



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 * e-mail address	Lenovo Global Environmental Affairs Alvin L Carter alcarter@lenovo.com	Lenovo
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 Computer				
Commercial name *	Yoga Book C930				
Model number *	ZA3S, ZA3T				
Issue date *	2018.7.6				
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 *		ZA3S, ZA3T Logo	Lon		
Issue dat	e *	2018.6.19	Lend	JV	O _{TM}
Product	environ	mental attributes - Legal requirements	Require	men	t met
Item			Yes	No	n.a.
P1	Hazardo	ous substances and preparations			
P1.1*	Products	s do comply with current European RoHS Directive. (See legal reference and NOTE B1)			
P1.2*	Commer	s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.			
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*	terpheny	s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated // (PCT) in preparations (see legal reference).			
P1.5*		s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the entaining at least 48% per mass of chlorine in the SCCP (see legal reference).			
P1.6*	Parts wit	th direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm²/week al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.			
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail contact): ww.lenovo.com/social_responsibility/us/en/environment.html			
P2	Batterie				
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)			
P2.2*	Batteries referenc	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See legal e)			
P2.3*	Batteries	s and accumulators are readily removable. (See legal reference)	X		
P3	Conform	nity verification & Eco design (ErP)			
P3.1*		duct is CE-marked to show conformance with applicable legal requirements (see legal reference).	\square	\Box	
	The Dec	claration of Conformity can be requested at (add link or e-mail address):			
P3.2*	The prod	duct complies with the Eco design requirements for energy-related products, al reference).			
		d information is; given in item P15 or added to this document,			
		available at (add URL):			
P5		packaging			
P5.1*	hexavale	ng and packaging components do not contain more than 0,01% lead, mercury, cadmium and ent chromium by weight of these together.			
P5.2*		kaging materials are marked with abbreviations and numbers indicating the nature of the material(see legal reference).	s) 🔀		
P5.3*	The pro Protocol	duct packaging material is free from ozone depleting substances as specified in the Montrea (see legal reference). nt: Legal reference has no maximum concentration values.	al 🔀		

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.

Treatment information

Information for recyclers/treatment facilities is available (see legal reference).

P6.1*

Model number *	ZA3S, ZA3T	Logo	Lonovo	_
Issue date *	2018.6.19		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	\boxtimes		
P7.2*	Plastic materials in covers/housing have no surface coating.			
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.			\boxtimes
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.	\boxtimes		
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.	\boxtimes		
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	\boxtimes		
	Product lifetime			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives		\boxtimes	
P7.8*	Upgrading can be done using commonly available tools		\boxtimes	
P7.9	Spare parts are available after end of production for: 3 years			
P7.10	Service is available after end of production for: 1 years			
	Material and substance requirements			
P7.11*	Product cover/housing material type (e.g. plastics, metal, aluminum):			
P7.12	Material type: PPS +45%GF Material type: AL5052 Material type: MGAL AZS Insulation materials of external electrical cables are PVC free.	<u>}1D</u>		_
P7.12	Insulation materials of external 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% weight (1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants, and	Ш	\boxtimes	ш
	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)		Ш	
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: Marking:			\boxtimes
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: DOPO , CAS #: 35948-25-5	\boxtimes	Ш	
	Alt. 2: Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g			
	according ISO 1043-4: <i>FR(40)</i>	\bowtie		
P7.18	Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in	-		
	concentrations above 0,1%:			\boxtimes
	1. Chemical name: , CAS #: (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:			
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been			\boxtimes
	assigned the following Risk phrases; 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 %.			
	Or			
	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 http://www.ecma-international.org/publications/standards/Ecma-370.htm

NOTE B5 If a certain substance has been assigned a certain risk phrases / hazard statement in the referenced source, this does not necessarily mean the substance has been tested for all of the hazards referred to by a certain customer.

