



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 * 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 statemen	conforms to the statements given in this declaration.					
Type of product *	Notebook					
Commercial name *	ThinkBook 14p G2 ACH					
Model number *	20YN					
Issue date *	2021-3-30					
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 *		20YN	Logo	Long	2016	
Issue dat	e *	2021-3-30		Lend	JVC) _{TH}
Product	environ	mental attributes - Legal requirements		Require	ment	met
Item		<u> </u>		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	E B1)	\boxtimes		
P1.2*		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, carbontetract ethane, methyl bromide (see legal reference). Comment: Legal reference has no nation values.				
P1.4*		s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychyl (PCT) in preparations (see legal reference).	nlorinated	X		
P1.5*	Products	s 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 th	ie 🔀		
P1.6*	(see lega	th direct and prolonged skin contact do not release nickel in concentrations above (al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	0,5 μg/cm²/wee	k 🔀		
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail www.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure	contact):	\boxtimes		
P2	Batterie	s				
P2.1*		oduct 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	\boxtimes		
P2.2*	Batteries referenc	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadr e)	nium. (See lega	al 🔀		
P2.3*	Batteries	and accumulators are readily removable. (See legal reference)		X		
P3	Conform	nity verification & Eco design (ErP)				
P3.1*	The Dec	duct is CE-marked to show conformance with applicable legal requirements (see le laration of Conformity can be requested at (add link or e-mail address): www.lenovo.com/us/en/compliance/eu-doc	gal reference).			
P3.2*	The prod	duct complies with the Eco design requirements for energy-related products, al reference).		\boxtimes		
	Required	d information is;				
P5		www.lenovo.com/us/en/compliance/eco-declaration				
P5.1*		ng and packaging components do not contain more than 0,01% lead, mercur	v cadmium a	nd 🔀		
	hexavale	ent chromium by weight of these together.			<u> </u>	
P5.2*	used (se	kaging materials are marked with abbreviations and numbers indicating the nature se legal reference).				
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montrea Protocol (see legal reference). Comment: Legal reference has no maximum concentration values.		al 🔀			
P6		nt information				
P6.1*	Informati	on for recyclers/treatment facilities is available (see legal reference).		\boxtimes		

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.

