Use for ErP
<u>Catego</u>	r <u>y 2</u>				
Short Idle Enabled	e State - WOL	4.51W	4.55W	4.61W	Use for ENERGY STAR V8 registration (P _{idle})
Long Idle Enabled	State - WOL	1.14W	1.15W	1.24W	Use for ENERGY STAR V8 registration (P _{idle})
Sleep (S3) - WOL Enabled	1.14W	1.15W	1.24W	Use for ENERGY STAR V8 registration (P _{sleep})
Off (S5) -	WOL Enabled	0.40W	0.40W	0.46W	Use for ENERGY STAR V8 registration (Poff)
Off (S5) -	WOL Disabled	0.40W	0.40W	0.46W	Use for ErP
EPS No-IC (External power wall outlet but di	Dad supply / charger plugged in the isconnected from the product.)	0.08 W	0.09 W	0.08 W	
PTEC *(1)		1.61W	1.61W	1.71W	
PTEC *(2) Typical Er) hergy Consumption	1.96W	1.96W	2.05W	
TEC *(1) Typical Er	nergy Consumption	0.27 kWh/week	0.27 kWh/week	0.29kWh/week	
TEC *(2) Typical Er	nergy Consumption	0.33kWh/week	0.33 kWh/week	0.34kWh/week	
Etec *(1) Annual Er	nergy Consumption	13.99 Wh/year	14.19kWh/year	14.95kWh/year	ETEC = (8760/1000) x (Poff x 0.25 + Psieep x 0.35 + Piong_Idle x 0.10+ Pshort_Idle x 0.30)

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 <u>http://www.ecma-international.org/publications/standards/Ecma-370.htm</u>

ETEC *(2) Annual Energy Consumption		17.22kWh/year	17.36kWh/year	17.98kWh/year	$E_{TEC} = (8760/1000) \times (P \\ P_{sleep} \times 0.35 + P_{long_ldle} \times P_{short_ldle} \times 0.30)$	c 0.10+		
External D					nabled; Pidle: Idle State - WOL Er	abled		L
		ncy Level (International	Efficiency Marking I	Protocol) ^ : VI				
Display res	solution * : 2.46 me	gapixels						
Default tim	e to enter energy s	ave mode: 10 minutes						
P9.2*	Information about	the energy save function	on is provided with th	ne product.		\times		
P9.3	Energy efficiency	class (monitors only):						
P10	Emissions	,						
	Noise emission -	 Declared according to 	ISO 9296 (See NO	TE B9)				
P10.1		Mode description		Statistical uppe	r limit A-weighted sound power	· level,	Lwa,c (B)
	Idle	* Idle mode	dle mode * 2.2					
	Operation	* Operating (CPU)		* 2.2				
	0	Declared A-weighted soun L _{pAm}	d pressure level (dB)	21.9 (operator position desktop – idle)				
	Other mode	Declared A-weighted soun	d pressure level (dB)	22.1 (operator	position desktop – operating)			
	Measured accord	ing to: 🔀 ISO 7779 🔀	_					
		Other	(only if not covered	by ECMA-74)				
Product	environmental a	attributes - Market r	equirements (cor	ntinued)	Re	equire	ment	met
ltem			•			Yes	No	n.a.
	Electromagnetic							
P10.4		meets the requirement -II(3 pin AC adapter o		lectromagnetic fields	of the following voluntary	\boxtimes		
P12		computing products						
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.							
P12.2*	The physical input device meets the requirements of ISO 9995 and ISO 9241-410.							
P13	Packaging and c	locumentation						
P13.1*	Product packagin	g material type(s): <i>cart</i> g material type(s): <i>pap</i> g material type(s): <i>LDF</i>	er weight (kg	g): 0.134				
P13.2*	Product plastic pr	imary packaging is free	from PVC.			\square		
P13.3*		ary corrugated fiberbo red fiber content: 65 %	ard packaging, spec	cify the contained p	ercentage of minimum post-			
P13.4*	Specify media for Electronic,	user and product docu Paper, Other	mentation (tick box):	:				
P13.5		plete this item if paper documentation on pap ecify:						
	Totally chlorine-fr Elemental chlorin	e-free				\boxtimes		
	Processed chlorir	ne-free						
P14	Voluntary progra							
P14.1	The product meet	ts the requirements of t	ne tollowing voluntar	ry program(s):				
	ENERGY STAR® Eco-label: <i>EPEA</i> Eco-label: <i>PCGL</i> Eco-label: <i>TCO</i>	Criteria version:	IEEE 1680.1-2018 13.0	Date: 2020/12/1 Date: 2020/12/1 Date: 2020/12/1 Date: 2020/12/1	Product category: 1/2 Product category: notebook Product category: notebook Product category: notebook			
P15		nation (See NOTE B1						
P9	NOTE: Supplier n information conta knowledge availa provided here is a information.	nakes no representatio ined in this document. <i>i</i> ble at the time of comp approximate and provid	ns, guarantees, assu All information provid letion, and supplier s ed for informational p	trances or warranties ded by supplier in this shall have no obligati purposes only. See a	tested product configuration s whether express or implied, ro s document is provided based of on to update such information. a Lenovo Account Representation	egardin on supp The inf	plier's format	ion
P9		Qualified Notebooks & ystar.gov/index.cfm?fus						

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 - 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	ThinkPad X12 Detachable/X12 Detachable LTE	Logo	
Model Number	20UV, 20UW		00010
Issue Date	2020/12/1		enovo.
Additional information			