NOTE B6 Applies to a product containing plastic parts whose combined weight exceeds 100 g with the exception of printed circuit boards, cables, connectors and electronic components and bio-based plastic material.

Model number * ZA3S, Z	A3T			Logo	Lenovo			
Issue date * 2018.6.	19				reliove	J _{TM}		
Product environmental a	ttributes - Market r	equirements (cont	nued)		Requiremen	nt met		
Item					Yes No	n.a.		
Material and sub	stance requirements	(continued)						
P7.21* Biobased plastic r	material content is used	d in the product (See N	OTE B7):					
If YES; at least one of the two alternatives below shall be answered; a) Of total plastic parts' weight > 25 g, the biobased plastic material content (calculated as a percentage of total plastic by weight) is %. or b) The weight of the biobased plastic material is g.								
	2* 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* Battery chemical	composition: Li-ion Po	lymer						
P9 Energy consump	otion (See NOTE B8)							
P9.1 For the product th		ls or energy consumpti						
Energy mode *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Stand modes and test i	lard for energy method *			
Peak (On-max)	27 W	27 W	27 W	Full load				
CategoryI1								
Short Idle State - WOL Enabled	7.726 W	7.771 W	7.368 W	Use for ENERG registration (Pid				
Long Idle State - WOL Enabled	7.728 W	7.536 W	7.848 W	Use for ENERG registration (Pid				
Sleep (S3) - WOL Disabled	2.064 W	2.10 W	2.37 W	Reference				
Off (S5) - WOL Disabled	0.425 W	0.427 W	0.450 W	Use for ErP				
EPS No-load	0.0166 W	0.0162 W	0.0237 W					
(External power supply / charger plugged in the wall outlet but disconnected from the product.)								
PTEC *	W	W	W			\boxtimes		
Typical Energy Consumption			0.4.40.1348.4					
ETEC * Annual Energy Consumption	33.41 kWh/year	34.40 kWh/year	34.49 kWh/year	$E_{TEC} = (8760/100 + P_{sleep} \times 0.35 + P_{short_Idle} \times 0.30)$	P _{long_Idle} x 0.10+			
			Mode(S3) - WOL Enable	ed; Pidle: Idle State -	WOL Enabled			
External Power Supply Efficie		I Efficiency Marking Pr	otocol) * : VI					
Display resolution * : 1600*25	60 megapixels							
Default time to enter energy s	ave mode: 1 minutes							
P9.2* Information about	the energy save functi	on is provided with the	product.	•				
P9.3 Energy efficiency	class (monitors only):							
P10 Emissions								
	- Declared according to	o ISO 9296 (See NOTE	E B9)					
P10.1 Mode	Mode description	Ì	Statistical upper limi	t A-weighted sound	d power level, L _{WA,c}	(B)		
Idle	*		*			\boxtimes		
Operation	*		*			\boxtimes		
Other mode	Declared A-weighted sour	d pressure level (dB) $L_{p{\sf A}}$	n (operator po	sition desktop – idle)			
		od pressure level (dB) L_{pA}		sition desktop – ope				
Measured accord	Measured according to: ISO 7779 ECMA-74 Other (only if not covered by ECMA-74)							

