

## 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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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 *	Personal Computer					
Commercial name *	Lenovo S50-30					
Model number *	FOBA					
Issue date *	2015/3/13					
Intended market *	🛛 Global 📃 Europe 📃 Asia, Pacific & Japan 📃 Americas 🗌 Other					
Additional information	ENERGY STAR® Qualified; GREENGUARD Certified					

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

Quality	Quality Control F		
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 contro such as organized by IT-Företagen (see www.itecodeclaration.org).	ol 🔀	

Model number *	FOBA		
Issue date *	2015/3/13	Logo	lenovo

Produc	t environmental attributes - Legal requirements	Requirement met		
ltem		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	$\square$		
	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).	$\square$		
	Comment: Legal reference has no maximum concentration value.			
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC),	$\boxtimes$		
	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	$\square$		
	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	$\square$		
1 1.0	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),			$\square$
1 1.0	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			$\square$
	aromatic amines. (See legal reference and Note B1)			$\square$
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as			
1 1.0	pentachlorophenol and derivatives (see legal reference).			$\boxtimes$
	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			
F1.9	microgram/cm <sup>2</sup> /week (see legal reference).	$\boxtimes$		
	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):			
F1.10	http://www.lenovo.com/social_responsibility/us/en/materials.html	$\bowtie$		
P2	Batteries			
P2.1*	If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains	$\square$		
	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	$\bowtie$		
	accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference)			
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, medica			
	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).	$\square$		
P3.2*	The product complies with legally required standards for electromagnetic compatibility (see legal			
1 0.2	reference).			
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it complies	$\square$		
1 0.0	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).	$\square$		
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			$\boxtimes$
	legal reference and Note B1).			
	If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).			$\square$
P4.2*				$\square$
P4.2* 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			
P4.3*	product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these			
P4.3* <b>P5</b>	product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).			
P4.3* <b>P5</b>	product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).  Product packaging			
P4.3* <b>P5</b> P5.1*	product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).  Product packaging Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium and hexavalent chromium by weight of these together.			
P4.3* P5 P5.1* P5.2*	product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).         Product packaging         Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium and hexavalent chromium by weight of these together.         Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference).			
P4.3* <b>P5</b> P5.1*	product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).  Product packaging Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium and hexavalent chromium by weight of these together.			

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

Model nu	umber *	FOBA				
Issue date * 20		2015/3/13	Logo	leno	vo.	
Product	tenviron	mental attributes - Market requirements - Environmental conscious de	esian	Require	ment	met
Item		atory to fill in. Additional information regarding each item may be found under P14.	oolgii	Yes	No	n.a.
P6		Int information				
P6.1*	Informat	ion for recyclers/treatment facilities is available (see legal reference).		$\square$		
P7	Design	mbly, recycling				
P7.1*		at have to be treated separately are easily separable				
P7.2*		naterials in covers/housing have no surface coating.				⊢⊢
P7.3*		arts >100g consist of one material or of easily separable materials.				⊢⊢
P7.4*		arts >25g have material codes according to ISO 11469 referring ISO 1043.			┢	╶岩
			veileble teele		<u> </u>	<u> </u>
P7.5		arts are free from metal inlays or have inlays that can be removed with commonly a	vallable tools.		<u> </u>	<u> </u>
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).				
		lifetime				
P7.7*		ng can be done e.g. with processor, memory, cards or drives		$\square$		
P7.8*	Upgradir	ng can be done using commonly available tools		$\square$		
P7.9.	Spare pa	arts are available after end of production for: <b>5</b> years				
P7.10	Service	s available after end of production for: 5 years				
	Material	and substance requirements				
P7.11*		cover/housing material type:				
			type: Steel			
P7.12		I cable insulation materials of power cables are PVC free.			$\boxtimes$	
P7.13	Electrica	l cable insulation materials of signal cables are PVC free			$\boxtimes$	
P7.14	All cover	/housing plastic parts >25g are free from chlorine and bromine.				
P7.15		ed circuit boards (without components) >25g are halogen free. as defined in IEC61	249-2-21. (See			
P7.16	Flame re Marking:	tarded plastic parts >25g in covers / housings are marked according ISO 1043-4:		$\boxtimes$		
P7.17	TBBPA	al specifications of flame retardants in printed circuit boards >25g (without componer (additive) , TBBPA (reactive) , Other; chemical name: <b>BISPHENOL A DIGLY</b> CAS #: <b>40039-93-8</b>				
	ISO 104	al specifications of flame retardants in printed circuit boards (without components) >2 3-4: Brominated Epoxy Resin See P14	25g according			
P7.18	concenti	etarded plastic parts >25g contain the following flame retardant substances/ ations above 0.1%:	preparations ir	י 🗌		
	1. Chem 2. Chem 3. Chem Alt. 2	ent: No legal limits exist, this is a market requirement.         ical name:       , CAS #:         ical name:       , CAS #:         ical name:       , CAS #:         ical name:       , CAS #:				
P7.19		al specifications of flame retardants in plastic parts >25g according ISO 1043-4: arts >25g are free from flame retardant substances/ preparations above 0.1% classi	fied as R45,			
P7.20	R40, R4	6, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)				
P7.20 P7.21		plastic parts' weight >25g, recycled material content is 65%. plastic parts' weight >25g, biobased material content is 0%.				
P7.22	Light sou If mercu	urces are free from mercury ry is used specify: Number of lamps: and max. mercury content per lamp:	mg			
P8	Batterie					
P8.1*		chemical composition: Lithium Ion/Lithium Manganese Dioxide				
P8.2	Batteries	meet the requirements of the following voluntary program/s: US RBRC				

