



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	

	based on product specification or test results based obtained from sample testing), that the product nts given in this declaration.
Type of product *	Notebook
Commercial name *	Lenovo FLEX 6-11/Lenovo YOGA 330-11
Model number *	81A6, 81A7
Issue date *	2017-11-29
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 nu Issue dat		81A6, 81A7 2017.11.29	Logo	Len	OVO	D _{tm}
Product	t environ	mental attributes - Legal requirements		Require	men	t met
Item				Yes	No	n.a.
P1	Hazardo	us substances and preparations				
P1.1*	Products	do comply with current European RoHS Directive. (See legal reference and NOTE	EB1)	\boxtimes		
P1.2*		do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.				

P1.3* Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), X hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1trichloroethane, 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). Products do not contain more than 0.1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the P1.5* 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). Comment: 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); 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) Batteries or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See legal P2.2* reference) P2.3* Batteries and accumulators are readily removable. (See legal reference) **P3** Conformity verification & Eco design (ErP) The product is CE-marked to show conformance with applicable legal requirements (see legal reference). P3.1 The Declaration of Conformity can be requested at (add link or e-mail address): http://www.lenovo.com/social_responsibility/us/en/ec_doc_notebooks/ 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): http://www.lenovo.com/social_responsibility/us/en/datasheets_notebooks/ Product packaging P5 P5.1 Packaging and packaging components do not contain more than 0,01% lead, mercury, cadmium and hexavalent chromium by weight of these together. P5.2* The packaging materials are marked with abbreviations and numbers indicating the nature of the material(s) used (see legal reference). P5.3* The product packaging material is free from ozone depleting substances as specified in the Montreal 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).

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 *	81A6,81A7	Logo	anava	
Issue date *	2017.11.29			

Product	environmental attributes - Market requirements (See General NOTE GN below)			
		Require	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.	\boxtimes		
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			
P7.8*	Upgrading can be done using commonly available tools	\boxtimes		
P7.9	Spare parts are available after end of production for: 5 years			
P7.10	Service is available after end of production for: 5 years			
	Material and substance requirements			
P7.11*	Product cover/housing material type (e.g. plastics, metal, aluminum):			
P7.12	Material type: PC/ABS Material type: Material type: Insulation materials of external electrical cables are PVC free.			
P7.13	Insulation materials of internal electrical cables are PVC free.		<u> </u>	
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, an polyvinyl chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in part	d	Ш	
P7.15	containing more than 25% post-consumer recycled content. 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)	N		
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: Brominated epoxy resin . CAS #: 26265-08-7			
	Alt. 2: Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g according ISO 1043-4: Brominated Epoxy Resin See P14			
P7.18	Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations is concentrations above 0,1%: 1. Chemical name: BPADP, CAS #: 181028-79-5 (See NOTE B4) 2. Chemical name: , CAS #: " 3. Chemical name: , CAS #: "	n 🔲		\boxtimes
	Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:	\boxtimes		
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been assigned the following Risk phrases; and Hazard statements:			
P7.20*	The source(s) for these classifications is/are found at (add URL(s)): , (See note B5) Postconsumer recycled plastic material content is used in the product (See Note B6):			
= -	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 *	81A6,81A7	Logo	Lonovo
Issue date *	2017.11.29		LEI IOVO"

