



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	Lenovo			
e-mail address	Alvin L Carter				
	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 *	Portable Computer Tablet					
Commercial name *	Lenovo TAB 7					
Model number *	ZA36,ZA37,ZA38					
Issue date *	2017.8.22					
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 * Issue date *	ZA36,ZA37,ZA38 2017.8.22	Logo	Len	OVC	) <sub>TM</sub>
Product enviror	mental attributes - Legal requirements		Require	ment	met
Item			Yes	No	n.a.
P1 Hazard	ous substances and preparations				

Product	environmental attributes - Legal requirements	Require	men	t 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).  Comment: Legal reference has no maximum concentration value.			
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), 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 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 th chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).	e 🔀		
P1.6*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm²/weel (see legal reference).  Comment: Max limit in legal reference when tested according to EN1811:2011-5.	<b>(</b>		
P1.7*	REACH Article 33 information about substances in articles is available at (add URL or mail contact): http://www.lenovo.com/social_responsibility/us/en/environment.html			
P2	Batteries			
P2.1*	If the product contains a battery or an accumulator, the battery/accumulator is labeled with the disposal symbol. Information on proper disposal is provided in user manual. (See legal reference)	$\boxtimes$		
P2.2*	Batteries or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See lega reference)	I 🔀		
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).  The Declaration of Conformity can be requested at (add link or e-mail address):	$\boxtimes$		
P3.2*	The product complies with the Eco design requirements for energy-related products, (see legal reference).			
	Required information is;  given in item P15 or added to this document, available at (add URL):			
P5	Product packaging			
P5.1*	Packaging and packaging components do not contain more than 0,01% lead, mercury, cadmium ar hexavalent chromium by weight of these together.	ıd 🔀		
P5.2*	The packaging materials are marked with abbreviations and numbers indicating the nature of the material (used (see legal reference).	s) 🔀		
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montre Protocol (see legal reference).  Comment: Legal reference has no maximum concentration values.	al 🔀		
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 nu	ımber *	ZA36,ZA37,ZA38	Logo			
Issue date *		2017.8.22		Lend	OVC	тм
Product	environ	mental attributes - Market requirements (See General NOTE GN b	pelow)			
	- Enviro	onmental conscious design		Requirer	nent r	net
Item		tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.
P7		Disassembly, recycling				
P7.1*		thave to be treated separately are easily separable				<u> </u>
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.			<u> </u>	
P7.4*		arts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.			Ц.	
P7.5		arts are free from metal inlays or have inlays that can be removed with commonly a	vailable tools.		Ц_	
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).		$\boxtimes$	Ш	Ш
D7 74	Product					
P7.7*		ng can be done e.g. with processor, memory, cards or drives		_ <u>_</u> _		Щ
P7.8*		ng can be done using commonly available tools				Щ
P7.9		arts are available after end of production for: 3 years				
P7.10		s available after end of production for: 1 years				
5- 44		and substance requirements				
P7.11*		cover/housing material type (e.g. plastics, metal, aluminum):	l trunci 07704			
P7.12		type: PC+20%GF Material type: PC+10%PC Material materials of external electrical cables are PVC free.	type: <b>C7701</b>			
P7.13		n materials of external electrical cables are PVC free.		-#-	$\overline{\mathbb{X}}$	$\vdash$
P7.14		plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) br	omine and 0.1%	<del>-  -  -  -  -  -  -  -  -  -  -  -  -  -</del>		$\vdash$
1 7.14		1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame		ш		ш
		chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) or gmore than 25% post-consumer recycled content.	chlorine in parts			
P7.15		circuit boards, PCBs (without components) are low halogen: all 🔲 PCBs > 2	5 g ☐ are low			
	halogen	as defined in IEC 61249-2-21. (See 1NOTE B2)				
P7.16		tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: >PC-GF20FR(40)<				
P7.17		nemical specifications of flame retardants in printed circuit boards > 25 g (without co				
	TBBF	PA (additive), ☐TBBPA (reactive) (See NOTE B3), ☑Other: <b>DOPO</b> , CAS #: <b>35948</b>	-25-5	$\bowtie$		Ш
		nemical specifications of flame retardants in printed circuit boards (without compone	nts) > 25 g			
	accordin	g ISO 1043-4: <i>ISO 1043-4: FR(40)</i>		$\boxtimes$	Ш	Ш
P7.18		ame retarded plastic parts > 25 g contain the following flame retardant substances	s/preparations in			]
		ations above 0,1%:	24)	$\boxtimes$	Ш	
		ical name: Bisphenol-A bis(diphenyl phosphate), CAS #: 5945-33-5 (See NOTE lical name: , CAS #: "	D <del>4</del> )			
		ical name: , CAS #: "				
		nemical specifications of flame retardants in plastic parts > 25 g according ISO 1043	-4:>PC-	$\square$		
	GF20FR					
P7.19	•	parts > 25 g, flame retardant substances/preparations above 0,1% are used which	have been	$\boxtimes$		
		the following Risk phrases; R22 and Hazard statements:				
	The sour	rce(s) for these classifications is/are found at (add URL(s)):	(. DE)			
D7 20*	Doctoo		note B5)			
P7.20*	Postcons	sumer recycled plastic material content is used in the product (See Note B6):			$\boxtimes$	
	If YES; a	t least one of the two alternatives below shall be answered;				
		otal plastic parts' weight > 25 g, the postconsumer recycled plastic material content	(calculated as			
	a pe	ercentage of total plastic by weight) is %.				

