

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 *	of product * NB					
Commercial name *	Lenovo V720-14, K42-80					
Model number *	80Y1, 80Y0					
Issue date *	2017/4/11					
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	mber *	80Y1, 80Y0 Logo	Lon		
Issue dat	e *	2017/4/11	Leng	DVC	
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)	\square		
P1.2*	Commer	s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.	\square		
P1.3*	hydrobro trichloro	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), pmofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1- ethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum ration values.			
P1.4*		s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated /l (PCT) in preparations (see legal reference).	\square		
P1.5*		s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in th ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	e 🔀		
P1.6*	(see lega	th direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm²/weel al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	< 🔀		
P1.7*		Article 33 information about substances in articles is available at (add URL or mail contact):	\square		
P2	Batterie	S			
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)	\boxtimes		
P2.2*	Batteries referenc	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See lega e)			
P2.3*	Batteries	s and accumulators are readily removable. (See legal reference)	\square		
P3	Conform	nity verification & Eco design (ErP)			
P3.1*		duct is CE-marked to show conformance with applicable legal requirements (see legal reference).	\boxtimes		
		laration of Conformity can be requested at (add link or e-mail address):			
P3.2*		duct complies with the Eco design requirements for energy-related products, al reference).	\bowtie		
		d information is; given in item P15 or added to this document,			
	required	a mormation is, available at (add URL):			
P5	Product	packaging			
P5.1*	Packagi	ng and packaging components do not contain more than 0,01% lead, mercury, cadmium ar ant chromium by weight of these together.	nd 🔀		
P5.2*	The pac	kaging materials are marked with abbreviations and numbers indicating the nature of the material(be legal reference).	s) 🔀		
P5.3*	Protocol	duct packaging material is free from ozone depleting substances as specified in the Montre (see legal reference). t: Legal reference has no maximum concentration values.	al 🔀		
P6		nt information			
P6.1*		on for recyclers/treatment facilities is available (see legal reference).	\square		

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 *		80Y1, 80Y0	Logo						
Issue dat	te *	2017/4/11		Len	ovc)			
Product		mental attributes - Market requirements (See General NOTE GN onmental conscious design	below)	Require	ment	met			
Item		tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.			
P7	Design	mbly, recycling							
P7.1*		It have to be treated separately are easily separable		\square					
P7.2*	Plastic m	naterials in covers/housing have no surface coating.				Ħ			
P7.3*		arts > 100 g consist of one material or of easily separable materials.							
P7.4*	•	tic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4. tic parts are free from metal inlays or have inlays that can be removed with commonly available tools.							
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).								
11.0									
P7.7*	Product lifetime Upgrading can be done e.g. with processor, memory, cards or drives								
P7.8*									
P7.9	Spare parts are available after end of production for: 5 years								
P7.10									
F7.10									
P7.11*		and substance requirements cover/housing material type (e.g. plastics, metal, aluminum):							
	Material type: PC+ABS Material type: Metal Material type: Aluminum								
P7.12		n materials of external electrical cables are PVC free.				\mathbf{X}			
P7.13	Insulation materials of internal electrical cables are PVC free.								
P7.14	weight (' polyvinyl	plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) b 1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) ng more than 25% post-consumer recycled content.	e retardants, ar	nd					
P7.15	Printed c	circuit boards, PCBs (without components) are low halogen: all ⊠PCBs > 25 g ⊠ ad in IEC 61249-2-21. (See 1NOTE B2)	are low haloge	en 🔀					
P7.16	Marking:	tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: > PC+ABS-TD15<		\boxtimes					
P7.17		nemical specifications of flame retardants in printed circuit boards > 25 g (without co PA (additive), TBBPA (reactive) (See NOTE B3), Other: <i>D0P0</i> ,, CAS #: 35948		\boxtimes					
		nemical specifications of flame retardants in printed circuit boards (without compone g ISO 1043-4: <i>FR(40)</i>	ents) > 25 g						
P7.18	concentr 1. Chemi 2. Chemi	ame retarded plastic parts > 25 g contain the following flame retardant substance ations above 0,1%: ical name: , CAS #: (See NOTE B4) ical name: , CAS #: " ical name: , CAS #: "	es/preparations	in					
		nemical specifications of flame retardants in plastic parts > 25 g according ISO 104	3-4:						
P7.19	•	parts > 25 g, flame retardant substances/preparations above 0,1% are used which I the following Risk phrases; and Hazard statements:	n have been						
	-		See note B5)						
P7.20*		sumer recycled plastic material content is used in the product (See Note B6):		\boxtimes					
	a) Oft ape or	It least one of the two alternatives below shall be answered; otal plastic parts' weight > 25 g, the postconsumer recycled plastic material conten ercentage of total plastic by weight) is <i>0.1</i> %.	it (calculated as						

