



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

## Annex B2 - Product environmental attributes Computers and computer monitors

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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	Morrisville, North Carolina 27560	
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Internet site *	www.lenovo.com	
Additional information		

	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 *	Tablet						
Commercial name *	Lenovo TAB3 8 Plus						
Model number *	ZA18						
Issue date *	2016-11-18						
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 number *	ZA18	Logo	Lonovo
Issue date *	2016-11-18		rei iovo"

Product	environmental attributes - Legal requirements	Require	men	met
Item		Yes	No	n.a.
P1	Hazardous substances and preparations			
P1.1*	Products do comply with current European RoHS Directive. (See legal reference and NOTE B1)	$\boxtimes$		
P1.2*	Products do not contain Asbestos (see legal reference).	$\boxtimes$		
	Comment: Legal reference has no maximum concentration value.			
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC),	$\boxtimes$		
	hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1-trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum			
	concentration values.			
P1.4*	Products do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated	$\square$		
	terphenyl (PCT) in preparations (see legal reference).			
P1.5*	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/cm²/week			
	(see legal reference).			
P1.7*	Comment: Max limit in legal reference when tested according to EN1811:2011-5.  REACH Article 33 information about substances in articles is available at (add URL or mail contact):	<u> </u>	_	
P1.7	REACH Afficie 33 information about substances in afficies is available at (add ORL of mail contact).			Ш
P2	Batteries			
P2.1*	If the product contains a battery or an accumulator, the battery/accumulator is labeled with the disposal	X	$\Box$	
	symbol. Information on proper disposal is provided in user manual. (See legal reference)		ш	
P2.2*	Batteries or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See legal	X		
	reference)			
P2.3*	Batteries and accumulators are readily removable. (See legal reference)	$\boxtimes$		
P3	Conformity verification & Eco design (ErP)			
P3.1*	The product is CE-marked to show conformance with applicable legal requirements (see legal reference).	$\boxtimes$		
	The Declaration of Conformity can be requested at (add link or e-mail address):			
P3.2*	The product complies with the Eco design requirements for energy-related products,	$\boxtimes$		
	(see legal reference).			
	Required information is; given in item P15 or added to this document,	X	Ш	Ш
	available at (add URL):			
P5	Product packaging			
P5.1*	Packaging and packaging components do not contain more than 0,01% lead, mercury, cadmium an hexavalent chromium by weight of these together.	d 🔀		
P5.2*	The packaging materials are marked with abbreviations and numbers indicating the nature of the material(s	<u>, N</u>	_	
P3.2	used (see legal reference).	s) <u> </u>		Ш
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montrea	al 🔀		
	Protocol (see legal reference).			_
	Comment: Legal reference has no maximum concentration values.			
P6	Treatment information			
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).	$\boxtimes$		

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 number *	ZA18	Logo	Lonovo
Issue date *	2016-11-18		LEI IOVO"

