

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				
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 *	Notebook				
Commercial name *	IdeaPad Pro 5 16ARP8, Xiaoxin Pro 16 ARP8				
Model number *	83AS				
Issue date *	2022-12-19				
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 *	83AS Logo	1.000		
lssue da	ate *	2022-12-19	Len		
Produc	t environ	mental attributes - Legal requirements	Require	emen	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)	\square		
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*	terphenyl (PCT) in preparations (see legal reference).		\boxtimes		
P1.5*		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/we al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	ek 🔀		
P1.7*		Article 33 information about substances in articles is available at (add URL or mail contact): <pre>www.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure</pre>	\square		
P2	Batterie	95			
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 leg	gal 🔀		
P2.3*	Batterie	s and accumulators are readily removable. (See legal reference)			
P3	Confor	nity verification & Eco design (ErP)			
P3.1*	The pro The Dec https://	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/eu-doc for EU; www.lenovo.com/us/en/compliance/uk-doc for UK). 🔀		
P3.2*		duct complies with the Eco design requirements for energy-related products, al reference).			
	Require	d information is; given in item P15 or added to this document, available at (add URL):			
		www.lenovo.com/us/en/compliance/eco-declaration			
P5		t 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 materia ee legal reference).			
P5.3*	(see leg	duct packaging material is free from ozone depleting substances as specified in the Montreal Proto al reference). nt: Legal reference has no maximum concentration values.	ocol 🔀		
		ha Logar totoroneo hao no maximum oonooniration valdoo.			
P6	Treatme	ent information			

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 *	83AS	Logo			
Issue da	te *	2022-12-19		Len	ovo	
Product	t environ	mental attributes - Market requirements (See General NOTE GN	below)			
		onmental conscious design	F	Require	ment	met
Item		tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.
P7		Disassembly, recycling				_
P7.1*		at have to be treated separately are easily separable			<u> </u>	
P7.2*		naterials in covers/housing have no surface coating.				
P7.3*	-	arts > 100 g consist of one material or of easily separable materials.				\square
P7.4*		arts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.		\square		
P7.5		arts are free from metal inlays or have inlays that can be removed with commonly a	available tools.	\square		
P7.6*	Labels a	re easily separable. (This requirement does not apply to safety/regulatory labels).		\boxtimes		
	Product					
P7.7*	Upgradir	ng can be done e.g. with processor, memory, cards or drives		\square		
P7.8*	Upgradir	ng can be done using commonly available tools		\boxtimes		
P7.9	Spare pa	arts are available after end of production for: 3 years				
P7.10	Service i	s available after end of production for: 4 years				
	Material	and substance requirements				
P7.11*	Product	cover/housing material type (e.g. plastics, metal, aluminum):				
		type: aluminium Material type: plastic(PC+ABS)				
P7.12		n materials of external electrical cables are PVC free.				
P7.13		n materials of internal electrical cables are PVC free.			\square	
P7.14		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 chloride or 0.3% weight (3000 ppm) bromine and 0.3% weight (3000 ppm) chlorine i				
		an 25% post-consumer recycled content.	n parts containing			
P7.15	Printed of	circuit boards, PCBs (without components) are low halogen: all \square PCBs > 25 g \boxtimes ed in IEC 61249-2-21. (See 1NOTE B2)	are low halogen			
P7.16	Flame re Marking:	tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4:		\square		
P7.17	Alt. 1: C	themical specifications of flame retardants in printed circuit boards > 25 g (with	out components):			
	TBBPA ((additive), TBBPA (reactive) (See NOTE B3), Other: , CAS #:	. ,			-
	Alt 2. Cl	nemical specifications of flame retardants in printed circuit boards (without component	ents) > 25 a	\boxtimes		
		g ISO 1043-4: FR(16)	cm3) + 20 g			
P7.18	Alt. 1			\square		
		etarded plastic parts >25g contain the following flame retardant substance	s/preparations in			
		ations above 0.1%:				
		ical name: Oligomeric phosphorous compound CAS #: Confidential				
		ical name: CAS #: ical name: CAS #:				
		ical name: CAS #:				
	Alt. 2					
	Chemica	al specifications of flame retardants in plastic parts >25g according ISO 1043-4:		_	_	
P7.19	In plactic	parts > 25 g, flame retardant substances/preparations above 0,1% are used which	have been			
P7.19		I the following Risk phrases; and Hazard statements: H411,H413	Thave been			
		rce(s) for these classifications is/are found at (add URL(s)): European Court	cil Directive			
	67/548/E					
P7.20*		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;				
		total plastic parts' weight > 25 g, the postconsumer recycled plastic material conter ercentage of total plastic by weight) is 20.06% .	it (calculated as			
	or	croentage of total plastic by weight is 20.00/0.				
		e weight of recycled material is 44.65 g.				

NOTE B3 and B4 A Guidance document on Chemical substances is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm

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 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 *	del number * 83AS		Lenovo
Issue date *	2022-12-19		LEIIOVO
Product environm	nental attributes - Market requirements (continued)		Requirement met

Requirement metYesNon.a.