GENERAL NOTE Standard references should direct to the latest version of a standard. If an older version of a standard is used, section P15 shall be used for explanation.

NOTE B2 IEC 61249-2-21 defines maximum limits of 900 ppm for each of the substances chlorine and bromine and a maximum limit of 1500ppm of these substances combined. The standard does not address fluorine, iodine and astatine which are included in the group of halogens.

NOTE B3 and B4 A Guidance document on Chemical substances is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm

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

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

Model number * 80Y1, 80	Y0			Logo		
Issue date * 2017/4/1	1				Lenov	O
Product environmental at	tributes - Market ro	equirements (conti	nued)		Requireme	ent met
Item		•			Yes No	n.a.
	tance requirements					
P7.21* Biobased plastic m	aterial content is used	I in the product (See N	OTE B7):			\boxtimes
		s below shall be answe				
a) Of total plasti of total plastic			material content (calcul	ated as a percent	age	
or	, ,	-				
, ,	the biobased plastic n	naterial is g. less than 0,1 mg/lamp.				
	specify: Number of lan		um mercury content per	·lamp: mg		\square
P8 Batteries		·		· · ·		
P8.1* Battery chemical co	•					\square
	tion (See NOTE B8)	s or energy consumption	ons are reported:			
Energy mode *	Power level at	Power level at	Power level at	Reference/Stand	ard for energy	
	100 V AC	115 V AC	230 V AC	modes and test r		
Peak (On-max)	65 W	65 W	65 W	Full load		
Category NBI1						
Short Idle State - WOL	5.06W	5.00 W	5.06 W	Reference		
Enabled						
Long Idle State - WOL	1.85 W	1.78 W	1.89 W	Reference		
Enabled						
Sleep (S3) - WOL Enabled	0.51 W	0.51 W	0.55 W	Reference		
Sleep (S3) - WOL Disabled	0.51 W	0.51 W	0.55 W	Reference		
Off (S5) - WOL Enabled	0.24 W	0.24 W	0.30 W	Reference		
				Reference		
Off (S5) - WOL Disabled	0.24 W	0.24 W	0.30 W			
	W	W	W	Reference		
Category NBI2						
Short Idle State - WOL Enabled	4.87W	4.88 W	5.08 W	Reference		
Long Idle State - WOL	1.85 W	2.65 W	2.68 W	Reference		
Enabled						
Sleep (S3) - WOL Enabled	0.57 W	0.52 W	0.52 W	Reference		
Sleep (S3) - WOL Disabled	0.57 W	0.52 W	0.52 W	Reference		
Off (S5) - WOL Enabled	0.24 W	0.31 W	0.30 W	Reference		
Off (S5) - WOL Disabled	0.24 W	0.31 W	0.30 W	Reference		
	W	W	W	Reference		
Category						
Short Idle State - WOL	W	W	W	Reference		
Enabled						
Long Idle State - WOL Enabled	W	W	W	Reference		_
Sleep (S3) - WOL Enabled	W	W	W	Reference		

