

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 * e-mail address	Lenovo Global Environmental Affairs Alvin L Carter 1009 Think Place Building 2 / 5F1 Morrisville, North Carolina 27560	Lenovo
Internet site *	alcarter@lenovo.com 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 *	Notebook PC					
Commercial name *	ThinkPad L560					
Model number *	20F1, 20F2					
Issue date *	November 18, 2016					
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 n	umber *	20F1, 20F2	Logo				
Issue date *		November 18, 2016		Leno	Lenovo		
	t environ	mental attributes - Legal requirements		Require		t met	
Item				Yes	No	n.a.	
P1		ous substances and preparations					
P1.1*	Products	s do comply with current European RoHS Directive. (See legal reference and NOTE	B1)				
P1.2*	Comme	s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.		\boxtimes			
P1.3*	hydrobro trichloro	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), pmofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrach ethane, methyl bromide (see legal reference). Comment: Legal reference has no m ration values.		-			
P1.4*	terpheny	s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychl /l (PCT) in preparations (see legal reference).		\boxtimes			
P1.5*	Products	s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carb ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	oon atoms ir	n the 🔀			
P1.6*	(see leg	th direct and prolonged skin contact do not release nickel in concentrations above 0 al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	,5 μg/cm²/w	eek 🔀			
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail o ww.lenovo.com/social_responsibility/us/en/materials.html	contact):				
P2	Batterie						
P2.1*		oduct contains a battery or an accumulator, the battery/accumulator is labeled with to Information on proper disposal is provided in user manual. (See legal reference)	he disposal	\boxtimes			
P2.2*	Batterie: referenc	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadm e)	ium. (See le	egal 🔀			
P2.3*	Batteries	s and accumulators are readily removable. (See legal reference)		\boxtimes			
P3	Conform	nity verification & Eco design (ErP)					
P3.1*	The proo	duct is CE-marked to show conformance with applicable legal requirements (see leg claration of Conformity can be requested at (add link or e-mail address): ww.lenovo.com/social_responsibility/us/en/ec_doc_notebooks/	al reference	e). 🔀			
P3.2*	The pro	duct complies with the Eco design requirements for energy-related products, al reference).		\boxtimes			
	Require	d information is available : ww.lenovo.com/social_responsibility/us/en/datasheets_notebooks/		\boxtimes			
P5		packaging					
P5.1*	Packagi	ng and packaging components do not contain more than 0,01% lead, mercury ent chromium by weight of these together.	, cadmium	and 🔀			
P5.2*	The pac	kaging materials are marked with abbreviations and numbers indicating the nature of the legal reference).	of the materi	ial(s) 🔀			
P5.3*	The pro Protocol	duct packaging material is free from ozone depleting substances as specified (see legal reference). nt: Legal reference has no maximum concentration values.	in the Mon	itreal 🔀			
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 *		20F1, 20F2	Logo				
Issue dat	te *	November 18, 2016		Len	Lenovo,		
Product	environ	mental attributes - Market requirements (See General NOTE GN	below)				
		onmental conscious design		Require		met	
Item		tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.	
P7	Design Disasse	mbly, recycling					
P7.1*		t have to be treated separately are easily separable		\square			
P7.2*		aterials in covers/housing have no surface coating.		Ē			
P7.3*		arts > 100 g consist of one material or of easily separable materials.					
P7.4*	Plastic p	arts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.					
P7.5	Plastic pa	arts are free from metal inlays or have inlays that can be removed with commonly a	available tools.				
P7.6*	Labels a	re easily separable. (This requirement does not apply to safety/regulatory labels).					
	Product	lifetime					
P7.7*	Upgradir	g can be done e.g. with processor, memory, cards or drives		\boxtimes			
P7.8*	Upgradin	g can be done using commonly available tools					
P7.9	Spare pa	rts are available after end of production for: 5 years					
P7.10	Service i	s available after end of production for: 5 years					
	Material	and substance requirements					
P7.11*	Product	cover/housing material type (e.g. plastics, metal, aluminum):					
			al type: POM				
P7.12	Insulatio	n materials of external electrical cables are PVC free.			\boxtimes		
P7.13	Insulatio	n materials of internal electrical cables are PVC free.		\boxtimes			
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)	e retardants, and	d 📩			
P7.15	Printed of	g more than 25% post-consumer recycled content. circuit boards, PCBs (without components) are low halogen: all PCBs > as defined in IEC 61249-2-21. (See 1NOTE B2)	25 g 🔀 are lov	v 🖂			
P7.16		tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4:		\boxtimes			
P7.17		nemical specifications of flame retardants in printed circuit boards > 25 g (without c	omponents):				
	TBBF	A (additive), TBBPA (reactive) (See NOTE B3), Other: <i>DOPO(9,10-dihydro</i> aphenanthrene-10-oxide), CAS #: 35948-25-5		\boxtimes			
		nemical specifications of flame retardants in printed circuit boards (without compone g ISO 1043-4:	ents) > 25 g				
P7.18	Alt. 1: Fl. concentr	ame retarded plastic parts > 25 g contain the following flame retardant substance ations above 0,1%:	es/preparations in	n			
		ical name: , CAS #: (See NOTE B4) ical name: , CAS #: "					
		ical name: , CAS #: "					
		nemical specifications of flame retardants in plastic parts > 25 g according ISO 104	3-4:	\boxtimes			
P7.19	In plastic	parts > 25 g, flame retardant substances/preparations above 0,1% are used which the following Risk phrases; R53 and Hazard statements: H412	n have been				
	The sour	ce(s) for these classifications is/are found at (add URL(s)): , (S	See note B5)				
P7.20*	Postcons	sumer recycled plastic material content is used in the product (See Note B6):		\boxtimes			
	a) Of t a pe or	t 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 %.	t (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.