woder number *		20YN	Logo	Len		
Issue dat	te *	2021-3-30		Len		TH.
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		Disassembly, recycling at have to be treated separately are easily separable				
P7.1*	Parts tha	\boxtimes				
P7.2*	Plastic m	\boxtimes				
P7.3*	Plastic p	\boxtimes				
P7.4*	Plastic p	\boxtimes				
P7.5	Plastic p	i. 🔀				
P7.6*	Labels a	re easily separable. (This requirement does not apply to safety/regulatory labels).		\boxtimes		
	Product					
P7.7*	Upgradir	ng can be done e.g. with processor, memory, cards or drives		\boxtimes		
P7.8*	Upgradir	ng can be done using commonly available tools				
P7.9	Spare pa	arts are available after end of production for: 5 years				
P7.10	Service i	s available after end of production for: 5 years				
		and substance requirements				
P7.11*		cover/housing material type (e.g. plastics, metal, aluminum):	. 1 4			
P7.12		type: PC/ABS Material type: metals Material naterials of external electrical cables are PVC free.	аі туре:			_
P7.13		n materials of external electrical cables are PVC free.			\boxtimes	H
P7.14		plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) b	romine and 0	1%	\square	+
7.14	weight (polyvinyl	phasic casing-cover parts / 25 contain no more than 0,1 % weight (1000 ppm) of 1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) ag more than 25% post-consumer recycled content.	e retardants,	and		
P7.15		circuit boards, PCBs (without components) are low halogen: all \square PCBs > 2 as defined in IEC 61249-2-21. (See 1NOTE B2)	25 g 🔲 are	low		
P7.16	Marking:					
P7.17		nemical specifications of flame retardants in printed circuit boards > 25 g (without co				_
	TBBF 26265-0	PA (additive), TBBPA (reactive) (See NOTE B3), Other: Brominated epoxy 8-7	resin. CAS #			
		nemical specifications of flame retardants in printed circuit boards (without compone g ISO 1043-4: <i>FR(16)</i>	ents) > 25 g			
P7.18	concentr	ame retarded plastic parts > 25 g contain the following flame retardant substance rations above 0,1%:	es/preparation	s in		
		ical name: BPADP , CAS #: 181028-79-5 (See NOTE B4)				
		ical name: , CAS #: " ical name: , CAS #: "				
		ical name: , CAS #: " nemical specifications of flame retardants in plastic parts > 25 g according ISO 104:	3_4∙			\square
P7.19		parts > 25 g, flame retardant substances/preparations above 0,1% are used which			\blacksquare	
1 7.10	assigned	the following Risk phrases; No signal word and Hazard statements: H411 Toxic t g lasting effects				
	The source(s) for these classifications is/are found at (add URL(s)): , (See note B5)					
P7.20*		sumer recycled plastic material content is used in the product (See Note B6):	,	\boxtimes		
	a) Of t a po or	at least one of the two alternatives below shall be answered; total plastic parts' weight > 25 g, the postconsumer recycled plastic material content ercentage of total plastic by weight) is 0%.	t (calculated a	as		
	b)	The weight of recycled material is 0 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 * 20YN					Logo		
Issue date * 2021-3-3		2021-3-3	0			Lenov	O _{nt}
Product e	nvironn	nental at	tributes - Market re	equirements (contir	nued)	Requireme	nt met
Item	-				,	Yes No	n.a.
	Material	and subs	stance requirements	(continued)			
P7.21*				in the product (See NO	OTE B7):		
	If YES; a	t least one	e of the two alternative	s below shall be answe	ered;		
	of to		c parts' weight > 25 g by weight) is		material content (calcula	ed as a percentage	
	or b) The	weight of	the biobased plastic r	naterial is q.			
P7.22*	Light sou	rces are f		less than 0,1 mg/lamp.	ım mercury content per l	amp: mg	
P8	Batteries	S					
P8.1*	Battery c	hemical c	omposition: Lithium io	on			
P9			tion (See NOTE B8)				
P9.1		roduct the	following power level	s or energy consumption			
Energy mod	de *		Power level at	Power level at		Reference/Standard for energy	
Peak (On-r	nax)		100 V AC	115 V AC	230 V AC 95 W	modes and test method * Full load	
,							
Category	<u> </u>						
Short Idle : Enabled	State - W	OL	6.75 W	6.74 W		Use for ENERGY STAR V8.0 registration (P _{idle})	
Long Idle S Enabled	State - WO	OL	3.92 W	3.78 W		Use for ENERGY STAR V8.0 registration (P _{idle})	
Sleep (S3) Disabled	- WOL Er	nabled /	0.58 W	0.58 W		Use for ENERGY STAR V8.0 registration (P _{sleep})	
Off (S5) - V Disabled	VOL Enak	oled /	0.26 W	0.26 W		Use for ENERGY STAR V8.0 registration, ErP (P _{off})	
EPS No-loa (External power si wall outlet but disc	upply / charger i	plugged in the the product.)	0.02 W	0.02 W	0.07 W		
PTEC * Typical Ene			W	W	W		
ETEC * Annual Ene	ergy Consi	umption	23.52 kWh/year	23.37 kWh/year	·	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.25 + P_{sleep} \times 0.35 + P_{long_ldle} \times 0.10 + P_{short Idle} \times 0.30)$	
						Pidle: Idle State - WOL Enabled	
l		•	•	Efficiency Marking Pro	tocol) * : VI		
Display res	olution * :	2240*140	00megapixels				
Default time	e to enter	energy sa	ve mode: 30 minutes				
P9.2*	Informati	on about t	the energy save function	on is provided with the	product.	\square	
P9.3	Energy e	fficiency of	class (monitors only):				
P10	Emissio	ns					
			Declared according to	ISO 9296 (See NOTE	B9)		
P10.1	Mode	N	Node description	•		-weighted sound power level, L_{WA}	.,c (B)
	Idle '		System Idle		* 2.3		
Operation *			CPU;Operation		* 3.4		
	Other mo	ode D	eclared A-weighted sound	d pressure level (dB) $L_{p{\sf Am}}$	17.9 (operator position	n desktop – idle)	
	Other mo			d pressure level (dB) $L_{p m Am}$	17.8 (operator position	n desktop – operating)	
	Measure	d accordir		ECMA-74	1		
	Other (only if not covered by 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 *		20YN				Logo	Long	1/0	
Issue date	*	2021-3-30					Leno	VO	н
Product 6	environn	nental attributes	- Market requirem	ents (con	tinued)		Require	ment	met
Item				•	•		Yes	No	n.a.
	Electron	nagnetic emissions							
P10.4	program	(s):		equency el	ectromagnetic field	s of the following volunta	ry 🗌		
P12		nics for computing							
P12.1*	-		omic requirements of			•	\boxtimes		
P12.2*	The phys	sical input device me	ets the requirements	of ISO 999	5 and ISO 9241-41	0.	\boxtimes		
P13		ng and documenta							
P13.1*	Product Product	packaging material t packaging material t packaging material t packaging material t	ype(s): <i>paper</i> ype(s): <i>EPE</i>	weight (kg weight (kg weight (kg weight (kg): 0.008): 0.08				
P13.2*	Product	plastic primary packa	aging is free from PV	C.			\boxtimes		
P13.3*	For product primary corrugated fiberboard packaging, specify the contained percentage of minimum post-consumer recovered fiber content: 90%								
P13.4*		media for user and p ronic, Paper, 0	roduct documentatior Other	tick box):					
P13.5	Ùser and		em if paper document tion on paper media i						
	,	hlorine-free al chlorine-free							
	Processe	ed chlorine-free							
P14	Volunta	ry programs							
P14.1	The proc	luct meets the requir	ements of the following	ng voluntar	/ program(s):				
	Eco-labe	d:	Criteria version: 8.0 Criteria version: Criteria version:		Date: 2021-3-17 Date: Date:	Product category: /2 Product category: Product category:			
P15		nal information (See							
P9						tested product configu			
	informati knowled	on contained in this ge available at the tin here is approximate	document. All information of completion, and	ation provided supplier sl	ed by supplier in th hall have no obliga	es whether express or imp is document is provided b tion to update such inforn a Lenovo Account Repre	pased on supposed in the information. The information is the information is the information in the information is the information information is the information is the information information is the information is the information is the information i	olier's format	ion
P9			otebooks & Tablet Co dex.cfm?fuseaction=f						

