



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	Log	0	
Company name *	Lenovo			
Contact information *	Lenovo Global Environmental Affairs		ODOVO	
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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 statemen	conforms to the statements given in this declaration.				
Type of product *	Notebook				
Commercial name *	ThinkPad E15 Gen 3				
Model number *	20YG, 20YH, 20YJ, 20YK				
Issue date *	2021/4/29				
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 number *		20YG, 20YH, 20YJ, 20YK	Logo	Long	21/6	
Issue date	e *	2021/4/29		Lend	JVC	J _{TM}
Product	environ	mental attributes - Legal requirements		Require	ment	met
Item				Yes	No	n.a.
P1		us substances and preparations				
P1.1*	Products	do comply with current European RoHS Directive. (See legal reference and NOTE	EB1)			
P1.2*		do not contain Asbestos (see legal reference). ht: Legal reference has no maximum concentration value.				
P1.3*		do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC).			$\overline{}$	-
1 1.0		mofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrach	loride. 1.1.1-		ш	
	trichloroe	ethane, methyl bromide (see legal reference). Comment: Legal reference has no n ation 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 car ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	bon atoms in t	he 🔀		
P1.6*		h direct and prolonged skin contact do not release nickel in concentrations above (),5 μg/cm²/wee	ek 🔀		
	(see legal 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 www.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure	contact):		Ш	
P2	Batterie					
P2.1*		duct contains a battery or an accumulator, the battery/accumulator is labeled with Information on proper disposal is provided in user manual. (See legal reference)	the disposal			
P2.2*		or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadn	nium. (See leg	al 🔀		
P2.3*	Batteries	and accumulators are readily removable. (See legal reference)		\boxtimes		
P3	Conforn	nity verification & Eco design (ErP)				
P3.1*	The D	luct is CE-marked to show conformance with applicable legal requirements (see legelaration of Conformity can be requested at (add link or e- www.lenovo.com/us/en/compliance/eu-doc	gal reference). -mail addres			
P3.2*		luct complies with the Eco design requirements for energy-related products, al reference).				
	Required	I information is; Silven in item P15 or added to this document, Silven available at (add URL):				
		ww.lenovo.com/us/en/compliance/eco-declaration				
P5		packaging 0.04% land and a set of the set of		1	_	
P5.1*	hexavale	ng and packaging components do not contain more than 0,01% lead, mercurent chromium by weight of these together.			<u> </u>	
P5.2*	used (se	kaging materials are marked with abbreviations and numbers indicating the nature e legal reference).				
P5.3*	(see lega	luct packaging material is free from ozone depleting substances as specified in the ${\tt N}$ al reference).	Montreal Proto	col 🔀		
		nt: Legal reference has no maximum concentration values.				
P6		nt information			_	
P6.1*	Informati	on 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 nu	mber *	20YG, 20YH, 20YJ, 20YK	Logo	Len	01/0	
Issue dat	e *	2021/4/29		Len		194
Product		mental attributes - Market requirements (See General NOTE GN I	below)			
-		onmental conscious design		Require		
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			П	\Box
P7.2*		naterials in covers/housing have no surface coating.			Ħ	Ħ
P7.3*		arts > 100 g consist of one material or of easily separable materials.			Ħ	\exists
P7.4*		Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.				
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.					$\overline{\Box}$
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).				Ħ	Ħ
	Product					
P7.7*	Upgradin	g can be done e.g. with processor, memory, cards or drives				
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				$\overline{\Box}$
	Material	and substance requirements				
P7.11*		cover/housing material type (e.g. plastics, metal, aluminum):				
D7.40		type: PC+ABS Material type: Materia	ıl type:			
P7.12		n materials of external electrical cables are PVC free.			$\underline{\underline{X}}$	
P7.13		n materials of internal electrical cables are PVC free.			Щ	
P7.14	weight (* polyvinyl	plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) bi 1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine ir n 25% post-consumer recycled content.	retardants,	and		
P7.15	Printed o	ircuit boards, PCBs (without components) are low halogen: all PCBs > 25 g din IEC 61249-2-21. (See 1NOTE B2)	are low halo	ogen 🛚		
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 co PA (additive), TBBPA (reactive) (See NOTE B3), Other: DOPO , CAS #: 35948				
		nemical specifications of flame retardants in printed circuit boards (without compone g ISO 1043-4:	ents) > 25 g			
P7.18	concentr 1. Chem 2. Chem	ame retarded plastic parts > 25 g contain the following flame retardant substance ations above 0,1%: ical name: halogen-free organic phosphorus compound, CAS #: confidential ical name: , CAS #: "				
	Alt. 2: Ch	ical name: , CAS #: " nemical specifications of flame retardants in plastic parts > 25 g according ISO 1043				
P7.19	assigned	parts > 25 g, flame retardant substances/preparations above 0,1% are used which the following Risk phrases; and Hazard statements:				
D7.00*			ee note B5)			$\overline{}$
P7.20*	If YES; a a) Of t a pe	t least one of the two alternatives below shall be answered; otal plastic parts' weight > 25 g, the postconsumer recycled plastic material contentercentage of total plastic by weight) is 3.0%. weight of recycled material is 14.7 g.	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.