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.

g.

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.

The weight of recycled material is

or

Issue date	* 2017.8.	22						
Product 6	environmental a	ttributes - Market re	equirements (contin	nued)	Requirement met			
Item			,	<b>,</b>	Yes No n.a.			
	Material and sub	stance requirements	(continued)					
P7.21*	•	material content is used ne of the two alternative		•				
	<ul> <li>a) Of total plass of total plast</li> </ul>	tic parts' weight > 25 g ic by weight) is %	, the biobased plastic r	1	ated as a percentage			
	or b) The weight of	of the biobased plastic r	naterial is g.					
P7.22*	Light sources are	Light sources are free from mercury, i.e. less than 0,1 mg/lamp.  If mercury is used specify: Number of lamps:  and maximum mercury content per lamp:  mg						
P8	Batteries							
P8.1*	-	composition: Li-ion Pol	lymer					
P9		otion (See NOTE B8)						
P9.1		ne following power level	s or energy consumption  Power level at		Deference/Ctandard for energy			
Energy mod		Power level at 100 V AC	115 V AC	Power level at 230 V AC	Reference/Standard for energy modes and test method *			
Peak (On-i	max)	5 W	<b>5</b> W	<b>5</b> W	Full load			
Category	y <u> 1</u>							
Short Idle Enabled	State - WOL	0.08 W	0.09 W	<b>0.26</b> W	Use for ENERGY STAR V6 registration (P <sub>idle</sub> )			
Long Idle : Enabled	State - WOL	0.08 W	0.83 W	<b>0.26</b> W	Use for ENERGY STAR V6 registration (P <sub>idle</sub> )			
Sleep (S3)	- WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration(P <sub>sleep</sub> )			
Sleep (S3)	- WOL Disabled	0.08 W	0.09 W	0.09 W	Reference			
Off (S5) - V	VOL Enabled	W	W	W	Use for ENERGY STAR V6 registration(P <sub>off</sub> )			
Off (S5) - V	VOL Disabled	0.08 W	0.09 W	<b>0.26</b> W	Use for ErP			
		W	W	W	Reference			
EPS No-loa (External power s	ad upply / charger plugged in the connected from the product.)	<b>0.035</b> W	0.038 W	0.071 W				
PTEC *		W	W	W				
ETEC *	ergy Consumption ergy Consumption	0.08 kWh/year	0.164 kWh/year	0.20 kWh/year	E <sub>TEC</sub> = (8760/1000) x (P <sub>off</sub> x 0.25 + P <sub>sleep</sub> x 0.35 + P <sub>long_idle</sub> x 0.10+			
		Poff: Off Mode(S5) - WC	L OL Enabled: Paleon: Sleen	Mode(S3) - WOL Enabled	P <sub>short Idle</sub> x 0.30) d; P <sub>idle</sub> : Idle State - WOL Enabled			
External Po	ower Supply Efficie	ncy Level (International			- India in the state of the sta			
	olution * : 720*128		<u> </u>	,				
		ave mode: 1 minutes						
P9.2*	0,	the energy save function	on is provided with the	product				
P9.3		class (monitors only):	on to provided with the	product.				
P10	Emissions	o.acc (morniors orny).						
FIU		<ul> <li>Declared according to</li> </ul>	ISO 9296 (See NOTF	B9)				
P10.1		Mode description	(555.1512		A-weighted sound power level, $L_{WA,c}$ (B)			
	Idle	*		*				
	Operation	*		*				
	Other mode	Declared A-weighted sound	d pressure level (dB) $L_{pAm}$	(operator pos	ition desktop – idle)			
	Other mode	Declared A-weighted sound	d pressure level (dB) $L_{p{\sf Am}}$	(operator pos	ition desktop – operating)			
	Measured accord		ECMA-74	•				
	Other (only if not covered by 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 <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>

