

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 *		Logo		
Company name *	Lenovo			
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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/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 *	Notebook PC			
Commercial name *	Lenovo B50-80			
Model number *	20386;80EW;80LT			
Issue date *	2014-11-30			
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.

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

Model number *	Lenovo B50-80		
Issue date *	2014-11-30	Logo	lenovo

Product	environmental attributes - Legal requirements	Requirement met		
Item		Yes	No	n.a.
P1	Hazardous substances and preparations			
P1.1*	Products do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavalent chromium, 0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). (See legal reference and Note B1)			
P1.2*	Products do not contain Asbestos (see legal reference). Comment: Legal reference has no maximum concentration value.			
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1-trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum concentration 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 carbon atoms in the chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).			
P1.6*	Textile and leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS), Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference). Comment: Legal reference has no maximum concentration values.			
P1.7*	Textile and leather parts with direct skin contact do not contain more than 0.003% Azo colorants that split aromatic amines. (See legal reference and Note B1)			\boxtimes
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as pentachlorophenol and derivatives (see legal reference). Comment: Legal reference has no maximum concentration values.			
P1.9*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5 microgram/cm²/week (see legal reference). Comment: Max limit in legal reference when tested according to EN1811:1998.			
P1.10*	REACH Article 33 information about substances in articles is available at (add URL or mail contact): http://www.lenovo.com/social_responsibility/us/en/materials.html			
P2	Batteries			
P2.1*	If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains more than 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be marked with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is provided in user manual. (See legal reference)			
P2.2*	Button cells used in the product do not contain more than 2% by weight of mercury. Other batteries or accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference)	\boxtimes		
P2.3*	Batteries and accumulators are easily removable by either users or service providers (as dependent on the design of the product). Exception: Batteries that are permanently installed for safety, performance, medical or data integrity reasons do not have to be "easily removable". (See legal reference)			
P3	Safety, EMC connection to the telephone network and labeling			
P3.1*	The product complies with legally required safety standards as specified (see legal reference).	\boxtimes	П	
P3.2*	The product complies with legally required standards for electromagnetic compatibility (see legal reference).			
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it complies with legally required standards for radio and telecommunication devices (see legal reference).			
P3.4*	The product is labeled to show conformance with applicable legal requirements (see legal reference).	\boxtimes	П	
P4	Consumable materials			
P4.1*	If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (see legal reference and Note B1).			\boxtimes
P4.2*	If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).		\Box	
P4.3*	If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).			
P5	Product packaging			
P5.1*	Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium and hexavalent chromium by weight of these together.	d 🔀		
P5.2*	Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference).	\boxtimes		
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 🔀		

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

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Product	duct environmental attributes - Market requirements - Environmental conscious design Requi					
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.		
P6	Treatment information					
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).		Ш	Ш		
P7	Design Disassembly, recycling					
P7.1*	Parts that have to be treated separately are easily separable	\boxtimes				
P7.2*	Plastic materials in covers/housing have no surface coating.	$\overline{\Box}$	$\overline{\boxtimes}$	$\overline{\Box}$		
P7.3*	Plastic parts >100g consist of one material or of easily separable materials.	$\overline{\boxtimes}$	Ħ	Ī		
P7.4*	Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.		Ħ	Ī		
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.		Ħ	Ħ		
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	$\overline{\mathbb{X}}$	Ħ	Ħ		
	Product lifetime		<u> </u>			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives		П			
P7.8*	Upgrading can be done using commonly available tools		Ħ	П		
P7.9.	Spare parts are available after end of production for: 5 years Service shall be able to support the spare parts and service after end of production for 5 years upon material availability in the market					
P7.10	Service is available after end of production for: 5 years Service shall be able to support the spare parts and service after end of production for 5 years upon material availability in the market					
	Material and substance requirements					
P7.11*	Product cover/housing material type:					
D7.40	Material type: BAYER FR3021 Material type: Material type:					
P7.12	Electrical cable insulation materials of power cables are PVC free.	井		<u> </u>		
P7.13	Electrical cable insulation materials of signal cables are PVC free					
P7.14	All cover/housing plastic parts >25g are free from chlorine and bromine.		Ц.	Щ.		
P7.15	All printed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See Note B2)	Ш		Ш		
P7.16	Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4:	\boxtimes				
D7 47	Marking:					
P7.17	Alt. 1 Chemical specifications of flame retardants in printed circuit boards >25g (without components):					
	TBBPA (additive) , TBBPA (reactive) , Other; chemical name: , CAS #:					
	Alt. 2					
	Chemical specifications of flame retardants in printed circuit boards (without components) >25g according					
	ISO 1043-4: Brominated Epoxy Resin See P14					
P7.18	Alt. 1 Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in					
	concentrations above 0.1%:	Ш	\boxtimes	Ш		
	Comment: No legal limits exist, this is a market requirement.					
	1. Chemical name: , CAS #:					
	2. Chemical name: , CAS #:					
	3. Chemical name: , CAS #:					
	Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4:					
	one media specifications of flame retardants in plastic parts >20g according too 1040 4.	\boxtimes				
P7.19	Plastic parts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, R40, R46, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)					
P7.20	Of total plastic parts' weight >25g, recycled material content is 5.28% .					
P7.21	Of total plastic parts' weight >25g, biobased material content is 0%.					
P7.22	Light sources are free from mercury					
P8	If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg Batteries mg					
P8.1*	Battery chemical composition: <i>Li-ion</i>					
P8 2	Batteries meet the requirements of the following voluntary program/s: US RBRC			\dashv		

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.