Product	environmental attributes - Market requirements (See General NOTE GN below)			
		equire	ment	met
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.
P7	Design Disassembly, recycling			
P7.1*	Parts that have to be treated separately are easily separable			
P7.2*	Plastic materials in covers/housing have no surface coating.			H
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.	<del>- H</del> -		
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.		$\blacksquare$	
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.			-
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	$\overline{\mathbb{X}}$	$\blacksquare$	+
1 7.0	Product lifetime			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives		$\square$	
P7.8*	Upgrading can be done using commonly available tools	<del>- H</del> -	$\square$	$\vdash$
P7.9	Spare parts are available after end of production for: 3 years			$\vdash$
P7.10	Service is available after end of production for: 1 years			-
1 7.10	· · · · · · · · · · · · · · · · · · ·			
P7.11*	Material and substance requirements  Product cover/housing material type (e.g. plastics, metal, aluminum):			
	Material type: <i>PC</i> +10% <i>GF</i> Material type: <i>PC</i> Material type: <i>AL6063</i>			
P7.12	Insulation materials of external electrical cables are PVC free.		$\boxtimes$	
P7.13	Insulation materials of internal electrical cables are PVC free.			
P7.14	External plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) bromine and 0,1%		$\overline{\boxtimes}$	
	weight (1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants, and	_		_
	polyvinyl chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in parts containing more than 25% post-consumer recycled content.			
P7.15	Printed circuit boards, PCBs (without components) are low halogen: all PCBs > 25 g are low			
	halogen as defined in IEC 61249-2-21. (See 1NOTE B2)			
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: Marking:			
P7.17	Alt. 1: Chemical specifications of flame retardants in printed circuit boards > 25 g (without components):			
	TBBPA (additive), TBBPA (reactive) (See NOTE B3), Other: chemical name, CAS #:	$\boxtimes$		
	Alt. 2: Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g			
	according ISO 1043-4:			
P7.18	Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in			
	concentrations above 0,1%:	$\bowtie$		
	1. Chemical name: Potassium nonafluoro-1-butanesulfonate, CAS #: 29420-49-3 (See NOTE B4) 2. Chemical name: , CAS #: "			
	3. Chemical name: , CAS #: "			
	Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:	$\square$		
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been			Ħ
	assigned the following Risk phrases; <b>Low</b> and Hazard statements:			
	The source(s) for these classifications is/are found at (add URL(s)): , (See note B5)			
P7.20*	Postconsumer recycled plastic material content is used in the product (See Note B6):		$\boxtimes$	
	If YES; at least one of the two alternatives below shall be answered;			
	a) Of total plastic parts' weight > 25 g, the postconsumer recycled plastic material content (calculated as			
	a percentage of total plastic by weight) is %.			
	OF  b) The weight of recycled meterial is			
	b) The weight of recycled material is 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 <a href="http://www.ecma-international.org/publications/standards/Ecma-370.htm">http://www.ecma-international.org/publications/standards/Ecma-370.htm</a>

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 nun	nber *	ZA18				Logo	Lano	VO
Issue date	*	2016-11-	18				Leno	VO <sub>TM</sub>
Product e	environn	nental at	tributes - Market re	equirements (conti	nued)		Requiren	nent met
Item				•	•			lo n.a.
	Material	and subs	tance requirements (	(continued)				
P7.21*	Biobased	d plastic m	aterial content is used	in the product (See N	OTE B7):			
			e of the two alternative					
					material content (calcula	ted as a percenta	age	
	or	otai piastic	by weight) is %	•				
	b) The		the biobased plastic n	•				
P7.22*			ree from mercury, i.e. I					
P8	Batteries		specify: Number of lam	ips: and maxim	um mercury content per	lamp: mg		
P8.1*			omposition: Li-ion Pol	ymer				
P9			tion (See NOTE B8)					
P9.1		roduct the	following power levels					
Energy mod	de *		Power level at 100 V AC	Power level at 115 V AC		Reference/Stand modes and test n		gy
Peak (On-r	max)		10.4 W	10.4 W	10.4 W	Full load	netriou	
Category								
Short Idle Enabled	State - W	OL	1.39 W	<b>1.4</b> W	1.46 W	Reference		
	04-4- 14//	<u> </u>	0.04\0/	0.0410/	0.23 W	Reference		
Long Idle S Enabled	State - W	JL	<b>0.24</b> W	<b>0.24</b> W	0.23 VV	Reference		
Sleep (S3)	- WOL E	nabled	W	W	W	Reference		
Sleep (S3)	- WOL Di	sabled	<b>0.24</b> W	<b>0.24</b> W	0.23 W	Reference		
Off (S5) - V	VOL Enak	oled	W	W	W	Reference		
Off (S5) - V	VOL Disa	bled	0.20 W	<b>0.21</b> W	0.21 W	Reference		
			W	W	W	Reference		
EPS No-loa			0.039 W	0.043 W	0.056 W			
(External power s wall outlet but disc	upply / charger connected from	plugged in the the product.)						
PTEC * Typical Ene	erav Cons	umption	W	W	W			
ETEC *			<b>3.61</b> kWh/year	3.5 kWh/year	<b>3.81</b> kWh/year			
Annual Ene			cy Level (International	Efficiency Marking Pro	otocol) * · W			
		-	00 megapixels	Emoleticy Marking PIC	, vi			
			ve mode: 1 minutes					-
P9.2*			the energy save function	on is provided with the	product			<del>- H</del>
P9.3			class (monitors only):	or is provided with the	product.			
P10	Emissio							
			Declared according to	ISO 9296 (See NOTE	B9)			
P10.1	Mode		lode description	,	Statistical upper limit	A-weighted sound	l power level, L	- <sub>WA,c</sub> (B)
	Idle	*			*			
	Operatio				*			$\boxtimes$
	Other mo			1				
	Measure	d accordir	·	ECMA-74	50M 74)			
			Other	(only if not covered by	ECMA-/4)			