Wiodei iid	iiiibei	ZA36,ZA37,ZA38		Logo	Long	110	
Issue dat	te *	2017.8.22			Lenc		м
Product	environ	mental attributes - Market requirements (	continued)		Require	ment	met
Item					Yes	No	n.a.
	Electro	magnetic emissions					
P10.4	Compute program	er display meets the requirement for low frequence (s):	ey electromagnetic fields of the fol	lowing voluntary	′ 🔲		
P12		mics for computing products					
P12.1*	The disp	play meets the ergonomic requirements of ISO 92	41-307 for visual display technolo	gies.			
P12.2*	The phy	sical input device meets the requirements of ISO	9995 and ISO 9241-410.		$\boxtimes$		
P13	Packagi	ng and documentation					
P13.1*	Product Product Product	packaging material type(s): BOX packaging material type(s): paper(manual) packaging material type(s): Paper cushion packaging material type(s): PE	weight (kg): 0.058 weight (kg): 0.054 weight (kg): 0.098 weight (kg): 0.003				
P13.2*	Product	plastic primary packaging is free from PVC.					
P13.3*		duct primary corrugated fiberboard packaging, ser recovered fiber content:	specify the contained percentage	of minimum po	ost-		$\boxtimes$
P13.4*		media for user and product documentation (tick b ronic, ⊠Paper, ⊡Other	ox):				
P13.5	User an	only complete this item if paper documentation us d product documentation on paper media is chlori lease specify:					
	•	hlorine-free					

Date: 2014-9-10

Date:

Date:

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Energy consumption of specific configuration may vary; description of the tested product configuration:

Product category: *I1* Product category:

Product category:

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.

Processed chlorine-free

Additional information (See NOTE B10)

The product meets the requirements of the following voluntary program(s):

Criteria version: 6.1

See Energy Star Qualified Notebooks & Tablet Computers for the latest information:

http://www.energystar.gov/index.cfm?fuseaction=find\_a\_product.showProductGroup&pgw\_code=CO

Criteria version:

Criteria version:

Voluntary programs

**ENERGY STAR®** 

Eco-label:

Eco-label:

information.