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

Sleep (S	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
EPS No-I	oad er supply / charger plugged in the	0.037 W	0.079 W	0.14 W	
wall outlet but o	disconnected from the product.)	W	W	W	
-	nergy Consumption	**	vv	vv	
ETEC *		17.22 kWh/year	17.21 kWh/year	17.98 kWh/year	
	nergy Consumption				
External F	Power Supply Efficie	ncy Level (Internation	al Efficiency Marking I	Protocol) * : VI	
Display re	esolution * : 1920*10)80 megapixels			
Default tir	me to enter energy s	ave mode: 10 minute	S		
P9.2*	Information about	t the energy save fund	tion is provided with th	ne product.	
P9.3	Energy efficiency	class (monitors only)	:		
P10	Emissions	,			
	Noise emission	- Declared according	to ISO 9296 (See NO	TE B9)	
P10.1	Mode	Mode description	*	Statistical upper li	mit A-weighted sound power level, <i>L_{WA,c}</i> (B)
	ldle	* Idle		* 2.6	
	Operation	* CPU Operating		* 4.0	
	Other mode				
	Measured accord	ling to: 🔀 ISO 7779	ECMA-74 (only if not covered	by ECMA-74)	

Model nu	ımber *	80Y1, 80Y0				L	ogo			
Issue dat	te *	2017/4/11						Leno	VO,	ж
Product	t environ	nental attribut	es - Market require	ements (con	itinued)			Require	ment	met
Item								Yes	No	n.a.
		magnetic emissi								
P10.4	program	(s):	the requirement for low	v frequency el	ectromagnetic field	s of the follow	ving voluntary			
P12		mics for comput								
P12.1*	The disp	play meets the ere	gonomic requirements	of ISO 9241-3	307 for visual displa	ay technologie	es.			
P12.2*	The phy	sical input device	meets the requirement	nts of ISO 999	5 and ISO 9241-41	0.			\mathbf{X}	
P13	Packaging and documentation									
P13.1*	Product Product	packaging mater packaging mater	ial type(s): paper	weight (kg weight (kg weight (kg): 0.068					
P13.2*	Product	Product plastic primary packaging is free from PVC.						\boxtimes		
P13.3*	For product primary corrugated fiberboard packaging, specify the contained percentage of minimum post-									
P13.4*		media for user ar ronic, 🔀Paper,	d product documentat	ion (tick box):						
P13.5	Ùser an		s item if paper docume entation on paper med							
	Totally o	hlorine-free								
		al chlorine-free						H		
	Process	ed chlorine-free						H		
P14	Volunta	ry programs								
P14.1	The pro	duct meets the re	quirements of the follo	wing voluntar	y program(s):					
	ENERG Eco-lab Eco-lab		Criteria version: 6 Criteria version: Criteria version:	5.1	Date: 2017/1/24 Date: Date:	Product cat Product cat Product cat	• •	NBI2		
P15	Additio	nal information (See NOTE B10)				•			
P9			specific configuration	on may vary;	description of the	tested prod	uct configura	tion:		
		•	· •		•	•	~			

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 V720-14, K42-80	Logo
Model Number	80Y1, 80Y0	
Issue Date	2017/4/11	Lenovo
Additional information		

P7.1.1	Product environmental attributes						
(d)	year of manufacture:				2017		
(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	Il discrete graphics o	ards (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]		16				
lents sting	Additional internal storage	(Yes / No)	No (Yes / No)	(Yes / No)	(Yes / No)		
capability adjustments applied during testing	Discrete television tuner	(Yes / No)	No (Yes / No)	(Yes / No)	(Yes / No)		
ability a	Discrete Audio Card	(Yes / No)	No (Yes / No)	(Yes / No)	(Yes / No)		
cap	Discrete graphics Card(s) [number / #]	# <i>:</i> (Yes / No)	<mark>Yes #: 1</mark> (Yes / No)	# <i>:</i> (Yes / No)	#: (Yes / No)		
	Category of discrete graphics Card(s)		G3				
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)		9.16				
Test results	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled						
(g)	Idle state power demand (Watts);	·		•	2.683		
(h)	Sleep mode power demand (Watts);				0.519		
(i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		0.519		
(j)	Off mode power demand (Watts);				0.314		
(k)	Off mode with WOL enabled power dema	and (Watts) (where en	abled);		0.314		
(I)	Internal power supply efficiency at 10 %,	20 %, 50 % and 100 %	% of rated output powe	er (if applicable):			
	10% 20% 50%	100% Avera	ge				
(m)	external power supply efficiency (if applic	cable)*:					
	Average active efficiency:89.18%,89.049	%,89.92%,88.32%,89.1	18%, 89.04%,89.92%				
()	*internal note: show values for all available external po						
(0)	Minimum number of loading cycles that t	ne patteries can withst	and (applies only to n	otebook computers):	800 cycles		
(p-1)	Measurement methodology used to determine information mentioned in points (I) – internal PSU efficiency: NA						