Model number *	20YG, 20YH, 20YJ, 20YK	Logo	Len	0)/(
Issue date *	2021/4/29		Len		У ън.
Product environn		Requi	remer	t met	
Item			Yes	No	n.a.

D7 04*		stance requirements		OTE D7):			
P7.21*	Biobased plastic material content is used in the product (See NOTE B7):						
		ic parts' weight > 25 g	es below shall be answe , the biobased plastic ma		ated as a percentage of		
	or	of the biobased plastic	material is				
P7.22*			less than 0,1 mg/lamp.		\square		
		specify: Number of la		um mercury content p	er lamp: mg		
P8	Batteries						
P8.1*	Battery chemical	composition: <i>Li-ion</i>					
P9		otion (See NOTE B8)					
P9.1			ls or energy consumption				
Energy mo	ode *	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)	65 W	65 W	65 W	Full load		
Categor	<u>y 2</u>						
Short Idle Enabled	State - WOL	5.68 W	5.73 W	5.82 W	Use for ENERGY STAR V8 registration (P _{idle})		
Long Idle Enabled	State - WOL	2.98 W	2.98 W	3.08 W	Use for ENERGY STAR V8 registration (P _{idle})		
Sleep (S3) - WOL Enabled		0.59 W	0.59 W	0.62 W	Use for ENERGY STAR V8 registration (P _{sleep})		
Off (S5) -	WOL Enabled	0.38 W	0.38 W	0.40 W	Use for ENERGY STAR V8 registration (P _{off})		
Off (S5) -	WOL Disabled	W	W	0.47 W	Use for ErP		
EPS No-Io (External power wall outlet but dis	ead supply / charger plugged in the sconnected from the product.)	0.05 W	0.06 W	0.06 W			
PTEC *	ergy Consumption	W	W	W			
ETEC *	ergy Consumption	20.18 kWh/year	20.40 kWh/year	20.77 kWh/year	E _{TEC} = (8760/1000) x (P _{off} x 0.25 + P _{sieep} x 0.35 + P _{long_idle} x 0.10+ P _{short Idle} x 0.30)		
		Poff: Off Mode(\$5) - W	OL Enabled; Psleep: Sleep	Mode(S3) - WOL Enabl	ed; P _{idle} : Idle State - WOL Enabled		
External P	ower Supply Efficie	ncy Level (Internationa	al Efficiency Marking Pro	tocol) * : V/			
Display res	solution * : 2.0736 r	negapixels			1920*1080		
Default tim	ne to enter energy s	ave mode: 10 minutes					
P9.2*			ion is provided with the	product.		=	
P9.3		class (monitors only):				┪	
P10	Emissions	oldoo (morilloro orily).					
. 10		- Declared according t	o ISO 9296 (See NOTE	B9)			
P10.1					nit A-weighted sound power level, $L_{WA,c}$ (B)	
-		* HDD idle		* 2.2			
	Operation	* Operating (SSD) * Operating (CPU)		* 2.3 * 3.3			
		Declared A-weighted sour	nd pressure level (dB) $L_{p m Am}$		tion desktop – idle)		
	Other mode	Declared A-weighted sour	nd pressure level (dB) $L_{p m Am}$		on desktop – operatingHDD) tion desktop – operatingCPU)		
	Measured according to: SISO 7779 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 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

Model number * Issue date *	20YG, 20YH, 20YJ, 20YK 2021/4/29	Logo	Lenovo.	
Product environs	nontal attributos - Market requirements (continued)		Requirement	_

		N.		
Product	environmental attributes - Market requirements (continued)	Requ	ireme	nt
met	, , ,	Ī		
Item		Yes	No	n.a
	Electromagnetic emissions			
P10.4	Computer display meets the requirement for low frequency electromagnetic fields of the following volunt program(s): MPR-II(3 pin AC adapter only)	tary 🔀		
P12	Ergonomics for computing products			
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.	\boxtimes		
P12.2*	The physical input device meets the requirements of ISO 9995 and ISO 9241-410.	X	一百	Ŧ
P13	Packaging and documentation			_
P13.1*	Product packaging material type(s): Corrugated Double wall Product packaging material type(s): Corrugated single wall Product packaging material type(s): PE weight (kg): 0.173 Product packaging material type(s): Solid EPE weight (kg): 0.035			
P13.2*	Product plastic primary packaging is free from PVC.	X		Т
P13.3*	For product primary corrugated fiberboard packaging, specify the contained percentage of minimum process consumer recovered fiber content: 70 %			
P13.4*	Specify media for user and product documentation (tick box): ☑Electronic, ☑Paper, ☑Other			
P13.5	(Please only complete this item if paper documentation used) User and product documentation on paper media is chlorine-free: If Yes, please specify:			
	Totally chlorine-free			
	Elemental chlorine-free	\square		
	Processed chlorine-free			
P14	Voluntary programs			
P14.1	The product meets the requirements of the following voluntary program(s):			
	ENERGY STAR® Criteria version: 8.0 Date: 2021/01 Product category: 2 Eco-label: EPEAT Criteria version: 1680.1-2018 Date: 2021/04 Product category: NoteBook 8.0 Date: 2021/04 Product category: NoteBook	otebook Notebook		
P15	Additional information (See NOTE B10)			
P9	Energy consumption of specific configuration may vary; description of the tested product config	guration:		
	NOTE: Supplier makes no representations, guarantees, assurances or warranties whether express or in information contained in this document. All information provided by supplier in this document is provided knowledge available at the time of completion, and supplier shall have no obligation to update such informational purposes only. See a Lenovo Account Reprinformation.	mplied, regar d based on s rmation. The	upplier inform	's atior
P9	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			

