

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 *	Lenovo Global Environmental Affairs				
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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 *	ThinkPad X13 Yoga				
Model number *	20SX, 20SY				
Issue date *	2020/2/17				
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 num	ber *	20SX, 20SY	Logo			
Issue date '	*	2020/2/17		Lene	Lenovo	
Product e	nviron	mental attributes - Legal requirements		Require		t met
Item				Yes	No	n.a.
		us substances and preparations				
P1.1* F	Products	do comply with current European RoHS Directive. (See legal reference and NOTE	EB1)	\bowtie		
C	Commer	do not contain Asbestos (see legal reference). t: Legal reference has no maximum concentration value.		\boxtimes		
h ti	ydrobro richloroe	do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), mofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrach ethane, methyl bromide (see legal reference). Comment: Legal reference has no m ation values.				
te	erpheny	do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polych I (PCT) in preparations (see legal reference).		\boxtimes		
P1.5* F	Products hain co	do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carl ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).				
(see lega	h direct and prolonged skin contact do not release nickel in concentrations above 0 al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.),5 μg/cm²/we	ek 🔀		
P1.7* F	REACH	Article 33 information about substances in articles is available at (add URL or mail ww.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure	contact):	\boxtimes		
P2 E	Batterie	ŝ				
		duct contains a battery or an accumulator, the battery/accumulator is labeled with t Information on proper disposal is provided in user manual. (See legal reference)	the disposal	\boxtimes		
	Batteries eference	or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadme)	nium. (See leg	gal 🔀		
P2.3* E	Batteries	and accumulators are readily removable. (See legal reference)		\boxtimes		
P3 (Conforn	nity verification & Eco design (ErP)				
P3.1* T	The proc	luct is CE-marked to show conformance with applicable legal requirements (see leg laration of Conformity can be requested at: https://www.lenovo.com/us/en/compliar).		
		luct complies with the Eco design requirements for energy-related products, al reference).		\boxtimes		
		I information is; given in item P15 or added to this document, available at: https://www.lenovo.com/us/en/compliance/e	an de la retir			
P5 F	Product	packaging		<i>// 1</i>		
P5.1* F	Packagir	packaging ng and packaging components do not contain more than 0,01% lead, mercury ant chromium by weight of these together.	y, cadmium	and 🔀		
P5.2* 1	The pacl	aging materials are marked with abbreviations and numbers indicating the nature elegal reference).	of the materia	al(s) 🔀		
P5.3* 1	The proc see lega	uct packaging material is free from ozone depleting substances as specified in the N al reference).	Nontreal Proto	ocol 🔀		
		t: Legal reference has no maximum concentration values.				
		nt information			_	
P6.1* Ir	normati	on for recyclers/treatment facilities is available (see legal reference).		\square		

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	Imber *	20SX,20SY	Logo			
Issue dat	te *	2020/2/17		Lena	DVO	ти
Product	environ	mental attributes - Market requirements (See General NOTE GN	below)			
		onmental conscious design		Require		met
Item		tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.
P7.1*		Disassembly, recycling It have to be treated separately are easily separable				
P7.2*		naterials in covers/housing have no surface coating.				<u> </u>
P7.3*		arts > 100 g consist of one material or of easily separable materials.				╞
P7.4*		arts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.			╞	╞┼
P7.5	•		available teele		<u> </u>	<u> </u>
		arts are free from metal inlays or have inlays that can be removed with commonly	avallable tools.		╧	<u> </u>
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).				
P7.7*	Product	Infetime ng can be done e.g. with processor, memory, cards or drives				
P7.8*		ig can be done using commonly available tools			┝┝	<u> </u>
P7.9		arts are available after end of production for: 5 years		\square		╞┿
						님
P7.10		s available after end of production for: 5 years				
P7.11*		and substance requirements cover/housing material type (e.g. plastics, metal, aluminum):				
F (.11			al type: PA+G/ a	ass Fiber		
P7.12		n materials of external electrical cables are PVC free.			\square	
P7.13		n materials of internal electrical cables are PVC free.			Ħ	
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 flam 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	Printed c	sircuit boards, PCBs (without components) are low halogen: all \square PCBs > 25 g \ge ed in IEC 61249-2-21. (See 1NOTE B2)	are low halog	en		
P7.16	Flame re Marking:	tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: FR(40)		\boxtimes		
P7.17		nemical specifications of flame retardants in printed circuit boards > 25 g (without c PA (additive), TBBPA (reactive) (See NOTE B3), X Other: 168G2 , CAS #: 992 (\boxtimes		
		nemical specifications of flame retardants in printed circuit boards (without compon g ISO 1043-4:	ents) > 25 g			
P7.18	concentr 1. Chem 2. Chem	ame retarded plastic parts > 25 g contain the following flame retardant substance ations above 0,1%: ical name: <i>polycarbonate based on bisphenol A</i> , CAS #: 25971-63-5 (See N ical name: , CAS #: " ical name: , CAS #: "		in 🔀		
	<u>Alt. 2: </u> Cł	nemical specifications of flame retardants in plastic parts > 25 g according ISO 104	3-4:			\boxtimes
P7.19	In plastic assigned	: parts > 25 g, flame retardant substances/preparations above 0,1% are used which I the following Risk phrases; and Hazard statements:	n have been			
D7 cot			See note B5)			
P7.20*	lfYES;a a) Oft ape or	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 6.3% .	it (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 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 *	20SX, 20SY	Logo		
Issue date *	2020/2/17		Lenovo	

Product environmental attributes - Market requirements (continued) Item

Requirement met Yes No n.a.