(p-2)	Measurement methodology used to determine information mentioned in points (m) – external PSU efficiency: EPA "Test Method for Calculating the Energy Efficiency of Single-voltage External AC-DC and AC-AC Power Supplies" dated August 11, 2004							
(p-3)	Measurement metho	dology used to determine information mentioned in p IEC 61960 measurement methodolo						
(p-4)		dology used to determine information mentioned in r Point P9.1 in the Product IT Eco Declaration: IEC 62623/ IEC EN50564:2011 measurement n						
(q)	Sequence of steps for	or achieving a stable condition with respect to power IEC 62623/ IEC EN50564:2011 measurement n						
(r)	Description of how s	leep and/or off mode was selected or programmed: Energy-star requirement						
(s)	Sequence of events off mode:	required to reach the mode where the equipment au Energy-star requirement	tomatically changes to sleep and/or					
(t)		te condition before the computer automatically re- s not exceed the applicable power demand requirement		30				
(u)		r a period of user inactivity in which the compute wer power demand requirement than sleep mode (in		NA				
(v)	Length of time befo	ore the display sleep mode is set to activate after	user inactivity (in minutes):	10				
(w)	Information on the er	nergy-saving potential of power management functio Based on user manual	nality:					
(x)	user information on h	now to enable the power management functionality: Based on user manual						
(z)		neasurements: — test voltage in V and frequency in tem, — information and documentation on the instru 230V50HZ-2%-Edition 2.0, 2011-01, Section 4	mentation, set-up and circuits used					
Addition	Notebook Battery		*, 12002301					
	-	Battery[ies] not user replaceable	Battery[ies] user replaceable	n/a				
		The battery[ies] in this product cannot be easily replaced by users themselves. $^{1)} \ensuremath{D}$						
Internal/b	ouilt-in Battery	\boxtimes						
External	detachable Battery							
Bios Bac	kup Battery							
Other:								
Additiona	al information	•						
1)								
The battery[ie		easily replaced by users themselves. продукт не може да се замени[ят] лесно от самите потребит	ели.					
Las baterías	de este producto no pueden	ser sustituidas fácilmente por los propios usuarios. y neměli provádět sami uživatelé.						
Brugeren kan	i ikke uden videre udskifte b	atteriet/batterierne i dette produkt. n/können nicht ohne weiteres vom Benutzer selbst ausgetauscht	werden.					
Kasutajad ei :	saa selle toote akut/akusid is							
La/les batteri		duit ne peuvent être facilement remplacée(s) par les utilisateurs é						
La batteria/le		non può/possono essere facilmente sostituita/e dall'utente.						
Šio gaminio b	paterijos [baterijų] pats vartot							
II-batterija/bat	tteriji f'dan il-prodott ma tista	reinasznalo nem tudja egyedul egyszerűen kicsereini. x/jistgħux tiġi/jiġu sostitwita/i mill-utenti stess. ett erstattes av brukerne selv.						
De batterij(en	i) in dit product is (zijn) door	de gebruiker niet gemakkelijk vervangbaar. awmienijk batarij w tym produkcje						

Użytkownik nie może 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 înșiși.

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.