P7.1.1	Product environmental attributes						
(d)	year of manufacture:				2020		
(e)	Etec value (kWh) per ErP Lot 3 Catego disabled and if the system is tested with				cards (dGfx) are		
(f)	Etec value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics cards (dGfx) are enable						
		Category A (according to ErP Lot 3)	Category B (according to ErP Lot 3)	Category C (according to ErP Lot 3)	Category D (according to ErP Lot 3)		
	Memory over base [GB]	16					
lents sting	Additional internal storage	Yes (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)		
capability adjustments applied during testing	Discrete television tuner	<mark>No</mark> (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)		
ability a	Discrete Audio Card	<mark>No</mark> (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)		
cap	Discrete graphics Card(s) [number / #]	No #: (Yes / No)	#: (Yes / No)	#: (Yes / No)	#: (Yes / No)		
	Category of discrete graphics Card(s)						
Test results	Etec Value (kWh) - dGfx disabled all discrete graphics cards (dGfx) are disabled/ UMA is active for switchable graphics/ product has no graphics cards (dGfx)	6.71					
Test r	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled	N/A					
(g)	Idle state power demand (Watts);		•	-	0.80		
(h)	Sleep mode power demand (Watts);				0.80		
(i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		0.80		
(j)	Off mode power demand (Watts);				0.34		
(k)	Off mode with WOL enabled power dema	and (Watts) (where en	abled);		0.34		
(I)	Internal power supply efficiency at 10 %, 20 %, 50 % and 100 % of rated output power (if applicable):						
	10% N/A 20% N/A 50% N/A 100% N/A Average N/A						
(m)	external power supply efficiency (if applicable)*:						
	Average active efficiency: 65W: 88.48%	5,87.89%,88.12%,89.7	3%				
(0)	*internal note: show values for all available external pr Minimum number of loading cycles that t		and (applies only to n	otebook computers):	300 cycles		
(p-1)	Measurement methodology used to dete	rmine information men NA	tioned in points (I) – ii	nternal PSU efficiency:			
(p-2)	Measurement methodology used to dete EN 5056	rmine information men 53:2011 measuremen		external PSU efficiend	cy:		

(p-3) Measurement metho	dology used to determine information mentioned in p EN 61960 measurement methodolog	.,						
	dology used to determine information mentioned in n Point P9.1 in the Product IT Eco Declaration: EN 62623:2013 measurement methodo							
(q) Sequence of steps for	or achieving a stable condition with respect to power EN 62623:2013 measurement methodo							
(r) Description of how sl	Description of how sleep and/or off mode was selected or programmed: Based on user manual Sequence of events required to reach the mode where the equipment automatically changes to sleep and/or							
(s) Sequence of events off mode:	required to reach the mode where the equipment aut Based on user manual	tomatically changes to sleep and/or						
	te condition before the computer automatically re- not exceed the applicable power demand requirement		10 mins					
(u) Length of time after	a period of user inactivity in which the compute	r automatically reaches a power	N/A					
mode that has a lower power demand requirement than sleep mode (in minutes): (v) Length of time before the display sleep mode is set to activate after user inactivity (in minutes): (u) Information on the energy applies not activate of power management functionality;								
(w) Information on the er	nergy-saving potential of power management function Based on user manual	nality:						
(x) user information on h	now to enable the power management functionality: Based on user manual							
	neasurements: — test voltage in V and frequency in tem, — information and documentation on the instru							
	230V, 50GHz, Total Harmonic Distortion	n <2 %						
Additional Notebook Batter								
	Battery[ies] <u>not</u> user replaceable	Battery[ies] user replaceable	n/a					
	The battery[ies] in this product cannot be easily replaced by users themselves. ¹⁾							
Internal/built-in Battery	\boxtimes							
External/detachable Battery								
Bios Backup Battery	\boxtimes							
Other:								
Additional information								
as baterías de este producto no pueden si ýměnu baterie/baterií v tomto výrobku by rugeren kan ikke uden videre udskifte batt er Akku/die Akkus dieses Produkts kann/k asutajad ei saa selle toote akut/akusid ise μπαταρία[-ες] στο προϊόν αυτό δεν μπορ a/les batterie(s présente(s) dans ce produ orisnik ne može lako zamijeniti Bateriju sa a batteria/le batterie in questo prodotto no etotāji paši nevar nomainīt šā ražojuma al io gaminio baterijos [bateriju] pats vartotoj termék akkumulátorát/akkumulátorait a fe batteria/batteriji fdan il-prodott ma tistax/ atteriet [ene] i dette produktet kan ikke lett	podykt не може да се замени[ят] лесно от самите потребитег er sustituidas fácilmente por los propios usuarios. neměli provádět sami uživatelé. teriet/batterierne i dette produkt. können nicht ohne weiteres vom Benutzer selbst ausgetauscht w höpsasti asendada. oúv va αντικατασταθούν εύκολα από τους ίδιους τους χρήστες it ne peuvent être facilement remplacée(s) par les utilisateurs eu um u ovom proizvodu. n può/possono essere facilmente sostituita/e dall'utente. kumulatoru(-us). as negali lengvai pakeisti. elhasználó nem tudja egyedül egyszerűen kicserélni. jistgħux tiġi/jiġu sostitwita/i mill-utenti stess. t egebruiker niet gemakkelijk vervangbaar. wymienić bateri wt ym produkcie.	verden.						