

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 *	Portable Computer Tablet						
Commercial name *	Lenovo Tab M8 (Gen 3)						
Model number *	ZA87,ZA88,ZA89						
Issue date *	2021.6.4						
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 *	ZA87,ZA88,ZA89	Long		
Issue date *		2021.6.4	Lenc		R
Produc	t environ	mental attributes - Legal requirements	Require		met
Item			Yes	No	n.a.
P1		ous substances and preparations			
P1.1*	Products	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*	Products terpheny	s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated (I (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 ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	the 🔀		
P1.6*	Parts wi (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	\boxtimes		
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*		s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See le	gal 🔀		
P2.3*	Batteries	and accumulators are readily removable. (See legal reference)	\times		
P3	Confor	nity verification & Eco design (ErP)			
P3.1*	The proo	duct is CE-marked to show conformance with applicable legal requirements (see legal reference laration of Conformity can be requested at (add link or e-mail address): www.lenovo.com/us/en/compliance/eu-doc).		
P3.2*	The pro	luct complies with the Eco design requirements for energy-related products, al reference).	\boxtimes		
	Require	d information is; given in item P15 or added to this document, available at (add URL):	\square		
P5		vww.lenovo.com/us/en/compliance/eco-declaration			
P5.1*		g and packaging components do not contain more than 0,01% lead, mercury, cadmium	and 🔽		
	hexaval	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 re legal reference).			
P5.3*	Protocol	duct packaging material is free from ozone depleting substances as specified in the Mon (see legal reference). nt: Legal reference has no maximum concentration values.	treal 🔀		
P6		nt information			
		on for recyclers/treatment facilities is available (see legal reference).	\times		

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 *	ZA87,ZA88,ZA89 Logo		.		
Issue da	te *	2021.6.4		en	ονο	
Product		mental attributes - Market requirements (See General NOTE GN below)				
		onmental conscious design	Re		ment	
Item		tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.
P7.1*		Disassembly, recycling at have to be treated separately are easily separable				
P7.2*						<u> </u>
		naterials in covers/housing have no surface coating.		<u> </u>		
P7.3*	•	arts > 100 g consist of one material or of easily separable materials.			<u> </u>	
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 to	ols.			
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).		\boxtimes		
		lifetime				
P7.7*	10	ng can be done e.g. with processor, memory, cards or drives		<u>Ц</u>		<u> </u>
P7.8*	10	ng can be done using commonly available tools			\boxtimes	
P7.9		arts are available after end of production for: 1 years				
P7.10	Service i	is available after end of production for: 1 years				
		and substance requirements				
P7.11*		cover/housing material type (e.g. plastics, metal, aluminum):				
P7.12		type: PC+20%GF Material type: PC+10%GF Material type: PC n materials of external electrical cables are PVC free.		_		
P7.12		n materials of external electrical cables are PVC free.		<u> </u>		<u> </u>
P7.14		plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) bromine and	0.10/	<u>H</u>		<u> </u>
F7.14	weight (polyvinyl	1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants 1 chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in ng more than 25% post-consumer recycled content.	s, and			
P7.15		circuit boards, PCBs (without components) are low halogen: all \boxtimes PCBs > 25 g \square ar as defined in IEC 61249-2-21. (See 1NOTE B2)	e low	\boxtimes		
P7.16	Marking:	etarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: : > PC_GF20FR40 <		\square		
P7.17		hemical specifications of flame retardants in printed circuit boards > 25 g (without components):			_
	TBBF	PA (additive), TBBPA (reactive) (See NOTE B3), Other: <i>DOPO</i> , CAS #: 35948-25-5		\bowtie		
		hemical specifications of flame retardants in printed circuit boards (without components) > 25 g g ISO 1043-4:	I			\square
P7.18	<u>Alt. 1: </u> Fl	lame retarded plastic parts > 25 g contain the following flame retardant substances/preparati	ons in			
		rations above 0,1%:				
		ical name: , CAS #: (See NOTE B4) ical name: , CAS #: ``				
		ical name: , CAS #: "				
		hemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4: FR40		\boxtimes		
P7.19		parts > 25 g, flame retardant substances/preparations above 0.1% are used which have beer	<u></u> ו	Ē	Ħ	Ē
	assigned	the following Risk phrases; and Hazard statements:				
	The sour	rce(s) for these classifications is/are found at (add URL(s)): , (See note B5)				
P7.20*	Postcons	sumer recycled plastic material content is used in the product (See Note B6):			\boxtimes	
	a) Oft ape or	at least one of the two alternatives below shall be answered; total plastic parts' weight > 25 g, the postconsumer recycled plastic material content (calculate ercentage of total plastic by weight) is %.	d 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.