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

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

Model nui	mber "	ZA3S, ZA3T					Logo	Lenc	W/O	
Issue date	*	2018.6.19						Lenc		тм
Product	environm	nental attribu	tes - Market require	ments (co	ntinued)			Require	ment	me
Item								Yes	No	n.a
	Electron	nagnetic emiss	ions							
P10.4	program(s):	the requirement for lov	/ frequency e	electromagnetic field	s of the foll	lowing voluntary			
P12		nics for compu								
P12.1*	The displ	ay meets the er	gonomic requirements	of ISO 9241-	307 for visual displa	ay technolo	gies.	\boxtimes		
P12.2*	The phys	ical input device	e meets the requiremer	nts of ISO 999	95 and ISO 9241-41	0.		X		
P13	Packaging and documentation									
P13.1*	Product p	packaging mater	rial type(s): box rial type(s): paper rial type(s): Plastic	weight (ko weight (ko weight (ko	g): 0.195					
P13.2*	Product p	olastic primary p	ackaging is free from F	VC.				\boxtimes		
P13.3*	consume	r recovered fibe				percentage	of minimum po	ost-		X
P13.4*		nedia for user a onic, <mark>X</mark> Paper,	nd product documentat Other	ion (tick box)	:					
P13.5	Ùser and		nis item if paper docume entation on paper med							
	•	nlorine-free al chlorine-free								
	Processe	ed chlorine-free						H		
P14	Voluntar	y programs								
P14.1		<u>, , , , , , , , , , , , , , , , , , , </u>	equirements of the follo	wing volunta	ry program(s):					
	ENERGY Eco-labe Eco-labe	l: l:	Criteria version: 6 Criteria version: Criteria version:	3.1	Date: 2014-9-10 Date: Date:	Product	category: /2 category: category:			
P15			(See NOTE B10)							
P9			f specific configuration							
	information knowledge	on contained in ge available at the here is approxin	no representations, gua this document. All infor the time of completion, a mate and provided for i	mation provious and supplier s	ded by supplier in the shall have no obligate	is documer tion to upda	nt is provided ba ate such informa	sed on supportion. The in	olier's format	iion
P9			ed Notebooks & Tablet ov/index.cfm?fuseaction				code=CO			

NOTE B10 Additional lines may be inserted to declare further items, by positioning the cursor at the far right of the row and hitting the <Enter> key.

Legal references Europe Annex B2

Reference	Declaration item
Directive 2011/65/EU (RoHS Directive) * * Specific exemptions apply for certain products and applications.	P1.1
Regulation (EC) 1907/2006(REACH, Annex XVII	P1.2, P1.4, P1.6, P1.7
Regulation (EC) 2037/2000, 2038/2000, 2039/2000 (Marketing and use of Ozone layer depleting substances)	P1.3, P5.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
Directive 2013/56/EC (Battery and accumulators Directive) * * These provisions shall not apply where, for safety, performance, medical or data integrity reasons, continuity of power supply is necessary and requires a permanent connection between the appliance and the battery or accumulator.	P2.1, P2.2, P2,3, P8.1
Directive 2006/95/EC (Low Voltage Directive)	P3.1
Directive 2004/108/EC (EMC Directive)	P3.1
Directive 1999/5/EC (R&TTE Directive)	P3.1
Regulation (EC) 801/2013 amending Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment, and amending Regulation (EC) No 642/2009 with regard to ecodesign requirements for televisions	P3.1, P3.2
Regulation (EC) No 1272/2008 (CLP Regulation)	P7.19
Directive 2004/12/EC (Packaging Directive)	P5.1
Decision 97/129/EC (Secondary packaging legislation)	P5.2
Directive 2012/19/EU (WEEE directive)	P6.1

Lenovo ErP Lot3 Information Sheet - PC / Notebook -

As required by COMMISSION REGULATION (EU) No 617/2013 of 26 June 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for computers and computer servers (ErP Lot3).

Products scope of this sheet:

Desktop computer, integrated desktop computer, and notebook computer

This document is only valid in connection with the IT Eco Declaration of the specific Product.

Commercial name	Yoga Book C930	Logo
Model Number	ZA3S, ZA3T	Lenovo
Issue Date	2018.6.19	Lenovo.
Additional information		