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 E15 Gen 3	Logo	
Model Number	20YG, 20YH, 20YJ, 20YK		Lonovo
Issue Date	2021/4/29		Lenovo.
Additional information			

d)	year of manufacture:				2020
e)	Etec value (kWh) per ErP Lot 3 Catego disabled and if the system is tested with				cards (dGfx) are
)	Etec value (kWh) per ErP Lot 3 Categorienable	ry and capability adjust	ments 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]	24			
ents ting	Additional internal storage	Yes (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)
	Discrete Audio Card	No (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)
	Discrete graphics Card(s) [number / #]	No #: (Yes / No)	#: (Yes / No)	#: (Yes / No)	#: (Yes / No)
	Category of discrete graphics Card(s)				
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)	11.13			
Test results	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled				
1)	Idle state power demand (Watts);	l			3.32
1)	Sleep mode power demand (Watts);				0.65
	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		0.65
	Off mode power demand (Watts);				0.35
:)	Off mode with WOL enabled power dem	and (Watts) (where en	abled);		0.35
)	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: 65W: 89,41%	6,88,62%,88,96%			
	*internal note: show values for all available external p	ower supplies			
o)	Minimum number of loading cycles that	the batteries can withst	tand (applies only to r	otebook computers):	500 cycles
p-1)	Measurement methodology used to dete	ermine information men	tioned in points (I) – i	nternal PSU efficiency	
o-2)	Measurement methodology used to dete	ermine information men	tioned in points (m) –	external PSU efficience	by:

(p-3)	Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries: EN 61960 measurement methodology					
(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: EN 62623:2013 measurement methodology					
(q)	Sequence of steps for achieving a stable condition with respect to power demand:: <i>EN</i> 62623:2013 measurement methodology					
(r)	Description of how sl	eep and/or off mode was selected or programmed:				
	B	y selecting sleep and/or off mode thru Windows	operating system			
(s)	Sequence of events off mode:	required to reach the mode where the equipment au Automatically changes to sleep after 30 I	, , , , ,			
(t)		te condition before the computer automatically rendered the applicable power demand requirement		30		
(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		10		
(w)	Information on the er	nergy-saving potential of power management function	nality:			
	User informatio	n described in User Guide and Power Manager u programs	nder ThinkVantage menu in all			
(x)	user information on h	now to enable the power management functionality:				
	User informatio	n described in User Guide and Power Manager u programs	nder ThinkVantage menu in all			
(z)		neasurements: — test voltage in V and frequency in tem, — information and documentation on the instru				
	230V/50HZ; T	otal Harmonic Distortion <2 % , 230V/50HZ; Tot Programmable AC/DC Source	al Harmonic Distortion <2 %,			
Addition	Notebook Battery	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/bi	uilt-in Battery					
External/detachable Battery						
Bios Back	up Battery					
Other:						
Additional	information					
<u> </u>						

The battery[ies] in this product cannot be easily replaced by users themselves.

Акумулаторната[ите] батерия[и] в този продукт не може да се замени[ят] лесно от самите потребители.

Las baterías de este producto no pueden ser sustituidas fácilmente por los propios usuarios.

Výměnu baterie/baterií v tomto výrobku by neměli provádět sami uživatelé. Brugeren kan ikke uden videre udskifte batteriet/batterierne i dette produkt.

Der Akku/die Akkus dieses Produkts kann/können nicht ohne weiteres vom Benutzer selbst ausgetauscht werden.

Kasutajad ei saa selle toote akut/akusid ise hõlpsasti asendada. Η μπαταρία[-ες] στο προϊόν αυτό δεν μπορούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες

La/les batterie(s présente(s) dans ce produit ne peuvent être facilement remplacée(s) par les utilisateurs eux-mêmes.

Korisnik ne može lako zamijeniti Bateriju sam u ovom proizvodu. La batteria/le batterie in questo prodotto non può/possono essere facilmente sostituita/e dall'utente. Lietotāji paši nevar nomainīt šā ražojuma akumulatoru(-us).

Šio gaminio baterijos [bateriju] pats vartotojas negali lengvai pakeisti. A termék akkumulátorát/akkumulátorait a felhasználó nem tudja egyedül egyszerűen kicserélni. II-batterija/batteriji f'dan iI-prodott ma tistax/jistgħux tiġi/jiġu sostitwita/i mill-utenti stess.

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.

Użytkownik nie może sam w łatwy 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.