

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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	alcarter@lenovo.com			
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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 *	IP Flex 3 Chrome 12IAN8				
Model number *	82XH				
Issue date *	2022-12-29				
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 *	82XH Logo			
lssue da	ite *	2022-12-29	Len)
Produc	t environ	mental attributes - Legal requirements	Require		t met
Item			Yes	No	n.a.
P1		ous substances and preparations			
P1.1*	Product	s do comply with current European RoHS Directive. (See legal reference and NOTE B1)			
P1.2*		s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.	\boxtimes		
P1.3*	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 yl (PCT) in preparations (see legal reference).	\square		
P1.5*	Product	s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in ontaining at least 48% per mass of chlorine in the SCCP (see legal reference).	the 🔀		
P1.6*	(see leg	th direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm²/w al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	eek 🔀		
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail contact): www.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure			
P2	Batterie	NS			
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*		s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See le	gal 🔀		
P2.3*		s and accumulators are readily removable. (See legal reference)			
P3		nity verification & Eco design (ErP)			
P3.1*	The pro The Dec <u>https://</u>	duct is CE-marked to show conformance with applicable legal requirements (see legal reference claration of Conformity can be requested at (add link or e-mail address): www.lenovo.com/us/en/compliance/uu-doc for EU ; www.lenovo.com/us/en/compliance/uu-doc for UK	:). 🔀		
P3.2*		duct complies with the Eco design requirements for energy-related products,	\square		
	· · ·	al reference). d information is; Ziven in item P15 or added to this document, available at (add URL):	\boxtimes		
	https://	www.lenovo.com/us/en/compliance/eco-declaration			
P5		t packaging			
P5.1*		ng and packaging components do not contain more than 0,01% lead, mercury, cadmium ent chromium by weight of these together.	and 🔀		
P5.2*	The pac	kaging materials are marked with abbreviations and numbers indicating the nature of the materi se legal reference).	al(s) 🔀		
P5.3*	The pro	duct packaging material is free from ozone depleting substances as specified in the Montreal Prot al reference). nt: Legal reference has no maximum concentration values.	ocol 🔀		
		ent information			
P6					

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	umber *	82 <i>XH</i>	Logo	Lon		
Issue da	te *	2022-12-29		Len	ovo	
Product		mental attributes - Market requirements (See General NOTE GN	· ·			
		onmental conscious design		Require		met
Item	*=manda	tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.
P7 P7.1*	Design,	Disassembly, recycling at have to be treated separately are easily separable		N 7		
P7.2*		naterials in covers/housing have no surface coating.				
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		arts are free from metal inlays or have inlays that can be removed with commonly	available tools.			
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).		\square		
		lifetime				
P7.7*		ng can be done e.g. with processor, memory, cards or drives				
P7.8*	10	ng can be done using commonly available tools		\square		
P7.9	Spare pa	arts are available after end of production for: 5 years				
P7.10	Service i	is available after end of production for: 5 years				
		and substance requirements				
P7.11*		cover/housing material type (e.g. plastics, metal, aluminum):				
P7.12		type: PC+ABS+TPU Material type: PC+ABC+15% tac n materials of external electrical cables are PVC free. PVC free. PVC free.				
				<u> </u>		
P7.13		n materials of internal electrical cables are PVC free.				
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 I chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine i an 25% post-consumer recycled content.	e retardants, and			
P7.15	Printed of	circuit boards, PCBs (without components) are low halogen: all PCBs > 25 g ed in IEC 61249-2-21. (See 1NOTE B2)] are low haloger	ו 🗌	\square	
P7.16	Flame re Marking:	etarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4				
P7.17	<u>Alt. 1: Cl</u>	hemical specifications of flame retardants in printed circuit boards > 25 g (without c PA (additive), TBBPA (reactive) (See NOTE B3), Other: , CAS #:	omponents):			
	<u>Alt. 2: </u> Cl	hemical specifications of flame retardants in printed circuit boards (without compon	ents) > 25 g		_	
D7.40		g ISO 1043-4:				
P7.18		retarded plastic parts >25g contain the following flame retardant substance rations above 0.1%:	s/preparations ir	ו 🖂		
	1. Chem	ical name: Bisphenol A diphosphate CAS #: 181028-79-5				
		ical name: CAS #: ical name: CAS #:				
		ical name: CAS #:				
		al specifications of flame retardants in plastic parts >25g according ISO 1043-4:FR	(40)			
P7.19	In plastic	parts > 25 g, flame retardant substances/preparations above 0,1% are used whic	h have been		H	
		the following Risk phrases; and Hazard statements:				
	The sou	rce(s) for these classifications is/are found at (add URL(s)): , (See note	e B5)			
P7.20*	Postcon	sumer recycled plastic material content is used in the product (See Note B6):		\boxtimes		
		at least one of the two alternatives below shall be answered;				
	΄ ap	total plastic parts' weight > 25 g, the postconsumer recycled plastic material conter ercentage of total plastic by weight) is 7.43% .	nt (calculated as			
	or b) The	e weight of recycled material is 34.1 g.				
L	~					