	Product environmental attributes						
d)	Year of manufacture:				2018		
(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) are 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]	4					
ents	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	Discrete graphics Card(s) [number / #]	No #: (Yes / No)	#: (Yes / No)	#: (Yes / No)	#: (Yes / No)		
	Category of discrete graphics Card(s)	No					
Test results	Etec Value (kWh) - dGfx disabled all discrete graphics cards (dGfx) are disabled/ UMA is active for switchable graphics/ product has no graphics cards (dGfx)	34.49					
Test r	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled						
(g)	Idle state power demand (Watts);	1	1	1	7.85		
(h)	Sleep mode power demand (Watts);				2.37		
(i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);				
(j)	Off mode power demand (Watts);				0.45		
(k)	Off mode with WOL enabled power dema	and (Watts) (where en	abled);				
(1)	Internal power supply efficiency at 10 %,	20 %, 50 % and 100 °	% of rated output pow	er (if applicable):			
	10% 20% 50%	100% Avera	age				
(m)	External power supply efficiency (if applie	cable)*:					
	Average active efficiency: 85.8						
	*internal note: show values for all available external po						
(o)	Minimum number of loading cycles that t	he batteries can withs	tand (applies only to r	notebook computers):	300		
(p-1)	Measurement methodology used to dete	rmine information mer	ntioned in points (I) – i	nternal PSU efficiency	:		
(p-2)	Measurement methodology used to dete						

(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: ENERGY STAR Test Method for Computers, R					
(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						
(s)	off mode:	required to reach the mode where the equipment au	, , ,				
(t)	condition which does	te condition before the computer automatically rendered the applicable power demand requirement	ents for sleep mode (in minutes):	1			
(u)		a period of user inactivity in which the compute ver power demand requirement than sleep mode (in		NA			
(v)		re the display sleep mode is set to activate after		1			
(w)	Information on the er	nergy-saving potential of power management functionergy-saving power functionergy-saving power functionergy-saving power functionergy-saving power functionergy-saving functionergy-saving power functionergy-sa	nality:				
(x)	User information on I	now to enable the power management functionality: refer to user manual					
(z)		measurements: — test voltage in V and frequency in system, — information and documentation on the in sting: 230V50HZ-2%-Edition 2.0, 2011-01, Section 4	strumentation, set-up and circuits				
Addition	nal Notebook Batter	y Information:					
		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/I	built-in Battery						
External	/detachable Battery						
Bios Bac	ckup Battery						
Other:							
Additiona	al information						
Akymynatopi Las baterías Výměnu bate Brugeren kar Der Akku/die Kasutajad ei H μπαταρία[- Lal/les batteria/les Lietotāji paši Šio gaminio t A termék akk ILietotāji paši Šio gaminio t A termék akk Ilabatterija/ba Batteriet (ene De batterij/ene Užytkownik n A ou as bate Bateria (bate Baterij/baterij/ Baterij/baterij/ Baterij/baterij/ Tämän tuotte Det är inte er	ната[ите] батерия[и] в този de este producto no pueden rierle/baterií v tomto výrobku by nikke uden videre udskifte be Akkus dieses Produkts kanr saa selle toote akut/akusid is Ec] στο προϊόν αυτό δεν μπο e(s présente(s) dans ce produce lako zamijeniti Bateriju se batterie in questo produto nevar nomainīt šā ražojuma baterijos [bateriju] pats vartot kumulátorát/akkumulátorait a tetriji f dan il-prodott ma tistæ] i dette produktet kan ikke len) in dit product is (zijn) door nie može sam w latwy sposóť rias deste produto não poder riile) din acest produs nu poæt tomto výrobku nemôže vymi je v tem izdelku uporabniki se en akku [akut] ei[vät] ole heļakelt för kunden att själv byta	ρούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες uit ne peuvent être facilement remplacée(s) par les utilisateurs esam 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 tiġi/jiġu sostitwita/i mill-utenti stess. stt erstattes av brukerne selv. de gebruiker niet gemakkelijk vervangbaar. o wymienić baterii w tym produkcie. n ser facilmente substituídas pelos próprios utilizadores. tte (pot) fi uşor înlocuită (înlocuite) de utilizatorii înşişi. eñat používatef. ami ne morejo zlatka zamenjati. oosti käyttäjän vaihdettavissa.	werden.				