

Product environmental attributes – THE ECO DECLARATION

The declaration may be published only when all rows and/or fields marked with an * are filled-in (n.a. for not applicable). Additional information regarding each item may be found under P14.

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/social_responsibility/us/en/datasheets_notebooks.html				

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 *	All-in-One Desktop PC					
Commercial name *	Lenovo H50-05					
Model number *	90BH 10189					
Issue date *	2014/07/14					
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.

Quality Control Re			
Item		Yes	No
QC1 *	The company enforces an internal quality control scheme to ensure the correctness of this eco declaration	\boxtimes	
QC2 *	The company is a member of an eco declaration system that enforces regular independent quality control such as organized by IT-Företagen (see www.itecodeclaration.org).	\square	

Model nu	umber *	Lenovo H50-05				
Issue da	te *	2014/07/14	Logo	lena	vo.	
Duralization				Berndar		
Item	t environ	mental attributes - Legal requirements		Require Yes	No No	
P1	Hazardo	us substances and preparations		res	INO	n.a.
P1.1*	Products chromiu	do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexa n, 0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers				
P1.2*	Products	erence and Note B1) o do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.				
P1.3*	Products hydrobro trichloro	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), mofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrack ethane, methyl bromide (see legal reference). Comment: Legal reference has no r ation values.				
P1.4*	Products	s do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% polych I (PCT) in preparations (see legal reference).	nlorinated	\boxtimes		
P1.5*	Products	o do not contain more than 0.1% short chain chloroparaffins (SCCP) with 10-13 car n containing at least 48% per mass of chlorine in the SCCP (see legal reference).	bon atoms in	\boxtimes		
P1.6*	Textile a Tris-(azi	nd leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-pho ridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference nt: Legal reference has no maximum concentration values.),		
P1.7*		nd leather parts with direct skin contact do not contain more than 0.003% Azo colo amines. (See legal reference and Note B1)	orants that split	t 🗌		\boxtimes
P1.8*	Wooden pentach	parts do not contain arsenic and chromium as a wood preservation treatment as v orophenol and derivatives (see legal reference). ht: Legal reference has no maximum concentration values.	vell as			\boxtimes
P1.9*	Parts wi microgra	h direct and prolonged skin contact do not release nickel in concentrations above m/cm ² /week (see legal reference).	0.5			
P1.10*	REACH	nt: Max limit in legal reference when tested according to EN1811:1998. Article 33 information about substances in articles is available at (add URL or mail ww.lenovo.com/social responsibility/us/en/materials.html	contact):	\boxtimes		
P2	Batterie					
P2.1*	If the pro more tha marked provideo	duct contains a battery or an accumulator, it is labeled with the disposal symbol at an 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lea with the chemical symbol for the metal concerned, Hg or Pb. Information on proper in user manual. (See legal reference)	ad, it shall be ^r disposal is			
P2.2*	accumu	ells used in the product do not contain more than 2% by weight of mercury. Other l ators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See l	egal reference			
P2.3*	design c or data i	and accumulators are easily removable by either users or service providers (as d f the product). Exception: Batteries that are permanently installed for safety, perfo ntegrity reasons do not have to be "easily removable". (See legal reference)				
P3		EMC connection to the telephone network and labeling				
P3.1*		duct complies with legally required safety standards as specified (see legal reference	,		<u>Ц</u>	
P3.2*	referenc		C C			
P3.3*	with lega	t is intended for connection to a public telecom network or contains a radio transm Illy required standards for radio and telecommunication devices (see legal reference the telecommunication devices (see legal reference)	e).			
P3.4*		duct is labeled to show conformance with applicable legal requirements (see legal i	eierence).			
P4 P4.1*	If a phot	nable materials o conductor (drum, belt etc.) is used in the product, it does not contain cadmium m	ax 0.01% (see	e		
P4.2*		erence and Note B1). er is used in the product, it does not contain cadmium max 0.1% by weight (see le	nal reference)			\boxtimes
P4.3*	If the ink product/	/toner formulation/preparation is classified as hazardous according to applicable re packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance wit tents is available (see legal reference).	gulations, the			
P5		packaging				
P5.1*		ng and packaging components do not contain more than 0.01% lead, mercur	y, cadmium a	nd 🔀		
P5.2* P5.3*		ackaging material is marked according to ISO 11469 referring ISO 1043 (see lega duct packaging material is free from ozone depleting substances as specified				
1-0.0	Protocol	(see legal reference). t: Legal reference has no maximum concentration values.		eal 🔀		

Note B1: Restriction applies to the homogeneous material, unless other specified and expressed in weight %.

