

ECMA/TC38-TG3/2015/026 (Rev. 1 – 15 April 2017)

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					
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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 statements given in this declaration.						
Type of product *	Desktop					
Commercial name *	Lenovo Legion T5 Tower					
Model number *	90NU, 90NV					
Issue date *	2020/03/03					
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 *	90NU, 90NV Logo			
Issue date *		2020/03/03	Len	OV(Эт
Produc	t enviror	mental attributes - Legal requirements	Require	emen	t met
Item			Yes	No	n.a.
P1		ous substances and preparations			
P1.1*	Product	s do comply with current European RoHS Directive. (See legal reference and NOTE B1)	\square		
P1.2*	Comme	s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.	\square		
P1.3*	hydrobr trichloro	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), omofluorocarbons (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 yl (PCT) in preparations (see legal reference).	\boxtimes		
P1.5*	Product	s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in ontaining at least 48% per mass of chlorine in the SCCP (see legal reference).	the 🔀		
P1.6*	(see leg	ith direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm²/w al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	eek 🔀		
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail contact): tatic.lenovo.com/ww/docs/sustainability/ww-disclosure-Lenovo-REACH-SVHC-Disclosure.pdf			
P2	Batterie	IS			
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*	Batterie referenc	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See le	gal 🔀		
P2.3*	Batterie	s and accumulators are readily removable. (See legal reference)	\boxtimes		
P3	Confor	mity verification & Eco design (ErP)			
P3.1*	The pro	duct is CE-marked to show conformance with applicable legal requirements (see legal reference claration of Conformity can be requested at: https://www.lenovo.com/us/en/compliance/eu-doc	e). 🔀		
P3.2*		duct complies with the Eco design requirements for energy-related products, al reference).	\boxtimes		
	Require	d information is; given in item P15 or added to this document, available at: https://www.lenovo.com/us/en/compliance/eco-declarati			
P5	Produc	t packaging			
P5.1*		ing and packaging components do not contain more than 0,01% lead, mercury, cadmium	and 🔀		
. 0. 1	hexaval	ent chromium by weight of these together.			
P5.2*	The pac	kaging materials are marked with abbreviations and numbers indicating the nature of the materi ee legal reference).	al(s) 🔀		
P5.3*	The pro Protoco	duct packaging material is free from ozone depleting substances as specified in the Mon I (see legal reference). nt: Legal reference has no maximum concentration values.	treal 🔀		
P6		ent information			
P6.1*		ion 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 *		90NU, 90NV	Logo				
Issue dat	te *	2020/03/03		Len	Lenovo		
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 Disasse	mbly, recycling					
P7.1*	Parts that	t have to be treated separately are easily separable		\mathbf{X}			
P7.2*	Plastic m	aterials in covers/housing have no surface coating.			Ħ		
P7.3*	Plastic p	arts > 100 g consist of one material or of easily separable materials.			Ħ	Ħ	
P7.4*	Plastic p	arts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.			Ħ	Ħ	
P7.5	Plastic p	arts are free from metal inlays or have inlays that can be removed with commonly a	available tools.		Ħ	Ħ	
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).			Ħ	Ħ	
	Product	lifetime					
P7.7*	Upgradir	g can be done e.g. with processor, memory, cards or drives		\square			
P7.8*	Upgradir	g can be done using commonly available tools					
P7.9	Spare pa	irts are available after end of production for: 5 years				Ē	
P7.10	Service i	s available after end of production for: 5 years				Ē	
	Material	and substance requirements					