number *	ZA87,ZA	88,ZA89			Logo	Lonovo
late *	2021.6.4					Lenovo
ct environr	nental at	tributes - Market I	requirements (conti	nued)		Requirement m
			•			Yes No n.a
		stance requirements				
Biobase	d plastic m	naterial content is use	d in the product (See N	OTE B7):		
If YES: a	at least one	e of the two alternativ	es below shall be answe	ered:		
a) Of	total plasti	ic parts' weight > 25	g, the biobased plastic		ulated as a percentag	je
	otal plastic	by weight) is	%.			
or b) The	a weight of	the biobased plastic	material is a			
			less than 0,1 mg/lamp.			
		specify: Number of la		um mercury content p	er lamp: mg	
Batterie						
Battery of	chemical c	omposition: Li-ion Po	olymer			
		tion (See NOTE B8)				
	product the		els or energy consumption			
mode *		Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Standar	0,
On-max)		10 W	10 W	10 W	Full load	
ory2						
dle State - W	OL	1.47 W	1.68 W	1.52 W	Use for ENERGY	STAR V8.0
d					registration (P _{idle})	
dle State - W	OL	0.23 W	0.23 W	0.25 W	Use for ENERGY	STAR V8.0
d					registration (Pidle)	
S3) - WOL D	isabled	0.23 W	0.23 W	0.25 W	Reference	
) - WOL Disa	abled	0.30 W	0.31 W	0.33 W	Use for ErP	
		W	W	W	Reference	
o-load		0.026 W	0.039 W	0.051 W		
wer supply / charger	plugged in the					
ut disconnected from	the product.)	5.41 kWh/year	6.01 kWh/year	6.84 kWh/year	E _{TEC} = (8760/1000)	x (P _{eff} x 0,25
Energy Cons	umption				$+ P_{sleep} \times 0.35 + P_{loc}$	ong Idle x 0.10+
					P _{short Idle} x 0.30)	
			OL Enabled; Psleep: Sleep		ed; Pidle: Idle State - W	OL Enabled
	,	,	al Efficiency Marking Pro			
resolution *		01				
		ve mode: 0.5 minutes				
			tion is provided with the	product.	•	
Energy e	efficiency o	class (monitors only):				
Emissio		D	100 0000 (0 110 ==	- DO)		
Noise e Mode		Declared according t lode description	to ISO 9296 (See NOTE		nit A-weighted sound p	ower level 1 (P)
Idle	*			*	in A-weighten souha p	bower level, $L_{WA,c}$ (B)
	n *			*		
		eclared A.weighted sour	nd pressure level (dR) 7	lanavata	noition dockton idla)	\geq
Other m	ode D	eclared A-weighted sour	nd pressure level (dB) L _{pAm}	(operator po	osition desktop – opera	ting)
Measure	ed accordir	ng to: 📃 ISO 7779 🗌	ECMA-74			
Other m	0	de D de D	de Declared A-weighted sound de Declared A-weighted A-weighted A-weighted A-weighted A-weighted A-weigh	$\begin{array}{c c} \mbox{de} & \mbox{Declared A-weighted sound pressure level (dB)} \ L_{p\rm Am} \\ \mbox{de} & \mbox{Declared A-weighted sound pressure level (dB)} \ L_{p\rm Am} \\ \mbox{according to: } & \mbox{ISO 7779} & \mbox{ECMA-74} \\ \end{array}$	de Declared A-weighted sound pressure level (dB) L_{pAm} (operator pole de Declared A-weighted sound pressure level (dB) L_{pAm} (operator pole according to: ISO 7779 ECMA-74	de Declared A-weighted sound pressure level (dB) L_{pAm} (operator position desktop – idle) de Declared A-weighted sound pressure level (dB) L_{pAm} (operator position desktop – operator position desktop – operator position desktop – operator according to: ISO 7779 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