	iber *	20F1, 20	-2			Logo	Lonova	
Issue date	*	Novemb	er 18, 2016				Lenovo	
Product e	nvironm	ental at	tributes - Market r	equirements (cont	inued)		Requirement	met
Item				•				n.a.
	Material a	and subs	tance requirements	(continued)				
P7.21*	Biobased	plastic m	aterial content is used	l in the product (See N	NOTE B7):			
	If YES; at	least one	of the two alternative	s below shall be answ	vered;			
					material content (calcu	ulated as a perce	ntage	
		al plastic	by weight) is %).				
	or b) The	weiaht of	the biobased plastic r	naterial is g.				
P7.22*				less than 0,1 mg/lamp).			
		is used s	specify: Number of lar	nps: and maxin	num mercury content pe	er lamp: m		_
P8 P8.1*	Batteries		magaitian Lithium I					_
			omposition: Lithium I	on				
			ion (See NOTE B8)	s or energy consumpt	tions are reported:			
Energy mod			Power level at	Power level at	Power level at	Reference/Star	ndard for energy	
0,			100 V AC	115 V AC	230 V AC	modes and tes		
Peak (On-n	nax)		45 W	45 W	45 W	Full load		
Category	<u>/ 1</u>							
Short Idle S	State		8.75784 W	8.90436 W	9.00972 W	P _{SHORT_IDLE} in EN	ERGY STAR	
Long Idle S	State		5.15688 W	5.16948 W	5.40492 W	PLONG_IDLE in ENE	RGY STAR	
Sleep (S3)			0.856884 W	0.854472 W	0.857148 W	P _{SLEEP} in ENERG	YSTAR	
Off (S5)			0.220308 W	0.225924 W	0.257916 W	P _{OFF} in ENERGY	STAR	
EPS No-loa	d		W	0.06 W	0.084 W			
(External power su wall outlet but disco	pply / charger plo onnected from th	ugged in the e product.)						
PTEC *			W	W	W			
Typical Ene	rgy Consu	mption	00.01.114/5/			F (0700/4	(D	_
ETEC * Annual Ene	rgy Consu	mption	30.64 kWh/year	31.04 kWh/year	31.61 kWh/year	+ $P_{SLEEP} \times T_{SLE}$	$\begin{array}{l} \textbf{000) x (P_{OFF} \times T_{OFF} \\ \textbf{EP} + P_{LONG_{IDLE}} \times \end{array}$	Ш
						TLONG_IDLE + PSI TSHORT IDLE)	IORT_IDLE ^	
External Po	wer Supply	y Efficien	cy Level (Internationa	Efficiency Marking P	rotocol) * : V			
Display reso	olution * : 1	1366 x 76	38,1920 x 1080 Pixels					Π
Default time	to enter e	nergy sa	ve mode: 30 minutes					Π
P9.2*	Informatio	n about t	he energy save functi	on is provided with the	e product.			Ħ
			lass (monitors only):		•			
P10	Emission							<u> </u>
	Noise em	ission –	Declared according to	ISO 9296 (See NOT	E B9)			
P10.1	Mode		ode description			it A-weighted sou	nd power level, <i>L_{WA,c}</i> (E	3)
	Idle		ldle		* 3.0			
	Operation		Operating(CPU)			* 3.5		
	Other mod	de *	* Operating(HDD) * 3.0					
					Declared A-weighted sound pressure (operator position desktop)		level, L _{pAm} (dB)	
ŀ	Idle	*	Idle		* 20			
F	Operation	*	Operating(CPU)		* 27			Ħ
	•		Operating(HDD)		* 21			H
ŀ	Other mod	je i			21			