	Material and sub	stance requirements	s (continued)		
P7.21*	Biobased plastic	material content is use	ed in the product (See N	OTE B7):	
P7.22*		free from mercury, i.e I specify: Number of la	e. less than 0,1 mg/lamp. amps: and maxim	um mercury content p	er lamp: mg
P8	Batteries				
P8.1*			Ion/Lithium Manganes	e Dioxide	
P9		otion (See NOTE B8)			
P9.1			els or energy consumption		
Energy mode *		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	65 W	Full load
<u>Catego</u>	<u>ry 1</u>				
Short Idle Enabled	e State - WOL	6.54W	6.88W	7.37W	Use for ENERGY STAR V8 registration (P _{idle})
Long Idle Enabled	State - WOL	0.95W	0.96W	0.96W	Use for ENERGY STAR V8 registration (P _{idle})
Sleep (S3	8) - WOL Enabled	0.95W	0.95W	0.96W	Use for ENERGY STAR V8 registration (P _{sleep})
Off (S5) - WOL Enabled		0.48W	0.47W	0.504W	Use for ENERGY STAR V8 registration (P _{off})
Off (S5) -	WOL Disabled	0.46 W	0.45 W	0.47 W	Use for ErP
EPS No-Ic (External power wall outlet but di	Dad r supply / charger plugged in the isconnected from the product.)	0.08 W	0.09 W	0.08 W	
PTEC *Ty Consump	pical Energy	2.51W	2.61W	2.79W	
	nergy Consumption	0.42 kWh/week	0.44 kWh/week	0.47kWh/week	
ETEC * Annual Er	nergy Consumption	21.98 kWh/year	22.88kWh/year	24.25 kWh/year	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.25 + P_{sleep} \times 0.35 + P_{long_ldle} \times 0.10 + P_{short_ldle} \times 0.30)$
					led; P _{idle} : Idle State - WOL Enabled
		•	al Efficiency Marking Pro	otocol) * : VI	
Display re	solution * : 8.29 me	gapixels			
Default tin	ne to enter energy s	ave mode: 20 minutes	3		
P9.2*	Information about	the energy save func	tion is provided with the	product.	
P9.3	Energy efficiency	class (monitors only):			
P10	Emissions				
5 / 6 ·			to ISO 9296 (See NOTE		
P10.1		Mode description			hit A-weighted sound power level, $L_{WA,c}$ (B)
	Idle	* Idle mode		* 2.5	
	Operation	* Operating (CPU)		* 3.5	
			and pressure level (dB) L_{pArr}		ition desktop – idle)
	L		and pressure level (dB) L_{pAm}	32.4 (operator pos	ition desktop – operating)
	Measured accord	ing to: 🔀 ISO 7779	ECMA-74 (only if not covered by	ECMA-74)	

NOTE B8 A Guidance document on Energy Efficiency is available; see <u>http://www.ecma-international.org/publications/standards/Ecma-370.htm</u>

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 B9 A Guidance document on Acoustic Noise is available; see <u>http://www.ecma-international.org/publications/standards/Ecma-370.htm</u>

Model nu	ımber *	20SX, 20SY				Logo			
ssue dat	te *	2020/2/17					Leno		тн
Product	environ	mental attribut	es - Market requirement	s (continued)			Require	ment	me
ltem							Yes	No	n.a
		magnetic emiss							
P10.4	program	n(s): MPR-II(3 pir	the requirement for low frequent AC adapter only)	ency electromag	netic fields of the f	ollowing volun	tary 🔀		
P12		mics for compu							
P12.1*	The dis	play meets the er	gonomic requirements of ISO) 9241-307 for vi	sual display techno	logies.	\square		
P12.2*	The phy	sical input device	e meets the requirements of IS	SO 9995 and IS	D 9241-410.		\boxtimes		
P13	Packag	ing and docume	entation						
P13.1*	Product	packaging mater	ial type(s): <i>paper</i> wei	ight (kg): 0.3163 ight (kg): 0.0511 ight (kg): 0.0885					
P13.2*			ackaging is free from PVC.	5 (5/			\boxtimes		
P13.3*	For pro		rugated fiberboard packaging	g, specify the c	ontained percentag	ge of minimur			
P13.4*		media for user a tronic, XPaper,	nd product documentation (tic	ck box):					
P13.5	Ùser an		is item if paper documentation entation on paper media is ch						
	Elemen	chlorine-free tal chlorine-free ed chlorine-free							
P14									
P14 P14.1		iry programs	equirements of the following v	oluntary program	n(s):				
	ENERG	Y STAR® el: EPEAT	Criteria version: V8 Criteria version: IEEE 10 2018	Date: 20	20/2/17 Produc	ct category: 1 ct category:			
	Eco-lab	el: PCGL	Criteria version: 13.0	Date: 20	20/2/17 Produc	ct category:			
	Eco-lab	el: TCO	Criteria version: 8.0	Date: 20	20/4/26 Produc	ct category:			
P15			(See NOTE B10)						
P9	Energy	consumption o	f specific configuration may	y vary; descript	ion of the tested p	product config	guration:		
	informat knowled	tion contained in Ige available at th d here is approxir	o representations, guarantee this document. All information te time of completion, and sup nate and provided for informa	n provided by sup pplier shall have	pplier in this docum no obligation to up	ent is provided date such info	based on support	olier's format	ion
P9			d Notebooks & Tablet Compu v/index.cfm?fuseaction=find_			w_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 - 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 X13 Yoga	Logo
Model Number	20SX, 20SY	
Issue Date	2020/2/17	Lenovo
Additional information		