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

Model nu	mber *	ZA87,ZA88,ZA	189		Logo			
Issue dat	e *	2021.6.4				Lenc	VO	-
	environr	nental attribu	tes - Market requirements	(continued)		Require		met
Item						Yes	No	n.a.
		magnetic emiss						
P10.4	program	ı(s):	the requirement for low frequer	ncy electromagnetic fiel	ds of the following volunt	ary 🔀		
P12		mics for compu						
P12.1*	The disp	alay meets the e	rgonomic requirements of ISO 9	9241-307 for visual disp	lay technologies.	\square		
P12.2*	The phy	sical input devic	e meets the requirements of ISC	O 9995 and ISO 9241-4	10.	\boxtimes		
P13	Packaging and documentation							
P13.1*	Product	packaging mate	rial type(s): <i>cardboard</i> weig rial type(s): <i>paper(manual)</i> wei rial type(s): <i>PE</i> weight (kg): <i>0.0</i>	ht (kg): 0.236 ight (kg): 0.069 006				
P13.2*	Product	plastic primary plastic plastic primary plastic primary plastic plasti	packaging is free from PVC.			\boxtimes		
P13.3*		duct primary col er recovered fibe	rrugated fiberboard packaging, er content: %	specify the contained	percentage of minimum	i post-		
P13.4*	Specify Select	media for user a ronic, XPaper,	nd product documentation (tick	box):				
P13.5	Ùser and		nis item if paper documentation nentation on paper media is chlo			\boxtimes		
	Totally c	hlorine-free				\boxtimes		
	Element	al chlorine-free				E E		
	Process	ed chlorine-free				H		
P14	Volunta	ry programs						
P14.1			equirements of the following vol	untary program(s):				
	ENERG	Y STAR®	Criteria version: 8.0	Date: 2020-7	Product category: 2			
	Eco-labe	əl:	Criteria version:	Date:	Product category:			
	Eco-labe	el:	Criteria version:	Date:	Product category:			
P15			(See NOTE B10)					
P9	Energy	consumption of	of specific configuration may	vary; description of th	e tested product config	uration:		
	informat knowled	ion contained in ge available at t d here is approxi	no representations, guarantees, this document. All information p he time of completion, and supp mate and provided for information	provided by supplier in t blier shall have no oblig	his document is provided ation to update such infor	based on sup mation. The in	olier's format	ion
P9	See Ene	ergy Star Qualifie	ed Notebooks & Tablet Compute ov/index.cfm?fuseaction=find_a					

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	Lenovo Tab M8 (Gen 3)	Logo	
Model Number	ZA87,ZA88,ZA89		
Issue Date	2021.6.4		Lenovo.
Additional information			

P7.1.1	Product environmental a	attributes								
(d)	Year of manufacture:					2021				
(e)	Etec value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics cards (dGfx) are disabled and if the system is tested with switchable graphics mode with UMA driving the display.									
(f)	Etec value (kWh) per Erł enable	P Lot 3 Categor	y and capability adjus	tments applied when a	all discrete graphics of	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)				
$ \Gamma $	Memory over base [GB]		4							
lents	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 :	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 graphi	cs Card(s)	Νο							
esults	Etec Value (kWh) - dGf all discrete graphics cards (dGfx) are dis UMA is active for switchable graphics/ product has no graphics cards (dGfx)	fx disabled	5.92		İ					
Test results	Etec Value (kWh) - dGf all discrete graphics cards (dGfx) are en									
(g)	Idle state power demand	(Watts);			L.	1.51				
(h)	Sleep mode power dema	nd (Watts);				0.25				
(i)	Sleep mode with WOL er	nabled power de	emand (Watts) (where	enabled);						
(j)	Off mode power demand	(Watts);				0.33				
(k)	Off mode with WOL enab	led power dem	and (Watts) (where er	nabled);						
(I)	Internal power supply effi	ciency at 10 %,	20 %, 50 % and 100	% of rated output pow	er (if applicable):					
	10% 20%	50%	100% Aver	age						
(m)	External power supply eff	ficiency (if appli	cable)*:							
	Average active efficiency	: 81.93%								
	*internal note: show values for all									
(0)	Minimum number of load				. ,	800cls , <i>≷</i> 70% of capacity				
(p-1)	Measurement methodolo	gy used to dete	rmine information me NA	ntioned in points (I) – i	nternal PSU efficiency	:				
(p-2)	Measurement methodolo Measuring the Energ				external PSU efficience Z to 10 CFR Part 430					