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	environinental at	tributes - Market	requirements (continueu)	Requirement	
Item	_				Yes No	n.a.
P9 Energy consumption						
9.1 For the product the following power levels or energy consumptions are reported: See P14						
Energy mo	de *	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	
Category					<u> </u>	
_	<u>V 11</u> State - WOL Enabl	ed 6.22536 W	6.16548 W	6.53532 W	Use for ENERGY STAR V6 registration (Pidle)	
	State - WOL Enable		4.03884 W	4.26912 W	•	<u> </u>
_					Use for ENERGY STAR V6 registration (Pidle)	<u> </u>
	- WOL Enabled	0.555768 W	0.559272 W	0.621024 W	Use for ENERGY STAR V6 registration(P _{sleep})	<u>Ц</u>
	- WOL Disabled	0.555768 W	0.559272 W	0.621024 W	Reference	<u>Ц</u>
	WOL Enabled	0.190284 W	0.195504 W	0.26076 W	Use for ENERGY STAR V6 registration(Poff)	<u>Ц</u>
	NOL Disabled	0.190284 W	0.195504 W	0.26076 W	Use for EuP	
Categor					,	
Short Idle	State - WOL Enabl	ed			Use for ENERGY STAR V6 registration(P _{idle})	
Long Idle	State - WOL Enable	ed			Use for ENERGY STAR V6 registration(P _{idle})	
Sleep (S3)	- WOL Enabled				Use for ENERGY STAR V6 registration (P _{sleep})	
Sleep (S3)	- WOL Disabled				Reference	
Off (S5) - I	WOL Enabled				Use for ENERGY STAR V6 registration(Poff)	
Off (S5) - I	WOL Disabled				Use for EuP	
EPS No-loa	ad	0.073 W	0.080 W	0.152W		
plugged in	ower supply / chargo the wall outlet but ed from the product.					
PTEC * Typical End	ergy Consumption					
TEC * Typical Ene	ergy Consumption	kWh/week	kWh/week	kWh/week		
ETEC * Annual Ene	ergy Consumption	22.00 W	21.88 W	23. 39 W	E _{TEC} = (8760/1000) x (P _{off} x 0.25 + P _{sleep} x 0.35 + P _{long_idle} x 0.10+ P _{short_idle} x 0.30)	
		P _{off} : Off Mode(S5	5) - WOL Enabled; F	P _{sleep} : Sleep Mode(S3) - WOL Enabled; P _{idle} : Idle State - WOL Enabled	
Display res	olution* : 1366*768	Megapixels				
Print Speed	d * : Im	ages per minute				\boxtimes
Default tim	e to enter energy sa	ve mode: 25 minutes	3			
P9.2*	Information about t	he energy save funct	tion is provided wi	th the product.		
P9.3*		the energy requirem version: Version 6.1			gram/s: Product category:	
P10	Emissions					
		Declared according	to ISO 9296			
P10.1		Node description		Declared	Declared A-weighted	
				A-weighted sound power		
				level L_{WAd} (
				lovoi Z _W Ad (Desktop X	
					or Desk side (only if product is not operator attended)	
	Idle *	HDD:Idle		* 3.0	25.7	
	Operation *	HDD: Operating		* 3.1	26.2	
	Other mode					
	Measured according	g to: SO7779	ECMA-74			
	Other (only if not covered by ECMA-74 with L _{pAm} measurement distance m)					
P10.2	The product meets	the acoustic noise re	equirements of the	e following volunt	tary program/s:	\boxtimes

Model nu	ımber *	Lenovo B50-80				
Issue dat	te *	2014-11-30 Logo	leno	/O .		
	environi	mental attributes - Market requirements (continued)	Require			
Item			Yes	No	n.a.	
		al emissions from printing products				
P10.3*		rformed according to ECMA-328 (ISO/IEC 28360) standard, other specify:			\boxtimes	
P10.4	Typical e	emission rate (print phase) is (mg/h):			\boxtimes	
		Dust Ozone Styrene Benzene TVOC				
P10.5		al emission requirements of the following voluntary program/s are met for :			\boxtimes	
		Dust Ozone Styrene Benzene TVOC				
		magnetic emissions		<u></u>		
P10.6		er display meets the requirement for low frequency electromagnetic fields of the following voluntary	\boxtimes			
D44	program					
P11.1*		nable materials for printing products		_		
		y Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see P4.3).		<u>Ц</u>		
P11.2*	Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements of EN12281.					
P11.3*	2-sided	(duplex) printing/copying is an integrated product function.			\boxtimes	
P12		mics for computing products				
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.					
P12.2*	The phy	rsical input device meets the requirements of ISO 9995 and ISO 9241-410.	\boxtimes			
P13	Packagi	ing and documentation				
P13.1*		packaging material type(s): Corrugated Carton weight (kg): 0.336				
		packaging material type(s): <i>Polyethylene Cushions</i> weight (kg): <i>0.070</i>				
D (0 0 t		packaging material type(s): Others weight (kg): 0.123				
P13.2*		plastic packaging is free from PVC.	\boxtimes			
P13.3*		media for user and product documentation (tick box):				
		nic 📐, Paper 📐, Other 🗌				
P13.4*	For pape fiber: 8	er user and product documentation, please specify contained percentage of post-consumer recycled 80%	d			
P14		nal information (See Note B4)				
	informat knowled	Supplier makes no representations, guarantees, assurances or warranties whether express or implie tion contained in this document. All information provided by supplier in this document is provided based as a vailable at the time of completion, and supplier shall have no obligation to update such informated here is approximate and provided for informational purposes only. See a Lenovo Account Represe tion.	sed on sup tion. The in	plier's forma		