Product environmental attributes - Market requirements (continued) Requirement met						
Item				Yes No n.a.		
	stance requirements					
P7.21* Biobased plastic m	naterial content is used	I in the product (See N	OTE B7):			
		s below shall be answ				
			material content (calcu	ılated as a percentage		
<u> </u>	by weight) is %).				
or b) The weight of	the biobased plastic r	naterial is g.				
P7.22* Light sources are f	ree from mercury, i.e.	less than 0,1 mg/lamp		\square		
If mercury is used	specify: Number of lan	nps: and maxim	um mercury content pe	er lamp: mg		
P8 Batteries						
•	omposition: Lithium id	on				
	tion (See NOTE B8)					
		s or energy consumpti		D. C (Ot a stant of the same of		
Energy mode *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Standard for energy modes and test method *		
Peak (On-max)	45 W	45 W	45 W	Full load		
, ,	-	-				
Category I1-						
Short Idle State - WOL	4.58 W	4.48 W	4.6 W	Use for ENERGY STAR V6		
Enabled				registration (P _{idle})		
Long Idle State - WOL	2.34 W	3.01 W	2.39 W	Use for ENERGY STAR V6		
Enabled	2.54 VV	3.07 W	2.33 VV	registration (P _{idle})		
				(13.7)		
Sleep (S3) - WOL Enabled	W	W	W	Use for ENERGY STAR V6		
				registration(P _{sleep})		
Sleep (S3) - WOL Disabled	0.82 W	0.82 W	0.83 W	Reference		
Off (S5) - WOL Enabled	W	W	W	Use for ENERGY STAR V6		
Oli (SS) - WOL Ellabled	VV	VV	VV	registration(P _{off})		
05 (05) 1/(01 5) 1/1	0.45104	0.45104	0.40344	. ,		
Off (S5) - WOL Disabled	0.45 W	0.45 W	0.48 W	Use for ErP		
	W	W	W	Reference		
Category						
Short Idle State - WOL	W	W	W	Reference		
Enabled						
Long Idle State - WOL	W	W	W	Reference		
Enabled						
Sleep (S3) - WOL Enabled	W	W	W	Reference		
Sleep (S3) - WOL Disabled	W	W	W	Reference		
Off (S5) - WOL Enabled	W	W	W	Reference		
, ,						
Off (S5) - WOL Disabled	W	W	W	Reference		
	W	W	W	Reference		
Category						
Category						
Short Idle State - WOL	W	W	W	Reference		
Enabled						
Long Idle State - WOL	W	W	W	Reference		
Enabled						

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

Sleep (S3	3) - WOL Enabled	W	W	W	Reference
Sleep (S3	3) - WOL Disabled	W	W	W	Reference
Off (S5) -	WOL Enabled	W	W	W	Reference
Off (S5) -	WOL Disabled	W	W	W	Reference
		W	W	W	Reference
	er supply / charger plugged in the	0.09 W	0.09 W	0.11 W	
PTEC *	disconnected from the product.)	W	W	W	
Typical E	nergy Consumption				
ETEC * Annual E	nergy Consumption	17.59kWh/year	17.91 kWh/year	17.78 kWh/year	E _{TEC} = (8760/1000) x (P _{off} x 0.25 + P _{sleep} x 0.35 + P _{long_idle} x 0.10+ P _{short_idle} x 0.30)
		Poff: Off Mode(S5) - I	WOL Enabled; Psleep: Sle	ep Mode(S3) - WOL Enal	bled; P _{idle} : Idle State - WOL Enabled
External F	Power Supply Efficier	ncy Level (Internation	nal Efficiency Marking F	Protocol) * :	
Display re	esolution * : 1.049me	gapixels			
Default tir	me to enter energy sa	ave mode: 30 minute	S		
P9.2*	Information about	the energy save fund	ction is provided with th	ne product.	
P9.3	Energy efficiency	class (monitors only)	<u> </u>		
P10	Emissions	, ,,			
	Noise emission -	Declared according	to ISO 9296 (See NO	TE B9)	
P10.1	Mode N	Mode description			mit A-weighted sound power level, L _{WA,c} (B)
	Idle *	System Idle		* NA	
		CPU;Operation		* NA	
	Other mode	Declared A-weighted so	und pressure level (dB) $L_{ m p}$	Am (operator)	position desktop – idle)
	Other mode	Declared A-weighted so	und pressure level (dB) $L_{ m p}$	Am (operator)	position desktop – operating)
	Measured according	ng to: ISO 7779 Other	ECMA-74 (only if not covered	by ECMA-74)	