(p-3)	Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries: 0.5C Charge/Discharge								
(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	IERGY STAR Final Test Method for Computers, F	Rev. October 2019						
(q)	Sequence of steps for	r achieving a stable condition with respect to power	demand::						
	ENERGY STAR Final Test Method for Computers, Rev. October 2019								
(r)	Description of how sl	eep and/or off mode was selected or programmed:							
	refer to power management, sleep mode: ACPI system level G1/S3 (suspend to RAM) state; off mode: ACPI system level G2/S5 ('soft off') state								
(s)	Sequence of events off mode:	required to reach the mode where the equipment aut	tomatically changes to sleep and/or						
	refe	r to power management, 0.5mins automatically r	eaches sleep mode						
(t)		e condition before the computer automatically re not exceed the applicable power demand requirement		0.5					
(u)	Length of time after	a period of user inactivity in which the compute ver power demand requirement than sleep mode (in	r automatically reaches a power	NA					
(v)	Length of time befo	re the display sleep mode is set to activate after	user inactivity (in minutes):	1					
(w)	Information on the er	ergy-saving potential of power management function	nality:						
		refer to user manual							
(x)		now to enable the power management functionality: r							
(z)		neasurements: — test voltage in V and frequency in system, — information and documentation on the ins sting:							
		230V50HZ-2%-Edition 2.0, 2011-01, Section 4	l, IEC62301						
Additiona	al 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⁾		174					
Internal/b	uilt-in Battery	\square							
	detachable Battery								
Bios Back	up Battery								
Other:									
Additional	information								
Akymynaröpha Las baterías di Výměnu bateri Brugeren kan i Der Akku/die A Kasutajad ei sz H μπαταρία[-ες La/les batteria/le b Lietotāji paši n. Korisnik ne mo La batteria/la k Šio gaminio ba A termék akku II-batterija/batt Batteria [ene] De batterij(en) Užytkownik nie Bateria (baterii Batériu(-ie) v tt Bateriu(-ie) v tt Baterij/baterije	Tra[итe] δατερμя[μ] в този i e este producto no pueden c/baterií v tomto výrobku by kke uden videre udskifte ba kkus dieses Produkts kann aa selle toote akut/akusid is j oro προίόν αυτό δεν μπο, s présente(s) dans ce prod že lako zamijeniti Bateriju s atterie in questo prodotto n evar nomainīt šā ražojuma i tetrijos [baterijų] pats vartott mulátorát/akkumulátorait a i eriji f dan il-prodott ma tistav i dette produktet kan ikke le in dit product kan ikke i in dit product ma v sposób as deste produto não poden le) din acest produs nu poa pomto výrobku nemôže vymii v tem izdelku uporabniki sa	poύv ¹ να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες uit ne peuvent être facilement remplacée(s) par les utilisateurs e am u ovom proizvodu. on può/possono essere facilmente sostituita/e dall'utente. akumulatoru(-us). ojas negali lengvai pakeisti. felhasználó nem tudja egyedül egyszerűen kicserélni. (/jistgħux tiġ/jiġu sostitwita/i mill-utenti stess. tt erstattes av brukerne selv. de gebruiker niet gemakkelijk vervangbaar. wymienić baterii w tym produkcie. n ser facilmente substituídas pelos próprios utilizadores. te (pot) fi uşor finlocuită (inlocuite) de utilizatorii înşişi. eñať používateľ. umi ne morejo zlahka zamenjati. posti käyttäján vaihdettavissa.	werden.						

Bu üründeki batarya(lar) kullanıcılar tarafından kolaylıkla değiştirilemez.