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 <a href="http://www.ecma-international.org/publications/standards/Ecma-370.htm">http://www.ecma-international.org/publications/standards/Ecma-370.htm</a>

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

Model number *	ZA18	Logo	Lanova
Issue date *	2016-11-18		Leliovo

Product	environmental attributes	- Market requirements (co	ontinued)		Require	ment	met
Item		· ·	•		Yes	No	n.a.
	Electromagnetic emission	s					
P10.4		requirement for low frequency	electromagnetic field	s of the following voluntary	$\boxtimes$		
	program(s):						
P12	Ergonomics for computing						
P12.1*	The display meets the ergor	nomic requirements of ISO 924	I-307 for visual displa	y technologies.	$\boxtimes$		
P12.2*	The physical input device m	eets the requirements of ISO 99	995 and ISO 9241-41	0.			
P13	Packaging and documenta	ation					
P13.1*	Product packaging material		kg): <b>0.646</b>				
	Product packaging material		weight (kg): 0.092				
		type(s): PE weight (kg): 0.008					
P13.2*	Product plastic primary pack				$\boxtimes$		
P13.3*		ated fiberboard packaging, sp	ecify the contained p	percentage of minimum post	-		$\boxtimes$
	consumer recovered fiber co						
P13.4*		product documentation (tick box	x):				
		Other					
P13.5		em if paper documentation use					
		ation on paper media is chlorin	e-free:		$\boxtimes$		
	If Yes, please specify:						
	Totally chlorine-free				$\boxtimes$		
	Elemental chlorine-free						
	Processed chlorine-free						
P14	Voluntary programs						
P14.1	The product meets the requ	irements of the following volunt	ary program(s):				
	ENERGY STAR®	Criteria version: 6.1	Date: 2014-9-10	Product category: 11			
	Eco-label:	Criteria version:	Date:	Product category:			
D4F	Eco-label:	Criteria version:	Date:	Product category:			
<b>P15</b>	Additional information (Se	· · · · · · · · · · · · · · · · · · ·		to to be and the section of			
P9	Energy consumption of sp	pecific configuration may var	r; aescription of the	testea product configuration	on:		

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 TAB3 8 Plus	Logo	
Model Number	ZA18		Lenovo
Issue Date	2016-11-18		reliovo"
Additional information			

	Product environmental attributes				
(d)	year of manufacture:				2016
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 Categor enable	y 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]	3			
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)	No			
esults	Etec Value (kWh) - dGfx disabled all discrete graphics cards (dGfx) are disabled/ UMA is active for switchable graphics/ product has no graphics cards (dGfx)	5.2			
Test results	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled				
g)	Idle state power demand (Watts);				0.23
h)	Sleep mode power demand (Watts);				0.23
i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		
j)	Off mode power demand (Watts);				0.21
k)	Off mode with WOL enabled power dem	and (Watts) (where en	abled);		
l)	Internal power supply efficiency at 10 %,	20 %, 50 % and 100 9	% of rated output pow	er (if applicable):	
	10% 20% 50%	100% Avera	ige		
m)	external power supply efficiency (if applic	cable)*:			
	Average active efficiency: 80.639				
	*internal note: show values for all available external po				
0)	Minimum number of loading cycles that t	he batteries can withst	tand (applies only to r	notebook computers):	300
p-1)	Measurement methodology used to dete	rmine information men	ntioned in points (I) – i	nternal PSU efficiency	:
p-2)	Measurement methodology used to dete				