P7.11*	Material	cover/housing material type (e.g. plastics, metal, aluminum): type: ABS PCR65%+ ABS Material type: Materia S/PC PCR 30% Metal*3(SGCC+SUS301+SPCC)	al type:				
P7.12		n materials of external electrical cables are PVC free.			\square		
P7.13	Insulatio	n 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) g more than 25% post-consumer recycled content.	e retardants, ar	nd			
P7.15	Printed	circuit boards, PCBs (without components) are low halogen: all PCBs > a defined in IEC 61249-2-21. (See 1NOTE B2)	25 g 🗌 are lo	w	\square		
P7.16	Flame re Marking:	tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: FR(17)				\square	
P7.17		nemical specifications of flame retardants in printed circuit boards > 25 g (without co PA (additive), TBBPA (reactive) (See NOTE B3), Other: Brominated Epoxy 1 8-7		\boxtimes			
		nemical specifications of flame retardants in printed circuit boards (without compone g ISO 1043-4:	ents) > 25 g			\square	
P7.18		ame retarded plastic parts > 25 g contain the following flame retardant substance ations above 0,1%: Chemical name: , CAS #: (See NOTE B4)	es/preparations	in			
		nemical specifications of flame retardants in plastic parts > 25 g according ISO 104					
P7.19		parts > 25 g, flame retardant substances/preparations above 0,1% are used which the following Risk phrases; <i>R45, R40, R46, R48, R50, R51, R53, R60, R61</i> and H hts:					
			See note B5)				
P7.20*	lfYES;a a) Oft ape or	sumer recycled plastic material content is used in the product (See Note B6): 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 13.2% .	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 *	90NU, 9	0NV			Logo					
Issue date *	2020/03/	/03				Lenov	Om			
Product enviro	nmental at	tributes - Market r	equirements (conti	nued)		Requireme	nt met			
Item				lideaj		Yes No	n.a.			
Mater	ial and sub	stance requirements	(continued)							
			in the product (See No	OTE B7):			\square			
If YES; at least one of the two alternatives below shall be answered; a) Of total plastic parts' weight > 25 g, the biobased plastic material content (calculated as a percentage										
	of total plastic by weight) is 0% .									
or b) T										
		specify: Number of lan		um mercury content per	·lamp: mg					
P8 Batter										
		composition:					\square			
		tion (See NOTE B8)								
P9.1 For the Energy mode *	e product the	Power level at	s or energy consumption	Power level at	Reference/Standar	d for energy				
Energy mode		100 V AC	115 V AC	230 V AC	modes and test me					
Peak (On-max)		W	W	W	Full load					
Category D2 -										
Category D2 -	-									
Short Idle State -	WOL	26.44 W	25.8 W	26.64 W	Use for ENERGY	STAR V8				
Enabled					registration (P _{idle})					
Long Idle State -	WOL	24.66 W	24.88 W	26.04 W	Use for ENERGY	STAR V8				
Enabled					registration (P _{idle})					
Sleep (S3) - WOL	Enabled	0.84 W	0.97 W	0.97 W	Use for ENERGY	STAR V8				
01000 (00) - 1102	Lilablea	0.04 11	0.07 11	0.07 11	registration(P _{sleep})					
Off (S5) - WOL Er	abled	0.54 W	0.54 W	0.68 W	Use for ENERGY	STAD V8				
011 (33) - WOL LI	labieu	0.04 W	0.04 11	0.00 W	registration(Poff)					
Off (S5) - WOL Di	applad	0.54 W	0.54 W	0.68 W	Use for ErP					
011 (35) - WOL DI	Sableu	0.54 VV	0.54 W	0.00 W	USE IOI EIP					
EPS No-load		W	W	W			\boxtimes			
(External power supply / char wall outlet but disconnected for	ger plugged in the rom the product.)									
PTEC *		W	W	W			\boxtimes			
Typical Energy Co	nsumption	D2:95.10kWh/year	D2:94.13 kWh/year	D2:97.55 kWh/year	$E_{TEC} = (8760/1000)$	x (P x 0.45				
Annual Energy Co	nsumption	D2.00. TORVIN/year	D2.34.15 KWIII/year		$+ P_{sleep} \times 0.05 + P_{lo}$					
	•				Pshort_Idle x 0.35)	-				
Extornal Dowor Su			5) - WOL Enabled; Psleep Efficiency Marking Pro	: Sleep Mode(S3) - WOL	Enabled; P _{idle} : Idle Sta	te - WOL Enable	ed Notes			
		•	Eniciency Marking Fro	10001) . N/A						
Display resolution	-									
		ive mode: 25 minutes					<u> </u>			
		87	on is provided with the	product.						