Model nu	umber *	81A6,81A7					Logo	Long	V/0	
Issue da	te *	2017.11.29						Lenc		тм
Product	t environr	nental attributes	- Market requirem	nents (con	tinued)			Require	ment	met
Item								Yes	No	n.a.
		magnetic emission								
P10.4	program	(s):	requirement for low f	requency el	ectromagnetic fields	of the foll	owing voluntar	у		
P12	Ergonor	mics for computin	g products							
P12.1*		<u> </u>	nomic requirements of				gies.	\boxtimes		
P12.2*	The phys	sical input device m	eets the requirements	of ISO 999	5 and ISO 9241-410).		\boxtimes		
P13	Packagi	ng and document	ation							
P13.1*	Product Product	packaging material packaging material	type(s): OTHER	weight (kg weight (kg weight (kg): 0.056					
P13.2*	Product	plastic primary pacl	caging is free from PV	C.				\boxtimes		
P13.3*		duct primary corruger recovered fiber co	ated fiberboard pack	aging, spec	ify the contained p	ercentage	of minimum p	oost-		\boxtimes
P13.4*		media for user and ronic, Paper,	oroduct documentation Other	n (tick box):						
P13.5	Ùser and		tem if paper documen ation on paper media							
	,	hlorine-free al chlorine-free								
	Processo	ed chlorine-free								
P14	Volunta	ry programs								
P14.1	The prod	duct meets the requ	irements of the followi	ing voluntar	y program(s):					
	Eco-labe	el:	Criteria version: 6.1 Criteria version: Criteria version:	1	Date: 2017-12-14 Date: Date:	Product of	0 ,			
P15		nal information (Se								
P9			pecific configuration							
	informati knowled	ion contained in this ge available at the t here is approximat	epresentations, guara document. All inform ime of completion, an e and provided for info	ation provid d supplier s	ed by supplier in this hall have no obligati	s documer on to upda	nt is provided bate such inform	ased on suppation. The in	olier's format	ion
P9	See Ene	rgy Star Qualified N	lotebooks & Tablet Condex.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	Lenovo FLEX 6-11/Lenovo YOGA 330-11	Logo	
Model Number	81A6, 81A7		Lonovo
Issue Date	2017.11.29		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	switchable graphics n	node with UMA driving	the display.	, ,
)	Etec value (kWh) per ErP Lot 3 Categor enable	y and capability adjust	ments applied when a	III 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]	4GB			
ents ting	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)				
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)	11.41			
Test results	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled				
g)	Idle state power demand (Watts);			•	3.21
٦)	Sleep mode power demand (Watts);				0.82
)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		
)	Off mode power demand (Watts);				0.43
۲)	Off mode with WOL enabled power dem	and (Watts) (where en	abled);		
)	Internal power supply efficiency at 10 %,	20 %, 50 % and 100 °	% of rated output pow	er (if applicable):	
	10% 20% 50%	100% Avera	ige		
n)	External power supply efficiency (if appli	cable)*:			
	Average active efficiency: 89.18%,87.58	3%,89.04%,87.60%,89	.92%,88.32%		
-)	*internal note: show values for all available external p Minimum number of loading cycles that t		tand (applies only to n	otobook computers):	
0)	withing number of loading cycles that i	ne ballenes can withs	iana (applies only to n	otenook computers):	1000
p-1)	Measurement methodology used to dete		itioned in points (I) – ii	nternal PSU efficiency:	:
		N/A			

(p-2)	Measurement methodology used to determine information mentioned in points (m) – external PSU efficiency: ENERGY STAR® Program Requirements for Single Voltage External Ac-Dc and Ac-Ac Power Supplies Eligibility Criteria (Version 2.0)			
(p-3)	Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries: ≥70% of Cmin			
(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: IEC 62623			
(q)	Sequence of steps for achieving a stable condition with respect to power demand:: *Power on -> Wait 5 minutes -> Stable condition*			
(r)	Description of how sleep and/or off mode was selected or programmed: **Begin menu -> Power -> Select sleep or off mode**			
(s)	Sequence of events required to reach the mode where the equipment automatically changes to sleep and/or off mode: NA			
(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):			
(u)		a period of user inactivity in which the compute		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):		10min	
(w)	Information on the energy-saving potential of power management functionality: *Refer to User Guide*			
(x)	User information on I	now to enable the power management functionality: *Refer to User Guide*		
(z)	the electricity supply used for electrical tes	230V50HZ-2%-Edition 2.0, 2011-01, Section 4	strumentation, set-up and circuits	
Additio	nal 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)	battery[ies] user replaceable	TI/a
Internal/	/built-in Battery			
External	l/detachable Battery			
Bios Backup Battery				
Other:				
Addition	al information			
1)				
The battery[i Akywynaropi Las baterías Výměnu bate Brugeren kar Der Akku/die Kasutajad ei H μπαταρία[- La/les batteri Ake La batteria/le Lietotāji paši Šio gaminio A termék akk	ната[ите] батерия[и] в този s de este producto no pueden erie/baterií v tomto výrobku by in ikke uden videre udskifte ba e Akkus dieses Produkts kanr i saa selle toote akut/akusid is -ες] στο προϊόν αυτό δεν μπο rie(s présente(s) dans ce proc može lako zamijeniti Bateriju ; e batterie in questo prodotto r i nevar nomainīt šā ražojuma baterijos [baterijų] pats vartot kumulátorát/akkumulátorait a	ρούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες iuit ne peuvent être facilement remplacée(s) par les utilisateurs e san u ovom proizvodu. on può/possono essere facilmente sostituita/e dall'utente. akumulatoru(-us).	werden.	

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.

Užytkownik nie može sam w latwy 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.