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.

Model number *	FOBA		
Issue date *	2015/3/13	Logo	lenovo

Product	environmental attr	ributes - Market I	requirements (	continued)	Requirement	met
Item					Yes No	n.a.
P9	Energy consumption	on				
9.1	For the product the	following power leve	els or energy cons	umptions are re	ported: See P14	
Energy m	node *	Power level at <b>100</b> V AC	Power level at 115 V AC	Power level at 230 V AC	Reference / Standard for energy modes and test method *	
Peak (Or	n-max)	W	W	W	Full load	
Catego	ry I1		1	1		
	e State - WOL Enable	d 40.164 W	<b>40.272</b> W	<b>41.652</b> W	Use for ENERGY STAR V6 registration(P <sub>idle</sub> )	
Long Idle	e State - WOL Enable	d 19.524 W	<b>19.620</b> W	20.892 W	Use for ENERGY STAR V6 registration(P <sub>idle</sub> )	
Sleep (S	3) - WOL Enabled	3.624 W	3.612 W	3.720 W	Use for ENERGY STAR V6 registration (P <sub>sleep</sub> )	$\boxtimes$
Sleep (S	3) - WOL Disabled	W	W	W	Reference	
Off (S5) -	- WOL Enabled	3.972 W	3.936 W	3.948 W	Use for ENERGY STAR V6 registration(Poff)	
Off (S5) ·	- WOL Disabled	0.39 W	0.39 W	0.42 W	Use for EuP	$\boxtimes$
EPS No-I	oad	0.179 W	0.181 W	0.204 W		
plugged i	power supply / charge n the wall outlet but cted from the product.)					
PTEC * Typical E	nergy Consumption	18.954 W	<b>18.990</b> W	19.675 W		
TEC *		3.193	3.199	3.314		
Typical E	nergy Consumption	kWh/week	kWh/week	kWh/week		
-		<b>166.04</b> kWh/year	<b>166.35</b> kWh/year	<b>172.35</b> kWh/year	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.45 + P_{sleep} \times 0.05 + P_{long_ldle} \times 0.15 + P_{short_ldle} \times 0.35)$	
		Poff: Off Mode(S5	5) - WOL Enabled; F	 P <sub>sleep</sub> : Sleep Mode(	(S3) - WOL Enabled; P <sub>idle</sub> : Idle State - WOL Enabled	
Display re	esolution* : 2.074 Meg	apixels		· ·		
Print Spe	ed * : Ima	iges per minute				$\square$
Default tir	me to enter energy sav	e mode: 25 minutes	3			
P9.2*	Information about th	e energy save funct	tion is provided wi	th the product.		Ē
P9.3*	The product meets t ENERGY STAR® v Others specify:			ng voluntary pro duct category:		
P10	Emissions Noise emission – [	Declared according t				
P10.1		ode description	0 100 9290	Declared A-weighted sound powe		
				level $L_{WAd}$ (		
	Idle *	HDD:Idle		* 3.18	23.8	
	Operation * Other mode	HDD: Operating		* 3.19	23.9	
						-
	Measured according	Other			with L <sub>pAm</sub> measurement distancem)	
P10.2	The product meets t	he acoustic noise re	equirements of the	e following volunt	tary program/s:	$\square$