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 * Issue date *	82XH 2022-12-29	Logo	Lenovo.
Product environ	nental attributes - Market requirements (continued)		Requirement met

Item

	Matorial and cul	ostance requirements	(continued)			-
P7.21*		material content is used		DTE B7):		
	•	ne of the two alternative				
		tic parts' weight > 25 g,			ted as a percentage of	
		by weight) is 0 %.				
	or					
		of the biobased plastic r				
P7.22*		free from mercury, i.e. specify: Number of lar		um mercury content pe	er lamp: mg	
P8	Batteries			an moroary content pe	ing	
P8.1*	Battery chemical	composition: LI-ION Po	olymer			
P9	Energy consum	ption (See NOTE B8)	-			
P9.1		ne following power level	s or energy consumptic	ons are reported:		
Energy mo	de *	Power level at	Power level at	Power level at	Reference/Standard for energy	
		100 V AC	115 V AC	230 V AC	modes and test method *	
Categor	<u>y 1</u>					
Short Idle	State - WOL	4.02 W	4.07 W	4.37 W	ENERGY STAR Computers V8	
Enabled					(P _{idle})	
Long Idle	State - WOL	0.52 W	0.52 W	0.59 W	ENERGY STAR Computers V8	
Enabled		0.02 11	0.02 11	0.00 11	(P_{idle})	
Class (02)	WOL Enchlad	0.52.14/	0.52.14/	0.50.14/		
Sieep (S3)	- WOL Enabled	0.52 W	0.52 W	0.59 W	ENERGY STAR Computers V8 (P _{sleep})	
Off (S5) - 1	NOL Enabled	0.38 W	0.38 W	0.45 W	ENERGY STAR Computers V8	
					(P _{off}) Use for ErP	
EPS No-loa		0.06 W	0.06 W	0.06 W		
(External power s wall outlet but dis	supply / charger plugged in the connected from the product.)	9				
PTEC *		W	W	W		\boxtimes
	ergy Consumption					
ETEC *	ergy Consumption	11.89(Cat1) kWh/year	12.02(Cat1) kWh/year	13.14(Cat1) kWh/year	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.25)$	
	ergy consumption	Kvvn/year	Kvvn/year	Kvvn/year	+ $P_{sleep} \times 0.35$ + $P_{long_ldle} \times 0.10$ + $P_{short\ ldle} \times 0.30$)	
					ed; P _{idle} : Idle State - WOL Enabled	
External Po	ower Supply Efficie	ncy Level (Internationa	Efficiency Marking Pro	tocol) * : V/		
Display res	solution * : 2.304 m	negapixels			1920*1200	
Default tim	e to enter energy s	ave mode: 8.5 minutes				Ē
P9.2*	Information abou	t the energy save functi	on is provided with the	product.		Ē
P9.3	Energy efficiency	class (monitors only):				
P10	Emissions					
	Noise emission	 Declared according to 	ISO 9296 (See NOTE	B9)		
P10.1	Mode	Mode description			t A-weighted sound power level, $L_{WA,c}$	(B)
	Idle	* SSD:Idle		* 2.2		
	Operation	* SSD: Operating		* 2.2		
	Other mode	Declared A-weighted soun		14.7 (operator posit	tion desktop – idle)	
	Other mode	Declared A-weighted soun	d pressure level (dB) L _{pAm}	14.7 (operator posit	tion desktop – operating)	
	Measured accord	ling to: 🔀 ISO 7779	ECMA-74	1		
		Other	(only if not covered by	ECMA-74)		
	1		() () () () () () () () (/		

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

Yes

No

n.a.