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 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.

P9

Legal references Europe Annex B

Reference	Declaration item
2002/95/EC (ROHS Directive)	P1.1, P4.1
REACH, Annex XVII	P1.6, P1.8, P4.2
REACH, Annex XVII	P1.4
REACH, Annex XVII	P1.2
REACH, Annex XVII	P1.7
REACH, Annex XVII	P1.9
Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000	P1.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
2006/66/EC (Battery and accumulators Directive)	P2.1, P2.2, P2,3, P3.4, P8.1
2006/95/EC (Low Voltage Directive)	P3.1, 3.4
2004/108/EEC (New EMC Directive)	P3.2, 3.4
1999/5/EC (R&TTE Directive)	P3.3, 3.4
"REACH" Regulation (1907/2006), annex VII	P1.10
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P4.3
REACH article 31, annex II	P4.3
2004/12/EC (Directive on packaging and packaging waste)	P5.1
(97/129/EC) (Commission Decision on Identification System for Packaging Materials	P5.2
2037/2000/EC Regulation on Substances that Deplete the Ozone Layer	P5.3
2002/96/EC (WEEE directive)	P3.4, P6.1
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P7.19

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 B50-80	Logo
Model Number	20386,80EW,80LT	_
Issue Date	2014 /11/30	lenovo.
Additional information		

(d)	year of ma	nufacture:					
(-)	,					2014	
(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:						
(f)	E TEC value (kWh) and capability adjustments applied when all discrete graphics cards (dGfx) are enabled: Cat B						
(g)	idle state p	oower deman	d (Watts);			<i>6.</i> 42	
h)	sleep mod	e power dem	and (Watts);			0.65	
(i)	sleep mod	e with WOL e	enabled power	demand (Watt	ts) (where enabled);	NA	
j)	off mode p	ower demand	d (Watts);			0.25	
(k)	off mode with WOL enabled power demand (Watts) (where enabled);					NA	
(I)	internal power supply efficiency at 10 %, 20 %, 50 % and 100 % of rated output power (if applicable):						
	10%	20%	50%	100%	Average		
(m)	external power supply efficiency (if applicable):						
	10%	20%	50%	100%	Average 65W: 87.58%;87.60%;88.32%;89.04%;89.9	92%;89.18%;	
	or Level: V						
o)	the minim	um number of	f loading cycle	s that the batte	eries can withstand (applies only to notebook computers):	300 cycles	
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:						
			2301/	/50Hz Total H:	armonic Distortion <2 %		

(p-1) the measurement methodology used to determine information mentioned in points (I) – internal PSU efficiency:							
NA NA							
(p-2) the measurement methodology used to determine information mentioned in points (m) – external PSU efficiency:							
Energy-star requirement							
(p-3) the measurement methodology used to determine information mentioned in points (o) – loadingcycles batteries:							
(p-4) the 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:							
Energy-star requirement							
(q) sequence of steps for achieving a stable condition with respect to power demand::							
Based on user manual							
(r) description of how sleep and/or off mode was selected or programmed:							
Based on user manual							
(s) sequence of events required to reach the mode where the equipment automatically changes to sleep and/or off mode:							
Based on user manual							
(t) the duration of idle state condition before the computer automatically reaches sleep mode, or another							
condition which does not exceed the applicable power demand requirements for sleep mode (in minutes):	i						
(u) the length of time after a period of user inactivity in which the computer automatically reaches a power mode that has a lower power demand requirement than sleep mode (in minutes):	Δ						
	<u> </u>						
(v) the length of time before the display sleep mode is set to activate after user inactivity (in minutes):)						
	<u>'</u>						
(w) information on the energy-saving potential of power management functionality:							
Based on user manual							
(x) user information on how to enable the power management functionality:							
Based on user manual							
(z) 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:							
230V/50Hz, Total Harmonic Distortion <2 %							
Addition Notebook Battery Information:							
Yes No n/a This notebook computer is operated by battery/ies that cannot be accessed and replaced by a non-prof user.	essional						
The battery[ies] in this product cannot be easily replaced by users themselves							
The sattery field in this product earnier be easily replaced by users themselves							

Iditional information	