Model nur	nber *	F0BA				
Issue date	*	2015/3/13	Logo	lenov	10.	
Product	environm	ental attributes - Market requirements (continued)		Require	ment	met
Item				Yes	No	n.a.
	Chemica	I emissions from printing products				
P10.3*		prmed according to ECMA-328 (ISO/IEC 28360) standard 🗌, other specify:				$\square$
P10.4	Typical er	mission rate (print phase) is (mg/h):				$\boxtimes$
		Oust Ozone Styrene Benzene TVOC				
P10.5		emission requirements of the following voluntary program/s are met for : ustOzoneStyreneBenzene	TVOC			$\square$
	Electrom	agnetic emissions				
P10.6	Computer program/s	r display meets the requirement for low frequency electromagnetic fields of the fol s: <i>MPR-II</i>	owing voluntary	$\square$		
P11	Consuma	able materials for printing products				
P11.1*	A Safety	Data Sheet (SDS) is available for the ink/toner preparation, even if not legally requ	iired (see P4.3).			$\square$
P11.2*	EN12281		e requirements c	f		
P11.3*	2-sided (c	duplex) printing/copying is an integrated product function.				$\boxtimes$
P12		ics for computing products				
P12.1*	•	ay meets the ergonomic requirements of ISO 9241-307 for visual display technolo	-	$\boxtimes$		
P12.2*	The physi	ical input device meets the requirements of ISO 9995 and ISO 9241-410. See P1	4	$\boxtimes$		
P13		ng and documentation				
P13.1*	Product p Product p	ackaging material type(s): paper       weight (kg): 1.16         ackaging material type(s): EPE+PE       weight (kg): 0.373         ackaging material type(s): Wood       weight (kg): 0.5				
P13.2*	•	lastic packaging is free from PVC.		$\boxtimes$		
P13.3*		nedia for user and product documentation (tick box):				
P13.4*	For paper fiber: 65	ver and product documentation, please specify contained percentage of post-co	onsumer recycled			
P14		al information (See Note B4)				
	informatic knowledg provided informatic		nt is provided base ate such information	ed on sup on. The in	plier's format	ion
P9		rgy Star Qualified Notebooks & Tablet Computers for the latest information: /w.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGrou	o&pgw_code=CC	)		

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.

## 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 S50-30	Logo
Model Number	FOBA	
Issue Date	2015/4/23	lenovo
Additional information		

P7.1.1	Product environmental attributes	
(d)	year of manufacture:	2015
(e)	<b>E TEC value</b> (kWh) per ErP Lot 3 Category and capability adjustments applied when <b>all discrete graphics ca disabled</b> and if the system is tested with switchable graphics mode with UMA driving the display:	rds (dGfx) are
	Category (according to ErP Lot 3): NA Etec: NA	
(f)	E TEC value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics ca enabled:	rds (dGfx) are
	Category (according to ErP Lot 3): B Etec: 91.11	
(g)	idle state power demand (Watts);	20.16
(h)	sleep mode power demand (Watts);	3.86
(i)	sleep mode with WOL enabled power demand (Watts) (where enabled);	3.72
(j)	off mode power demand (Watts);	0.42
(k)	off mode with WOL enabled power demand (Watts) (where enabled);	3.91
(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 ;	
	or level: Meet Level V	
(0)	the minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):	300 cycles
(p-1)	the measurement methodology used to determine information mentioned in points (I) – internal PSU efficiency:	
	N/A	
(p-2)	the measurement methodology used to determine information mentioned in points (m) - external PSU efficiency:	
	Energy-star requirement by EPA 2.0	
(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:						
	IEC	62623 Edition 1.0 2	2012-10	- Desktop and notebook computers - Measurement of energy consumption			
(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): 25						
(u)				ser inactivity in which the computer automatically reaches a demand requirement than sleep mode (in minutes):	10		
	•		•				
(v)	the length	of time before the	display	sleep mode is set to activate after user inactivity (in minutes):	10		
(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			
Addition	Notebook B	attery Information:					
Yes		No	n/a	This notebook computer is operated by battery/ies that cannot be accerby a non-professional user.	ssed and replaced		
(Battery replaceat		(Battery user replaceable)		The battery[ies] in this product cannot be easily replation themselves	aced by users		

Additional information						