-		class (monitors only):								
P10 Emiss		Declared according to	ISO 9296 (See NOTE	B9)						
P10.1 Mode		Node description		Statistical upper limit	A-weighted sound n	ower level. Lwa	с (B)			
Idle	*	HDD:Idle		* 3.3		,,,,,,,,				
Opera	tion *	HDD: Operating		* 3.4						
Other		Declared A-weighted sound	d pressure level (dBL)(A)	22.3 (operator positi	on desktop – idle)					
Other		Declared A-weighted soun			n desktop – HDD opera	ating)				
Measu	ired accordi	ng to: 🔀 ISO 7779 🔀	ECMA-74							
		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 <u>http://www.ecma-international.org/publications/standards/Ecma-370.htm</u>

Model nu	mber *	90NU, 90NV					Logo			
Issue dat	te *	2020/03/03						Lenc		тм
Product	environ	mental attribute	es - Market require	ements (cor	ntinued)			Require	ment	met
Item								Yes	No	n.a
		magnetic emission								
P10.4	Comput program		he requirement for lov	w frequency e	lectromagnetic field	s of the foll	owing volunt	ary		
P12		mics for comput								
P12.1*	The disp	play meets the erg	onomic requirements	of ISO 9241-	307 for visual displa	ay technolog	gies.			\boxtimes
P12.2*	The phy	sical input device	meets the requirement	nts of ISO 999	95 and ISO 9241-41	10.				\mathbf{X}
P13	Packag	ing and docume	ntation							
P13.1*	Product Product	packaging materi packaging materi packaging materi	al type(s): <i>PE</i> al type(s): <i>Wood</i>	weight (kg weight (kg weight (kg	g): 0.731					
P13.2*	Product	plastic primary pa	ckaging is free from I	PVC.						\square
P13.3*		duct primary corre er recovered fiber	ugated fiberboard pa content: 70%	ckaging, spe	cify the contained	percentage	of minimum	post-		
P13.4*		media for user an ronic, XPaper,	d product documenta Other	tion (tick box)	:					
P13.5	Ùser an		s item if paper docum ntation on paper med					\boxtimes		
	Totally o	hlorine-free								
		al chlorine-free								
	Process	ed chlorine-free								
P14		ry programs								
P14.1			quirements of the follo	owing volunta	ry program(s):					
	ENERG	Y STAR®	Criteria version:	8.0	Date: 2020/2/24		ategory: D2			
	Eco-labe		Criteria version:		Date:	Product of	0,			
	Eco-lab		Criteria version:		Date:	Product of	ategory:			
P15		nal information (
P9			specific configurati							
	informat knowled	ion contained in the ge available at the l here is approximeter is approximeter the second s	p representations, gua his document. All infor e time of completion, ate and provided for i	rmation provio and supplier s	led by supplier in th shall have no obliga	is documen tion to upda	it is provided ite such infor	based on sup mation. The in	plier's format	tion
P9			Notebooks & Tablet /index.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 Legion T5 28ICB05	Logo
Model Number	90NU, 90NV	
Issue Date	2020/03/03	Lenovo
Additional information		·

P7.1.1	Product environmental attributes								
(d)	year of manufacture:				2020				
(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 Category and capability adjustments applied when all discrete graphics cards (dGfx) are enable								
		Category A (according to ErP Lot 3)	Category B	Category C (according to ErP Lot 3)	Category D (according to ErP Lot 3)				
	Memory over base [GB]								
ents ting	Additional internal storage	(Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)				
capability adjustments applied during testing	Discrete television tuner	(Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)				
pability plied du	Discrete Audio Card	(Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)				
c <mark>al</mark> ap	Discrete graphics Card(s) [number / #]	#: (Yes / No)	#: (Yes / No)	#: (Yes / No)	#: 1 (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)								
Test r	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled								
(g)	Idle state power demand (Watts);								
(h)	Sleep mode power demand (Watts);								
(i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);						
(j)	Off mode power demand (Watts);								