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	ThinkBook 14p G2 ACH	Logo	
Model Number	20YN		Lenovo
Issue Date	2021-3-30		renovo.
Additional information			

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			
Etec value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics cards (dGfx 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]	16GB						
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)			
	Discrete graphics Card(s) [number / #]	NO #: (Yes / No)	#: (Yes / No)	#: (Yes / No)	#: (Yes / No)			
	Category of discrete graphics Card(s)							
	Etec Value (kWh) - dGfx disabled all discrete graphics cards (dGfx) are disabled/ UMA is active for switchable graphics/ product has no graphics cards (dGfx)	19.27						
Test results	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled							
g)	Idle state power demand (Watts);	4	<u> </u>	1	6.48			
1)	Sleep mode power demand (Watts);				0.58			
)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);					
)	Off mode power demand (Watts);				0.33			
k)	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	age					
n)	External power supply efficiency (if appli	cable)*:						
	Average active efficiency: 95W:85.56%	%, 89.08%, 86.24%						
p)	*internal note: show values for all available external po Minimum number of loading cycles that t		tand (applies only to n	otebook computers):	300			
o-1)	Measurement methodology used to dete	rmine information mer	ntioned in points (I) – in	nternal PSU efficiency	:			

(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 metho	dology used to determine information mentioned in p ≥70% of Cmin	oints (o) – loading cycles batteries:					
(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	r achieving a stable condition with respect to power	demand::					
		Power on -> Wait 5 minutes -> Stable cor	ndition					
(r)	Description of how sl	eep and/or off mode was selected or programmed:						
		Begin menu -> Power -> Select sleep or o	ff mode					
(s)	Sequence of events off mode: NA	required to reach the mode where the equipment aut	omatically changes to sleep and/or					
(t)		te condition before the computer automatically renot exceed the applicable power demand requirement		30min				
(u)	Length of time after	a period of user inactivity in which the compute ver power demand requirement than sleep mode (in	r automatically reaches a power	NA				
(v)		re the display sleep mode is set to activate after		10min				
(w)	Information on the er	nergy-saving potential of power management function	nality:Refer to User Guide					
(x)	User information on I	now to enable the power management functionality: *Refer to User Guide*						
(z)		measurements: — test voltage in V and frequency in system, — information and documentation on the insting:						
		230V50HZ-2%-Edition 2.0, 2011-01, Section 4	I, IEC62301					
Additiona	al 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)						
Internal/bu	uilt-in Battery							
External/d	letachable Battery							
Bios Back	up Battery							
Other:	Other:							
Additional	information							
1)	1 in this product cannot be	easily replaced by users themselves						

ле рацегуще» и пля рючиет сантов се вазлучением в село в

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 il-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 ușor 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[văţ] ole helposti käyttājān vaihdettavissa.

Det är inte enkelt för kunden att själv byta ut batteriet/batterierna.

Bu üründeki batarya(lar) kullanıcılar tarafından kolaylıkla değiştirilemez.