P7.1.1	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]	27.0				
ents sting	Additional internal storage	No (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)	
capability adjustments applied during testing	Discrete television tuner	No (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)	
ability a	Discrete Audio Card	No (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)	31.8				
Test r	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled	N/A				
(g)	Idle state power demand (Watts);		•		0.96	
(h)	Sleep mode power demand (Watts);				0.87	
(i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		0.96	
(j)	Off mode power demand (Watts);				0.48	
(k)	Off mode with WOL enabled power dema	and (Watts) (where en	abled);		0.50	
(I)	Internal power supply efficiency at 10 %,	20 %, 50 % and 100 %	% of rated output pow	er (if applicable):		
	10% N/A 20% N/A 50% N/A 100% N/A Average N/A					
(m)	external power supply efficiency (if applied	cable)*:				
	Average active efficiency: 65W: 88.48%,87.89%,88.12%,89.73%					
(0)	*internal note: show values for all available external po 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)	p-2) Measurement methodology used to determine information mentioned in points (m) – external PSU efficiency: EN 50563:2011 measurement methodology					

(p-3)	Measurement metho	dology used to determine information mentioned in p EN 61960 measurement methodolog		
(p-4)		dology used to determine information mentioned in r 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	eep and/or off mode was selected or programmed: Based on user manual		
(s)		required to reach the mode where the equipment au	tomatically changes to sleep and/or	
	off mode:	Based on user manual		
(t)		te condition before the computer automatically re- s not exceed the applicable power demand requirement	•	30 mins
(u)	Length of time after	a period of user inactivity in which the compute	r automatically reaches a power	NA
(λi)		ver power demand requirement than sleep mode (in ore the display sleep mode is set to activate after a		10 mins
(v) (w)		nergy-saving potential of power management function Based on user manual		To mins
(x)	user information on h	now to enable the power management functionality:		
(-)		Based on user manual		
(z)		neasurements: — test voltage in V and frequency in tem, — information and documentation on the instruction 230V , 50GHz , Total Harmonic Distortior	mentation, set-up and circuits used	
A 1 1*4*				
Addition	nal Notebook Batter		Detter figel ween realess ship	10
		Battery[ies] not user replaceable	Battery[ies] user replaceable	n/a
		The battery[ies] in this product cannot be easily replaced by users themselves. ¹⁾		
Internal/b	ouilt-in Battery	\boxtimes		
External/	detachable Battery			
Bios Bac	kup Battery			
Other:				
Additiona	al information			
γγγλατόρμα ss baterias de ymēnu bateria ugeren kan il er Akku/die A asutajad ei sa μπαταρία[-ες i/les batterie(orisnik ne mo a batteria/le b tetotāji paši ne o gaminio ba termék akkur batterija/batte atteriet [ene] i e batterij(en) żytkownik nie ou as bateria	ra[μτe] δατερμя[μ] в този η e este producto no pueden s e/baterií v tomto výrobku by kke uden videre udskifte bat kkus dieses Produkts kann/l aa selle toote akut/akusid ise c] στο προϊόν αυτό δεν μπορ s présente(s) dans ce produ že lako zamijeniti Bateriju sa atterijas [bateriju] pats vartotoj mulátorát/akkumulátorait a fe eriji f dan il-prodott ma tistax/ i dette produktet kan ikke let in dit product is (zijn) door d: može sam w latwy sposób	ούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες it ne peuvent être facilement remplacée(s) par les utilisateurs eu am u ovom proizvodu. n può/possono essere facilmente sostituita/e dall'utente. kumulatoru(-us). jas negali lengvai pakeisti. alhasználó nem tudja egyedül egyszerűen kicserélni. jistgňux tigi/jigu sostitwita/i mill-utenti stess.	verden.	