	Material and s	ubstance requirements	(continued)						
P7.21*		c material content is use		NOTE B7):					
	If YES: at least	If YES; at least one of the two alternatives below shall be answered;							
	a) Of total pla	otal plastic parts' weight > 25 g, the biobased plastic material content (calculated as a percentage of							
	total plastic by weight) is %.								
	or b) The weigh	t of the biobased plastic	material is q.						
P7.22*	/	re free from mercury, i.e)					
		If mercury is used specify: Number of lamps: and maximum mercury content per lamp: mg							
P8	Batteries								
P8.1*	,	Battery chemical composition: LI-ION Polymer battery							
P9		mption (See NOTE B8)							
P9.1		the following power level							
Energy m		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	n-max)	100 W	100 W	100 W	Full load				
<u>Catego</u>	ory 2								
	e State - WOL	7.79 W	7.77 W	8.05 W	ENERGY STAR Computers V8				
Enabled					(P _{idle})				
	e State - WOL	0.53 W	0.49 W	0.53 W	ENERGY STAR Computers V8				
Enabled					(P _{idle})				
Sleep (S3	3) - WOL Enabled	0.50 W	0.49 W	0.53 W	ENERGY STAR Computers V8				
Off (S5) -	WOL Enabled	0.40 W	0.40 W	0.46 W	ENERGY STAR Computers V8				
EPS No-le		0.070 W	0.070 W	0.070 W					
	er supply / charger plugged in disconnected from the produc	the t.)							
PTEC *		W	W	W		\bowtie			
Typical El ETEC *	nergy Consumptio	n 23.35 kWh/year	22.23 kWh/year	24.25 kWh/year	$E_{\text{TEC}} = (8760/1000) \times (P_{\text{off}} \times 0.25)$				
	nergy Consumptio			24.25 KWII/year	$E_{TEC} = (0700/1000) \times (P_{off} \times 0.25)$ + $P_{sleep} \times 0.35 + P_{long \ Idle} \times 0.10$ +				
					P _{short Idle} x 0.30)				
					ed; Pidle: Idle State - WOL Enabled				
		iency Level (Internationa	al Efficiency Marking Pi	rotocol) * : VI					
Display re	esolution * : 4.096 r	megapixels							
Default tir	me to enter energy	save mode: 5 minutes							
P9.2*	Information abo	out the energy save funct	ion is provided with the	e product.					
P9.3	Energy efficiend	cy class (monitors only):				\boxtimes			
P10	Emissions				•				
		n – Declared according t	to ISO 9296 (See NOT						
P10.1	Mode	Mode description			hit A-weighted sound power level, $L_{WA,c}$	(B)			
	Idle	* Idle (Operating)		* 2.4		Ц.			
	Operation	* HDD:Operation CPU:Operation		* NA(No HDD) 5.1		\Box			
	Other mode	Declared A-weighted sour	nd pressure level (dB) L_{A}	16.3 (operator pos	ition NB – idle)				
	Other mode	Declared A-weighted sour			on NB – operating)				
	Measured acco	rding to: 🔀 ISO 7779 [ECMA-74	I					
	1	Other	(only if not covered b	y ECMA-74)					

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

Item

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

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

Model nu	umber *	83AS			Log	0	Long		
Issue dat	te *	2022-12-19					Leno	VO,	6
Product	environr	nental attribute	es - Market requirements (cor	ntinued)			Require	ment	me
Item							Yes	No	n.a
		nagnetic emissi							
P10.4	program	(s): MPR-II(3 pin	he requirement for low frequency e AC adapter only)	lectromagnetic fields	s of the following	g voluntary	′ 🖂		
P12	Ergono	nics for comput	ing products						
P12.1*			onomic requirements of ISO 9241-						
P12.2*	The phy	sical input device	meets the requirements of ISO 999	95 and ISO 9241-410	0.		\boxtimes		
P13	Packaging and documentation								
P13.1*	Product Product Product Product	packaging materi packaging materi packaging materi packaging materi	al type(s): Corrugated Fiberboard al type(s): paper(manual) al type(s): Corner paper weight al type(s): PET weight (kg): 0.01t al type(s): EPE weight (kg): 0.105 al type(s): POF weight (kg): 0.005	weight (kg): <i>0.040</i> (kg): <i>0.048</i> 5					
P13.2*			ackaging is free from PVC.				\boxtimes		
P13.3*		luct primary corr er recovered fiber	ugated fiberboard packaging, spec content: 80 %	cify the contained p	ercentage of m	ninimum p			
P13.4*		media for user an ic ⊠, Paper ⊠,	d product documentation (tick box): Other						
P13.5	Úser and		s item if paper documentation used entation on paper media is chlorine-				\boxtimes		
	Element	hlorine-free al chlorine-free ed chlorine-free							
P14	Volunta	ry programs							
P14.1			quirements of the following voluntar	y program(s):					
		Y STAR® el: EPEAT el:	Criteria version: <i>8.0</i> Criteria version: <i>1680.1-2018</i> Criteria version:	Date: 2022/12/17 Date: Date:	Product categ Product categ Product categ	ory:			
P15		nal information (
P9 P9	NOTE: \$ the info supplied informa <u>Accoun</u> See Ene	Supplier makes i rmation contain r's knowledge av tion. The inform t Representative ergy Star Qualifie	specific configuration may vary; no representations, guarantees, a ed in this document. All informati vallable at the time of completion ation provided here is approxima for more information. ed Notebooks & Tablet Computer tps://www.energystar.gov/produ	assurances or warr ion provided by su , and supplier shall te and provided fo rs for the latest info	anties whether pplier in this d l have no oblig r informational prmation:	express	or implied, I is provided I Ipdate such	based	lon