(p-3)	p-3) Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries:  IEC61916 measurement methodology				
(p-4)	Measurement methodology used to determine information mentioned in maximum, idle, sleep, off mode power as defined in Point P9.1 in the Product IT Eco Declaration:				
	IEC62321/IEC EN50564:2011 measurement methodology				
(q)	Sequence of steps for achieving a stable condition with respect to power demand::				
	IEC62321/IEC EN50564:2011 measurement methodology				
(r)	Description of how sleep 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)					
refer to power management, 1mins automatically reaches sleep mode					
(t)	Duration of idle state condition before the computer automatically reaches sleep mode, or another condition which does not exceed the applicable power demand requirements for sleep mode (in minutes):			1	
(u)	Length of time after a period of user inactivity in which the computer automatically reaches a power			NA NA	
(v)	mode that has a lower power demand requirement than sleep mode (in minutes):  Length of time before the display sleep mode is set to activate after user inactivity (in minutes):			1	
(w)					
refer to user manual					
(x) user information on how to enable the power management functionality:					
refer to user manual					
(z) test parameters for measurements: — test voltage in V and frequency in Hz, — total harmonic distortion of the electricity supply system, — information and documentation on the instrumentation, set-up and circuits used for electrical testing:					
230V50HZ-2%-Edition 2.0, 2011-01, Section 4, IEC62301					
Additio	n Notebook Battery				
		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					
External/detachable Battery					
Bios Backup Battery					
Other:					
Addition	nal information				
1) The battery[ies] in this product cannot be easily replaced by users themselves. Акумулаторната[ите] батерия[и] в този продукт не може да се замени[ят] лесно от самите потребители.					

Las baterías de este producto no pueden ser sustituidas fácilmente por los propios usuarios. Výměnu baterie/baterií v tomto výrobku by neměli provádět sami uživatelé.

Brugeren kan ikke uden videre udskifte batteriet/batterierne i dette produkt.

Der Akku/die Akkus dieses Produkts kann/können nicht ohne weiteres vom Benutzer selbst ausgetauscht werden.

Kasutajad ei saa selle toote akut/akusid ise hõlpsasti asendada.

Η μπαταρία[-ες] στο προϊόν αυτό δεν μπορούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες La/les batterie(s présente(s) dans ce produit ne peuvent être facilement remplacée(s) par les utilisateurs eux-mêmes. Korisnik ne može lako zamijeniti Bateriju sam u ovom proizvodu.

La batteria/le batterie in questo prodotto non può/possono essere facilmente sostituita/e dall'utente. Lietotāji paši nevar nomainīt šā ražojuma akumulatoru(-us). Šio gaminio baterijos [baterijų] pats vartotojas negali lengvai pakeisti.

A termék akkumulátorát/akkumulátorait a felhasználó nem tudja egyedül egyszerűen kicserélni. Il-batterija/batteriji f'dan il-prodott ma tistax/jistgħux tiġi/jiġu sostitwita/i mill-utenti stess. Batteriet [ene] i dette produktet kan ikke lett erstattes av brukerne selv.

De batterij(en) in dit product is (zijn) door de gebruiker niet gemakkelijk vervangbaar. Użytkownik nie może sam w łatwy sposób wymienić baterii w tym produkcie. A ou as baterias deste produto não podem ser facilmente substituídas pelos próprios utilizadores.

Bateria (bateriile) din acest produs nu poate (pot) fi uşor înlocuită (înlocuite) de utilizatorii înşişi. Batériu(-ie) v tomto výrobku nemôže vymieňať používateľ.

Baterij/baterije v tem izdelku uporabniki sami ne morejo zlahka zamenjati.

Tämän tuotteen akku [akut] ei[vät] ole helposti käyttäjän vaihdettavissa. Det är inte enkelt för kunden att själv byta ut batteriet/batterierna. Bu üründeki batarya(lar) kullanıcılar tarafından kolaylıkla değiştirilemez.