Model n	umber *	Lenovo H50-05			
Issue da	ite *	2014/07/14 Logo	lene	DVO.	
Produc	t environ	mental attributes - Market requirements - Environmental conscious design	Require	ement	met
Item		atory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.
P6		nt information		-	
P6.1*	Informat	ion for recyclers/treatment facilities is available (see legal reference).	\boxtimes		
P7	Design				
P7.1*		mbly, recycling at have to be treated separately are easily separable			
P7.1					<u> </u>
		naterials in covers/housing have no surface coating.			<u> </u>
P7.3*	-	arts >100g consist of one material or of easily separable materials. arts >25g have material codes according to ISO 11469 referring ISO 1043.			
P7.4*					
P7.5	Plastic p	arts are free from metal inlays or have inlays that can be removed with commonly available tools			
P7.6*	Labels a	re easily separable. (This requirement does not apply to safety/regulatory labels).	\boxtimes		
		lifetime			
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	\boxtimes		
P7.9.	Spare pa	arts are available after end of production for: 5 years			
P7.10		s available after end of production for: 5 years			Ē
		and substance requirements			
P7.11*		cover/housing material type:			
	Material	type: ABS Material type: PC+ABS Material type: PC			
P7.12	Electrica	I cable insulation materials of power cables are PVC free.		\times	
P7.13	Electrica	I cable insulation materials of signal cables are PVC free		\square	
P7.14	All cover	/housing plastic parts >25g are free from chlorine and bromine.			Ē
P7.15	All printe Note B2	d circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (S	ee		
P7.16		tarded plastic parts >25g in covers / housings are marked according ISO 1043-4:	\boxtimes		
P7.17	Alt. 1				
		Il specifications of flame retardants in printed circuit boards >25g (without components): additive) , TBBPA (reactive) , Other; chemical name: <i>Epoxy Resin</i> , CAS #: <i>26265-08-7</i>	\square		
		Il specifications of flame retardants in printed circuit boards (without components) >25g according 3-4: Brominated Epoxy Resin See P14			
P7.18	concentr	etarded plastic parts >25g contain the following flame retardant substances/preparations ations above 0.1%: ent: No legal limits exist, this is a market requirement.	in 🔲		
	1. Chem 2. Chem	ical name: CAS #: , Supplier: nical name: CAS #: , Supplier:			
	Alt. 2	ical name: CAS #: , Supplier:			
	Chernica	specifications of fiame relation in plastic part			
P7.19		arts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, 6, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)			
P7.20	Of total p	plastic parts' weight >25g, recycled material content is 27%.			
P7.21		plastic parts' weight >25g, biobased material content is 0 %.			
P7.22		urces are free from mercury ry is used specify: Number of lamps: and max. mercury content per lamp: mg			
P8	Batterie				
	Rattery (hemical composition: Lithium Manganese Dioxide			
P8.1*	Dattery				

Note B2: IEC61249-2--21 has maximum limits for chlorine and bromine but does not address fluorine, iodine and astatine which are included in the group of halogens.

Note B3: 'Starting from January 2009, Risk phrases can be replaced by Hazard phrases according to the Globally Harmonized System (GHS), mandatory by December 2010.