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

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

Model nu	umber * 20F1, 20F2	2		Logo	Longy					
lssue da	te * November	18, 2016			Lenov	O				
Product	environmental attri	ibutes - Market requirements	(continued)		Requireme	ent met				
Item					Yes N	No n.a.				
	Electromagnetic en									
P10.4		Computer display meets the requirement for low frequency electromagnetic fields of the following voluntary program(s): <i>MPR-II(3 pin AC adapter only</i>)								
P12	Ergonomics for cor	nputing products								
P12.1*	The display meets th	e ergonomic requirements of ISO 9	241-307 for visual d	lisplay technologies.						
P12.2*	The physical input de	evice meets the requirements of ISC) 9995 and ISO 924	1-410.						
P13	Packaging and doc	umentation								
P13.1*	Product packaging m Product packaging m	naterial type(s): Corrugated Cardbo naterial type(s): 100% Recycled Po naterial type(s): Others (Polyethyle	lyethylene (RLDPE	weight (kg): 0.505 weight (kg): 0.118 weight (kg): 0.024						
P13.2*	Product plastic prima	ry packaging is free from PVC.			\square					
P13.3*	For product primary consumer recovered	corrugated fiberboard packaging, fiber content: 80 %	specify the contain	ned percentage of minimum						
P13.4*	Specify media for use	er and product documentation (tick per,Other	box):							
P13.5		te this item if paper documentation u cumentation on paper media is chlo /:								
	Totally chlorine-free Elemental chlorine-fr Processed chlorine-f									
P14	Voluntary programs	5								
P14.1		ne requirements of the following volu	untary program(s):							
	ENERGY STAR® Eco-label: <i>TCO</i> Eco-label: <i>EPEAT</i> Eco-label: <i>GREENG</i>	Criteria version: 6.1 Criteria version: 5.0 Criteria version: Gold UARD Criteria version: Gold	Date: Date: Date: Date:	Product category: <i>11</i> Product category: Product category: Product category:						
P15	Additional informat	ion (See NOTE B10)								
P9	Energy consumption	on of computer products; descrip	tion of the tested p	product configuration:						
		r cord can be ordered on request.								

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	ThinkPad L560	Logo
Model Number	20F1, 20F2	
Issue Date	November 18, 2016	Lenovo.
Additional information		

P7.1.1	Product environmental attributes							
(d)	year of manufacture:				2016			
(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 enabled	y and capability adjust	ments applied when a	Il discrete graphics o	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]	28						
lents 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 app	Discrete graphics Card(s) [number / #]	No #: (Yes / No)	#: (Yes / No)	#: (Yes / No)	#: (Yes / No)			
	Category of discrete graphics Card(s)							
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)	13.460						
Test r	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled							
(g)	Idle state power demand (Watts);				4.262			
(h)	Sleep mode power demand (Watts);				0.797			
(i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		0.883			
(j)	Off mode power demand (Watts);				0.288			
(k)	Off mode with WOL enabled power dem	and (Watts) (where en	abled);		0.291			
(I)	Internal power supply efficiency at 10 %,	20 %, 50 % and 100 °	% of rated output powe	er (if applicable):				
	10% 20% 50%	100% Avera	age					
(m)	external power supply efficiency (if applied	cable)*:						
	Average active efficiency: 45W: 87,98%	5,88,63%,88,83%						
(0)	Minimum number of loading cycles that t	he batteries can withs	tand (applies only to n	otebook computers):	300			
(p-1)	Measurement methodology used to dete	rmine information mer	ntioned in points (I) – ir	nternal PSU efficiency:				
	Not applicable							