P14

P15

P9

P9

P14.1

## 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 7	Logo	
Model Number	ZA36,ZA37,ZA38	Longvo	
Issue Date	2017.8.22	Lenovo	
Additional information	Low-voltage equipment is an exception for ERP		

(d)	Year of manufacture:				2017		
(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 ErP Lot 3 Categor enable	y and capability adjust	tments 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]	2					
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 lied du	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					
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)	0.2					
Test results	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled						
(g)	Idle state power demand (Watts);				0.26		
(h)	Sleep mode power demand (Watts);				0.09		
(i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);				
j)	Off mode power demand (Watts);				0.05		
(k)	Off mode with WOL enabled power dem	and (Watts) (where en	abled);				
(1)	Internal power supply efficiency at 10 %,	20 %, 50 % and 100 9	% of rated output pow	er (if applicable):			
	10% 20% 50%	100% Avera	age				
m)	External power supply efficiency (if appli	cable)*:					
	Average active efficiency: 72.39						
	*internal note: show values for all available external po	ower supplies					
(o)	Minimum number of loading cycles that t	he batteries can withs	tand (applies only to r	otebook 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  Measuring the Energy Consumption						

(p-3) Measurement metho	(p-3) Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries:  0.5C Charge/Discharge							
	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:  ENERGY STAR Test Method for Computers, Rev. Aug-2010							
(q) Sequence of steps for	or achieving a stable condition with respect to power ENERGY STAR Test Method for Computers, R							
	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							
off mode:								
(t) Duration of idle sta	te condition before the computer automatically re	eaches sleep mode, or another	1					
(u) Length of time after	a period of user inactivity in which the compute	r automatically reaches a power	NA					
	ver power demand requirement than sleep mode (in re the display sleep mode is set to activate after		1					
	nergy-saving potential of power management functio refer to user manual							
(x) User information on l	now to enable the power management functionality:  refer to user manual							
	measurements: — test voltage in V and frequency in system, — information and documentation on the insting:  230V50HZ-2%-Edition 2.0, 2011-01, Section 4	strumentation, set-up and circuits						
Additional 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)							
Internal/built-in Battery								
External/detachable Battery								
Bios Backup Battery								
Other:								
Additional information								
Las baterías de este producto no pueden Výměnu baterie/baterií v tomto výrobku b Brugeren kan ikke uden videre udskifte ba Der Akku/die Akkus dieses Produkts kanr Kasutajad ei saa selle toote akut/akusid is Η μπαταρία[-ες] στο προϊόν αυτό δεν μπο La/les batterie(s présente(s) dans ce produkts kanr korisnik ne može lako zamijeniti Bateriju La batteria/le batterie in questo prodotto n Lietotāji paši nevar nomainīt šā razojuma Šio gaminio baterijos [bateriju] pats vartot A termék akkumulátorát/akkumulátorait a Il-batterija/batteriji f'dan il-prodott ma tista Batteriet [ene] i dette produktet kan ikke k De batterij(en) in dit product is (zijn) door Užytkownik nie može sam w łatwy sposót A ou as baterias deste produto não poder	продукт не може да се замени[ят] лесно от самите потребите ser sustituidas fácilmente por los propios usuarios.  y neměli provádět sami uživatelé.  atteriet/batterierne i dette produkt.  //können nicht ohne weiteres vom Benutzer selbst ausgetauscht  ise hölpsasti asendada.  poúv να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες  uit ne peuvent être facilement remplacée(s) par les utilisateurs e  sam u ovom proizvodu.  on può/possono essere facilmente sostituita/e dall'utente.  akumulatoru(-us).  ojas negali lengvai pakeisti.  felhasználó nem tudja egyedül egyszerűen kicserélni.  x/jistgħux tiġi/jiġu sostitwita/i mill-utenti stess.  stt erstattes av brukerne selv.  de gebruiker niet gemakkelijk vervangbaar.  y wymienić baterii w tym produkcie.  n ser facilmente substituídas pelos próprios utilizadores.  te (pot) fi uşor înlocuită (înlocuite) de utilizatorii înşişi.  eñat' používatel.  ami ne morejo zlahka zamenjati.  posti käyttäjān vaihdettavissa.  ut batteriet/batterierna.	werden.						