Issue date * 2014/07/1	14			Logo <i>lenovo</i> .	
Product environmental att	tributes - Market	requirements (continued)	Requiremen	t met
Item			,	Yes No	
P9 Energy consumpt					
	following power lev				
Energy mode *	Power level at 100 V AC	115 V AC	230 V AC	method *	
Peak (On-max)	W	W	W	Full load	\square
Category D2			•		
Short Idle State - WOL Enable		23.28 W	22.17 W	Use for ENERGY STAR V6 registration(P _{idle})	
Long Idle State - WOL Enable	ed 19.25 W	19.16 W	19.47 W	Use for ENERGY STAR V6 registration(P _{idle})	
Sleep (S3) - WOL Enabled	0.94 W	0.95 W	1.02 W	Use for ENERGY STAR V6 registration (P _{sleep})	
Sleep (S3) - WOL Disabled	W	W	W	Reference	\square
Off (S5) - WOL Enabled	0.57 W	0.57 W	0.64 W	Use for ENERGY STAR V6 registration(Poff)	
Off (S5) - WOL Disabled	W	W	W	Use for EuP	\square
Category D1		•		1	
Short Idle State - WOL Enable	ed 20.36 W	21.80 W	22.50 W	Use for ENERGY STAR V6 registration(P _{idle})	
Long Idle State - WOL Enable	ed 19.87 W	19.90 W	20.03 W	Use for ENERGY STAR V6 registration(Pidle)	
Sleep (S3) - WOL Enabled	0.94 W	0.95 W	1.02 W	Use for ENERGY STAR V6 registration (P _{sleep})	
Sleep (S3) - WOL Disabled	W	W	W	Reference	
Off (S5) - WOL Enabled	0.56 W	0.57 W	0.64 W	Use for ENERGY STAR V6 registration(Poff)	
Off (S5) - WOL Disabled	W	W	W	Use for EuP	
Category I3					
Short Idle State - WOL Enable	ed 12.47 W	12.98 W	11.95 W	Use for ENERGY STAR V6 registration(Pidle)	
Long Idle State - WOL Enable	ed 10.76 W	10.76 W	11.17W	Use for ENERGY STAR V6 registration(P _{idle})	Ħ
Sleep (S3) - WOL Enabled	0.81 W	0.82 W	0.94 W	Use for ENERGY STAR V6 registration (P _{sleep})	┼⊢
Sleep (S3) - WOL Disabled	W	W	W	Reference	
Off (S5) - WOL Enabled	0.42 W	0.43 W	0.55 W	Use for ENERGY STAR V6 registration(Port)	
Off (S5) - WOL Disabled	W	W	W	Use for EuP	
Category 0					
Short Idle State - WOL Enable	ed 22.79 W	20.65W	22.99W	Use for ENERGY STAR V6 registration(P _{idle})	
Long Idle State - WOL Enable		20.25W	20.74W	Use for ENERGY STAR V6 registration(P _{idle})	
Sleep (S3) - WOL Enabled	1.02 W	1.03 W	1.08 W	Use for ENERGY STAR V6 registration (P _{sleep})	┼┼
Sleep (S3) - WOL Disabled	W	W	W	Reference	
Off (S5) - WOL Enabled	0.55 W	0.55 W	0.60 W	Use for ENERGY STAR V6 registration(Port)	
	W	W	W	_	
Off (S5) - WOL Disabled	vv	••	vv	Use for EuP	
Category I1	1 11 01 11	11.071/	44.0014		
Short Idle State - WOL Enable		11.23W	11.60W	Use for ENERGY STAR V6 registration(P _{idle})	부분
Long Idle State - WOL Enable		10.81W	11.22 W	Use for ENERGY STAR V6 registration(P _{idle})	ᆜᆜ
Sleep (S3) - WOL Enabled	0.85 W	0.88 W	0.96 W	Use for ENERGY STAR V6 registration (P _{sleep})	
Sleep (S3) - WOL Disabled	W	W	W	Reference	\square
Off (S5) - WOL Enabled	0.47 W	0.49 W	0.57 W	Use for ENERGY STAR V6 registration(Port)	
Off (S5) - WOL Disabled	W	W	W	Use for EuP	
EPS No-load PTEC *	W	W	W		
Typical Energy Consumption	kWh/week	kWh/week	kWh/week		\square
TEC * Typical Energy Consumption	kWh/week	kWh/week	kWh/week		\square