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

Model nu	Imber *	82XH					Logo				
Issue dat	te *	2022-12-29						Le	no	VO.	
Product	environ	nental attribute	es - Market requirement	ts (conti	inued)			Re	quire	nent	met
Item									Yes	No	n.a.
		nagnetic emissi									
P10.4	program	(s): MPR-II(3 pin	ne requirement for low frequ AC adapter only)	lency ele	ctromagnetic fiel	ds of the foll	owing volur	ntary	\square		
P12		nics for comput									
P12.1*			onomic requirements of ISO			•	gies.		\boxtimes		
P12.2*	The phy	sical input device	meets the requirements of I	SO 9995	and ISO 9241-4	10.			\boxtimes		
P13	Packag	ng and docume	ntation								
P13.1*	Product Product Product	packaging materi	al type(s): <i>LDPE Cushion</i> al type(s): <i>LDPE Bag</i> we al type(s): weight	eight (kg):	reight (kg): 0.030 : 0.011						
P13.2*			ckaging is free from PVC.	eigin (ng	<i>p</i>				\boxtimes		
P13.3*	For pro	1 71	ugated fiberboard packaging	ıg, specif	y the contained	percentage	of minimu	m post-			
P13.4*	Specify	media for user an ic ⊠, Paper ⊠,	d product documentation (tic	ck box):							
P13.5	Ùser an		item if paper documentatio ntation on paper media is ch		ee:						
	Totally o	hlorine-free							\square		
	,	al chlorine-free									
	Process	ed chlorine-free							Ħ		
P14	Volunta	ry programs							<u> </u>		
P14.1			uirements of the following v	oluntary	program(s):						
	Eco-lab	Y STAR® el: EPEAT el: PCGL	Criteria version: 8.0 Criteria version: 1680.1 Criteria version: Ver.14	-2018 I	Date: 2022/12/29 Date: 2023/2/28 Date: 2023/2/28	Product	category: 1 category: N category: N				
P15	Additio	nal information (See NOTE B10)								
P 9	Energy	consumption of	specific configuration may	y vary; d	lescription of th	e tested pro	oduct confi	iguration:			
	the info supplie informa	rmation containe 's knowledge av tion. The inform	o representations, guaran ed in this document. All inf ailable at the time of comp ation provided here is app for more information.	formation pletion, a	n provided by s and supplier sha	upplier in t all have no	his docum obligation	ent is prov to update	vided I such	based	lon
P9	See Ene	rgy Star Qualifie	d Notebooks & Tablet Cor ov/index.cfm?fuseaction=				o&pgw_coo	de=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	IP Flex 3 Chrome 12IAN8	Logo
Model number *	82XH	
Issue date *	2022-12-29	Lenovo
Additional information		

d)	Year of manufacture:				2023
e)	Etec value (kWh) per ErP Lot 3 Catego disabled and if the system is tested with				cards (dGfx) are
)	Etec value (kWh) per ErP Lot 3 Categor enable	ry and capability adjust	ments applied when a	all discrete graphics	cards (dGfx) are
		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]	4			
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)
	Discrete Audio Card No (Yes / No) (Yes / No)		(Yes / No)	(Yes / No)	(Yes / No)
app	Discrete graphics Card(s) [number / #]	No #: (Yes / No)	#: (Yes / No)	#: (Yes / No)	#: (Yes / No)
	Category of discrete graphics Card(s)				
sults	Etec Value (kWh) - dGfx disabled all discrete graphics cards (dGfx) are disabled/ UMA is active for switchable graphics/ product has no graphics cards (dGfx)	10.0			
Test results	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled				
g)	Idle state power demand (Watts);	4	I		A : 3.08
ı)	Sleep mode power demand (Watts);				A : 0.43
)	Sleep mode with WOL enabled power d	emand (Watts) (where	enabled);		A : NA
	Off mode power demand (Watts);				A : 0.29
x)	Off mode with WOL enabled power dem	and (Watts) (where en	abled);		A : NA
)	Internal power supply efficiency at 10 %	, 20 %, 50 % and 100 %	% of rated output pow	er (if applicable):	
	10% 20% 50%	100% Avera	ige		
n)	External power supply efficiency (if appli	cable)*:			
	Average active efficiency: 65W: 89,41%	6, <mark>88,62%,88,96%</mark>			
	*internal note: show values for all available external p				
))	Minimum number of loading cycles that	the batteries can withs	and (applies only to n	otebook computers):	300CYCLES
o-1)	Measurement methodology used to dete	ermine information mer NA	tioned in points (I) – ii	nternal PSU efficiency	:
o-2)	Measurement methodology used to dete	ermine information mer 63:2011 measuremen		external PSU efficience	cy:

(p-3)	Measurement metho	dology used to determine information mentioned in p EN 61960 measurement methodology		
(p-4)		dology used to determine information mentioned in r Point P9.1 in the Product IT Eco Declaration:	naximum, idle, sleep, off mode	
		EN 62623:2013 measurement methodo	blogy	
(q)	Sequence of steps for	or achieving a stable condition with respect to power	demand::	
		EN 62623:2013 measurement methodo	blogy	
(r)	Description of how s	leep and/or off mode was selected or programmed:		
		EN 62623:2013 measurement methodo	blogy	
(s)	Sequence of events off mode:	required to reach the mode where the equipment au	tomatically changes to sleep and/or	
	refe	er to power management, 30mins automatically re	eaches sleep mode	
(t)		te condition before the computer automatically re- not exceed the applicable power demand requirement		10
(u)		r a period of user inactivity in which the compute		NA
. ,		ver power demand requirement than sleep mode (in		
(v) (w)		re the display sleep mode is set to activate after nergy-saving potential of power management function		10
(**)		lergy-saving potential of power management function	nancy.	
		refer to user manual		
(x)	User information on	how to enable the power management functionality:		
		refer to user manual		
(z)		measurements: — test voltage in V and frequency in		
	used for electricity supply	system, — information and documentation on the in- sting:	strumentation, set-up and circuits	
		230V, 50GHz, Total Harmonic Distortion	n < 2 %	
			1 ~ 2 /0	
Additio	nal Notebook Batter	y Information: 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⁾		1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Internal/	/built-in Battery			
	I/detachable Battery			
	ckup Battery			
Other:				
Addition	al information			
) he battery[ie	s] in this product cannot be e	asily replaced by users themselves.		
		родукт не може да се замени[ят] лесно от самите потребител er sustituidas fácilmente por los propios usuarios.	и.	
ýměnu bater	rie/baterií v tomto výrobku by	neměli provádět sami uživatelé.		
er Akku/die /	Akkus dieses Produkts kann/	teriet/batterierne i dette produkt. können nicht ohne weiteres vom Benutzer selbst ausgetauscht w	verden.	
	saa selle toote akut/akusid ise ccl στο προϊόν αυτό δεν μπορ	ehőlpsasti asendada. ούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες		
/les batterie	e(s présente(s) dans ce produ	it ne peuvent être facilement remplacée(s) par les utilisateurs eu	ıx-mêmes.	
a batteria/le		n può/possono essere facilmente sostituita/e dall'utente.		
	nevar nomainīt šā ražojuma a aterijos [bateriju] pats vartoto			
termék akku	umulátorát/akkumulátorait a fe	elhasználó nem tudja egyedül egyszerűen kicserélni.		
atteriet [ene]] i dette produktet kan ikke let			
) in dit product is (zijn) door d ie może sam w łatwy sposób	e gebruiker niet gemakkelijk vervangbaar.		
ou as bateri				
		ser facilmente substituídas pelos próprios utilizadores.		
		ser facilmente substituídas pelos próprios utilizadores. e (pot) fi ușor înlocuită (înlocuite) de utilizatorii înșiși.		
atériu(-ie) v 1 aterij/baterije	iile) din acest produs nu poat tomto výrobku nemôže vymie	ser facilmente substituidas pelos próprios utilizadores. e (pot) fi ușor înlocuită (înlocuite) de utilizatorii înșiși. ňat použivateľ. m ine morejo zlahka zamenjati.		

Bu üründeki batarya(lar) kullanıcılar tarafından kolaylıkla değiştirilemez.