(p-2) Measur	(p-2) Measurement methodology used to determine information mentioned in points (m) – external PSU efficiency:						
EPA "	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) Measur	Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries: IEC 61960 measurement methodology						
	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 / IEC EN50564:2011 measurement n					
(q) Sequen	ice of steps to	r achieving a stable condition with respect to power	demand:				
(r) Descrip	tion of how sl	IEC 62623 / IEC EN50564:2011 measurement n eep and/or off mode was selected or programmed:	nethodology				
(i) Descrip							
(s) Sequen		<u>y selecting sleep and/or off mode thru Windows</u> or required to reach the mode where the equipment autors and the mode where the equipment autors are approximately and the mode where the equipment and the state of the state					
off mod							
(t) Duratio	n of idle stat	<u>Automatically changes to sleep</u> e condition before the computer automatically re	aches sleep mode, or another				
conditio	n which does	not exceed the applicable power demand requirement	ents for sleep mode (in minutes):	30 minutes			
		a period of user inactivity in which the compute ver power demand requirement than sleep mode (in					
		re the display sleep mode is set to activate after		10 minutes			
(w) Informa	tion on the en	ergy-saving potential of power management function	nality:				
Use	er informatio	n described in User Guide and Power Manager u programs	nder ThinkVantage menu in all				
(x) User int	formation on h	now to enable the power management functionality:					
Us	er informatio	n described in User Guide and Power Manager u programs	nder ThinkVantage menu in all				
the elec		neasurements: — test voltage in V and frequency in system, — information and documentation on the ins ting:					
		230V, 50Hz, Total Harmonic Distortion	<2 %				
Addition Notebo	ok Battery						
		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 Ba	attery			\boxtimes			
External/detachal	ole Battery		\boxtimes				
Bios Backup Batt	ery						
Other:							
Additional informa	ition						
1)							
The battery[ies] in this pro Akymynaropµara[μτe] δa Las baterías de este prod Výměnu baterie/baterií v Brugeren kan ikke uden v Der Akku/die Akkus diese Kasutajad ei saa selle too H µπαταρία[-ες] στο προϊ La/les batterie(s présente Korisnik ne može lako za La batteria/le batterie in q Lietotāji paši nevar noma Šio gaminio baterijos [batteria] A termék akkumulátorát/z II-batterija/batteriji f'dan il- Batterij(en) in dit produ Užytkownik nie može san A ou as baterias deste pr Bateria (baterije) v tomto výrob Baterij/baterije v tem izde	терия[и] в този г tucto no pueden i tomto výrobku by idere udskifte ba ss Produkts kann te akut/akusid is óv αυτό δεν μποj (s) dans ce prod mijeniti Bateriju s uesto prodotto n inīt šā ražojuma a erijų] pats vartoto ikkumulátorait a i .prodott ma tistav juktet kan ikke le uct is (zijn) door c n w łatvy sposób oduto nāo poden st produs nu poa ku nemôže vymii klu uporabniki sa ut] ei[vät] ole help	ουύν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες uit ne peuvent être facilement remplacée(s) par les utilisateurs e am u ovom proizvodu. on può/possono essere facilmente sostituita/e dall'utente. akumulatoru(-us). ojas negali lengvai pakeisti. felhasználó nem tudja egyedül egyszerűen kicserélni. d'jistghux tigi/jigu sostitwita/i mill-utenti stess. tt erstattes av brukerne selv. fe gebruiker niet gemakkelijk vervangbaar. wymienić baterii w tym produkcie. n ser facilmente substituídas pelos próprios utilizadores. te (pot) fi uşor înlocuită (înlocuite) de utilizatorii înşişi. eñať používateľ. min ne morejo zlahka zamenjati. posti käyttäjän vaihdettavissa.	werden.				
ви urundeki batarya(lar)	kullanıcılar tarafı	ndan kolaylıkla değiştirilemez.					