ETEC * Annual Energy Consumption		D2 : 98.07 D1: 91.15 I3: 54.38 0: 99.20 I1: 53.04 (KWh/year) P: Off Mode(St	D1: 95.65 13: 60.00 0: 92.54 11: 50.95 (kWh/year)	D1: 98.27 I3: 53.90 0: 100.58 I1: 52.98 (kWh/year)	E _{TEC} = (8760/1000) x (P _{off} x 0.45 + P _{slee} + P _{Shortidie} x 0.35 +P _{Longidie} x 0.15) 3) - WOL Enabled; P _{idle} : Idle State - WOL En		
Display res	solution* : Megap) - WOL Enabled, P _s	leep. Sieep woue(SS			
Print Spee		mages per minute					
Default tim	e to enter energy s	save mode: 25 minutes	3				
P9.2*		t the energy save funct		the product.			
P9.3*	The product meets the energy requirements of the following voluntary program/s: ENERGY STAR® version: 6.0 Tier: Product category: Traditional Desktop Computer Others specify:						
P10	Emissions						
		 Declared according t 	to ISO 9296	-	T		
P10.1	Mode	Mode description		Declared A-weighted sound power level L_{WAd} (B)	Declared A-weighted sound pressure level L _{pAm} (c Operator position Bystander Desktop (only if produoperator and operator an	positions uct is not	
	Idle	* HDD:Idle		3.3	24		
	Operation	* HDD: Operating		3.5	21		
	Other mode						
	Measured accord	ling to: 🛛 ISO7779	ECMA-74	ed by FCMA-74 w	vith L _{pAm} measurement distance	m)	
P10.2	The product mee	ts the acoustic noise re					
	Chemical emiss	ions from printing pr	oducts	-			
P10.3*	Test performed a	ccording to ECMA-328	3 (ISO/IEC 28360) s	standard 🔀, othe	er specify: will be tested 7/2014		
P10.4		rate (print phase) is (m			····	\boxtimes	
	Dust				VOC		
P10.5	Chemical emission	on requirements of the Ozone	following voluntary Styrene	program/s Benzene	are met for :		
	Electromagnetic						
P10.6		meets the requirement	nt for low frequency	electromagnetic	fields of the following voluntary		
P11	program/s:	terials for printing pr	oducte				
P11.1*				eparation, even if	not legally required (see P4.3).		
P11.2*					that it meets the requirements of		
P11.3*		printing/copying is an in	ntegrated product fu	unction.			
P12	, .	computing products	<u> </u>				
P12.1*		s the ergonomic requir		1-307 for visual d	display technologies.		
P12.2*	The physical inpu	it device meets the rec	uirements of ISO 9	995 and ISO 924	11-410.		
P13	Packaging and o						
P13.1*	Product packagin			(g): 180 (g): 1200 : (g):			
P13.2*		ackaging is free from F					
P13.3*	Specify media for Electronic X, P	r user and product doc	umentation (tick bo	x):			
P13.4*			tion, please specify	contained percer	ntage of post-consumer recycled		
P14		nation (See Note B4)					
	NOTE: Supplier makes no representations, guarantees, assurances or warranties whether express or implied, regarding the information contained in this document. All information provided by supplier in this document is provided based on supplier's knowledge available at the time of completion, and supplier shall have no obligation to update such information. The information provided here is approximate and provided for informational purposes only. See a Lenovo Account Representative for more information.						
P9		^r Qualified Notebooks gystar.gov/index.cfm			t information: vProductGroup&pgw_code=CO		

Note B4: 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.