(k)	Off mode with WOL enabled power dem	and (Watts) (where en	abled);						
(I)	Internal power supply efficiency at 10 %	, 20 %, 50 % and 100 %	% of rated output pow	er (if applicable):					
	650W: 10% 89.56% 20% 91.91% 50	0% 86.15% 100% 91 .	83% Average 87.7	9%					
(m)	external power supply efficiency (if appli	cable)*:							
	Average active efficiency: N/A								
(0)	*internal note: show values for all available external p Minimum number of loading cycles that t	ower supplies the batteries can withst	and (applies only to n	otebook computers):	N/A				
(p-1)									

(p-2) Measurement metho	Measurement methodology used to determine information mentioned in points (m) – external PSU efficiency: N/A							
(p-3) Measurement metho	Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries: N/A							
power as defined in F	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 Edition 1.0 2012-10 - Desktop and notebook computers - Measurement of energy consumption/ IEC EN50564:2011 measurement methodology							
	or achieving a stable condition with respect to power ased on user manual/Power on->Wait 5 minutes-:							
(r) Description of how sl Base	eep and/or off mode was selected or programmed: ed on user manual/Begin menu -> Power -> Select	ct sleep or off mode						
off mode:	Sequence of events required to reach the mode where the equipment automatically changes to sleep and/or off mode: Based on user manual/Control Panel->Power Options-> Change Settings-> Restore default settings for this plan							
	te condition before the computer automatically re-		20					
(u) Length of time after	not exceed the applicable power demand requirement a period of user inactivity in which the compute wer power demand requirement than sleep mode (in	r automatically reaches a power	180					
(v) Length of time befo	re 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 function Based on user manual	nality:						
(x) user information on h	now to enable the power management functionality: Based on user manual							
	neasurements: — test voltage in V and frequency in tem, — information and documentation on the instruction 230V, 50Hz, Total Harmonic Distortion	mentation, set-up and circuits used						
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/built-in Battery								
External/detachable Battery								
Bios Backup Battery								
Other:								
Additional information			-					
Las baterias de este producto no pueden Výměnu baterie/baterii v tomto výrobku by Brugeren kan ikke uden videre udskifte ba Der Akku/die Akkus dieses Produkts kann Kasutajad ei saa selle toote akut/akusid is H µmarapiq[-sc] στο προϊόν αυτό δεν µmo La/les batterie(s présente(s) dans ce prod Korisnik ne može lako zamijeniti Baterijus La batteria/le batterie in questo prodotto n Lietotāji paši nevar nomainīt šā ražojuma Šio gaminio baterijos [bateriju] pats vartot A termék akkumulátorát/akkumulátorait a Il-batterija/batteriji f'dan il-prodott ma tista: Batteriet [ene] i dette produktet kan ikke le De batterij(en) in dit product is (zijn) door Użytkownik nie może sam w łatwy sposób	 προχνκτ не може да се замени[ят] лесно от самите потребите ser sustituidas fácilmente por los propios usuarios. / neměli provádět sami uživatelé. tikeriet/batterierne i dette produkt. /können nicht ohne weiteres vom Benutzer selbst ausgetauscht e hölpsasti asendada. poúv vα αντικατασταθούν εύκολα από τους ίδιους τους χρήστες uit ne peuvent être facilement remplacée(s) par les utilisateurs e sam u ovom proizvodu. on può/possono essere facilmente sostituita/e dall'utente. akumulatoru(-us). bjas negali lengvai pakeisti. felhasználó nem tudja egyedül egyszerűen kicserélni. k/jistghux tiġi/jiġu sostitwita/i mill-utenti stess. tte erstattes av brukerne selv. de 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. 	werden.						

Bateria (bateriile) din acest produs nu poate (pot) fi uşor inlocuită (înlocuite 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.