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 *	IdeaPad Pro 5 16ARP8, Xiaoxin Pro 16 ARP8	Logo
Model number *	83AS	
Issue date *	2022-12-19	Lenovo
Additional information		

d)	Year of manufacture:				2022			
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) ar 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]	32						
ients 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 lied du	Discrete Audio Card	No (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)			
capa appl	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)	4.27						
Test results	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled							
g)	Idle state power demand (Watts);		l		0.53			
ו)	Sleep mode power demand (Watts);				0.53			
)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		0.53			
)	Off mode power demand (Watts);				0.46			
<)	Off mode with WOL enabled power dem	and (Watts) (where en	abled);		0.46			
)	Internal power supply efficiency at 10 %	, 20 %, 50 % and 100 °	% of rated output pow	er (if applicable):				
	10% 20% 50%	100% Avera	age					
n)	External power supply efficiency (if appli	cable)*:						
	Average active efficiency: 100W: 90.93	%, 90.27%, 89.95%, 9	0.03% 65W: 91.49%,	90.15%, 91.49%, 91.	15%			
<u> </u>	*internal note: show values for all available external p							
0)	Minimum number of loading cycles that	the batteries can withs	tand (applies only to n	otebook computers):	300CYCLES			
p-1)	Measurement methodology used to dete	ermine information mer NA	ntioned in points (I) – i	nternal PSU efficiency:	:			
p-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 50563:2011 measurement methodo		
	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::	
	Power on \rightarrow Wait 5 minutes \rightarrow Stable co	ndition	
(r) Description of how s	leep and/or off mode was selected or programmed:		
	Power on → Wait 5 minutes → Stable co	ndition	
(s) Sequence of events off mode:	required to reach the mode where the equipment au	tomatically changes to sleep and/or	
	er to power management, 10 mins automatically re te condition before the computer automatically re		
condition which does	not exceed the applicable power demand requirement	ents for sleep mode (in minutes):	5
mode that has a low	r a period of user inactivity in which the compute ver power demand requirement than sleep mode (in	minutes):	NA
	re the display sleep mode is set to activate after a nergy-saving potential of power management function		5
		,	
User information	described in User Guide and Power Manager un programs	der Lenovo Vantage menu in all	
(x) User information on	how to enable the power management functionality:		
User information	e described in User Guide and Power Manager un programs	der Lenovo Vantage menu in all	
	measurements: — test voltage in V and frequency in		
used for electrical test	system, — information and documentation on the instance in the	strumentation, set-up and circuits	
	230V, 50GHz, Total Harmonic Distortior	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			
Other:			
Additional information			
1) The battery[ies] in this product cannot be e			
Las baterías de este producto no pueden s	родукт не може да се замени[ят] лесно от самите потребител er sustituidas fácilmente por los propios usuarios.	и.	
Výměnu baterie/baterií v tomto výrobku by Brugeren kan ikke uden videre udskifte bat			
Der Akku/die Akkus dieses Produkts kann/ Kasutaiad ei saa selle toote akut/akusid ise	können nicht ohne weiteres vom Benutzer selbst ausgetauscht w hölpsasti asendada.	verden.	
	ούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες it ne peuvent être facilement remplacée(s) par les utilisateurs eu	x-mêmes.	
Korisnik ne može lako zamijeniti Bateriju sa			
Lietotāji paši nevar nomainīt šā ražojuma a Šio gaminio baterijos [bateriju] pats vartoto	kumulatoru(-us).		
A termék akkumulátorát/akkumulátorait a fé	elhasználó nem tudja egyedül egyszerűen kicserélni. 'jistgħux tiġi/jiġu sostitwita/i mill-utenti stess.		
Batteriet [ene] i dette produktet kan ikke let De batterij(en) in dit product is (zijn) door d	t erstattes av brukerne selv.		
Użytkownik nie może sam w łatwy sposób			
Bateria (bateriile) din acest produs nu poat	e (pot) fi ușor înlocuită (înlocuite) de utilizatorii înșiși.		
Batériu(-ie) v tomto výrobku nemôže vymie Baterij/baterije v tem izdelku uporabniki sa Tämän tuotteen akku (akut) eilväl ole belo	ni ne morejo zlahka zamenjati.		
Tämän tuotteen akku [akut] ei[vät] ole help Det är inte enkelt för kunden att själv byta u Bu üründeki batarya(lar) kullanıcılar tarafır	ut batteriet/batterierna.		
u urunueni valarya(iar) nullanicilar (afatif	iuan kolayılkıla ucyişlinici ilez.		