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 H50-05	Logo
Model Number	90BH ,10189	_
Issue Date	2014.07.14	lenovo
Additional information		

(d)	Year of manufacture: Availi	ble on product label
(e)	E TEC value (kWh) 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:	
	Cat. B 45.77	
	Cat. C 46.93 Cat. D 43.85	
(f)	E TEC value (kWh) and capability adjustments applied when all discrete graphics cards (dGfx)	
(.)	are enabled:	
	Cat. B 84.46	
	Cat. C 87.11 Cat. D 85.11	
(g)	idle state power demand (Watts);	23.89
(h)	sleep mode power demand (Watts);	0.80
(i)	sleep mode with WOL enabled power demand (Watts) (where enabled);	0.80
(j)	off mode power demand (Watts);	0.63
(1.)		0.00
(k)	off mode with WOL enabled power demand (Watts) (where enabled);	0.63
(I)	Internal power supply efficiency at 10 %, 20 %, 50 % and 100 % of rated output power (if applicable):	N/A
	10% 20% 50% 100%	
(m)	External power supply efficiency (if applicable):	
	10% 20% 50% 100% Average ;	
	or Level: V	
(0)	The minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):	N/A
(f)	Test parameters for measurements: — test voltage in V and frequency in Hz, — total harmonic distortion of the electricity supply system, — information and documentation on the instrumentation, set-up and circuits used for electrical testing:	
	Test voltage in V and frequency in Hz $230V/50Hz$ Total harmonic distortion of the electricity supply system $\leq 2\%$	
	Information and documentation on the instrumentation, set-up and circuits used for electrical testing	

		lunati	u una a sat	Dense Llead		
			rument Type	Range Used Or ***	Make and Model **	
			ver Source	1~280VAC;1~550HZ;1000V A.	NF;EC1000S; SN:9152124	
		Digita	al Watch	Full range	CASIO; HS-70W; SN:208Q08R	
		Powe	er Meter	0~600V;0~20A	YOKOGAWA;WT210;SN:91M94456 0	
		Hygroth	ermograph	15~35℃/15~90%	testo; 608-H1,SN:1034895602	
			anemometer	0~20m/s,-20~70℃	Testo;425;SN:02591883	
		Light N	leasuring	1°;1-300cd/ m ²	Konica Minolta;LS-110;	
(p-1)		measure iency:	ment methodolo	by used to determine information of the second s	ation mentioned in points (I) – internal am	PSU
(p-2)		measure	ment methodolo	gy used to determine informa	tion mentioned in points (m) – externa	I PSU
	enio	iency.		N/A		
(p-3)		measure eries:	ment methodolo	gy used to determine informa N/A	tion mentioned in points (o) - loading	cycles
(n 1)	Tho	monouror	nont mothodolog	wurd to determine information	mentioned in maximum, idle, sleep, off r	modo
(p-4)	powe	er as defir	ned in Point P9.1	in the Product IT Eco Declaration	on:	noue
				IEC 62301		
(q)	Sequ	uence of s	steps for achievin	g a stable condition with respec	t to power demand::	
				Power on -> Wait 5 minutes ->		
(r)	Desc	cription of	how sleep and/o	r off mode was selected or prog	rammed:	
			Be	egin menu -> Power -> Select	sleep or off mode	
(S)		uence of e node:	events required to	o reach the mode where the equ	ipment automatically changes to sleep a	nd/or
		Contro	ol Panel->Power	· Options-> Change Settings->	Restore default settings for this plan	
(t)					utomatically reaches sleep mode, or ar I requirements for sleep mode (in minute	
(u)				iod of user inactivity in which r power demand requirement th	the computer automatically reaches a an sleep mode (in minutes):	40 minutes
(v)	The	length of	time before the	e display sleep mode is set to	activate after user inactivity (in minutes):	10 minutes
(w)	Infor	mation or	the energy-savi	ng potential of power managem	ent functionality:	
				N/A		
(x)	User	r informati	on on how to ena	able the power management fun	ctionality:	
				Refer to User Gu	ide	
Additio Yes	n Noteb No	ook Batte n/a	This notebook	computer is operated by batter	y/ies that cannot be accessed and repla	ced by a non-professional
165			user.			
		\square	The battery	[ies] in this product can	not be easily replaced by users	s themselves
Actalise	nel in f					
Additio	nal infor	mation				