

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		
Contact information *	Lenovo Global Environmental Affairs Alvin L Carter 1009 Think Place Building 2 / 5F1 Morrisville, North Carolina 27560 alcarter@lenovo.com	lenovo	
Internet site *	http://www.lenovo.com/social_responsibility/us/en/environment	t.html	
Additional information	The latest version of this document can be found at		
	http://www.lenovo.com/social_responsibility/us/en/datasheets_	notebooks.html	

conforms to the statemen	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 Computer					
Commercial name *	Lenovo G51-35					
Model number *	80M8,80N0					
Issue date *	2015-2-25					
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	\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 nu		80M8,80N0					
Issue date *		2015-2-25 Logo					
Product	t environ	mental attributes - Legal requirements	Require	ment	met		
Item		· · · · · · · · · · · · · · · · · · ·	Yes	No	n.a.		
P1	Hazardo	ous substances and preparations					
P1.1*	Products chromiu	s do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavalent m, 0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). (See erence and Note B1)					
P1.2*	Products	s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.	\boxtimes				
P1.3*	Products hydrobro 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*	Products terpheny	\square					
P1.5*		s do not contain more than 0.1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in n containing at least 48% per mass of chlorine in the SCCP (see legal reference).	\boxtimes				
P1.6*	Tris-(azi	nd leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS), ridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference). nt: Legal reference has no maximum concentration values.			\square		
P1.7*	Textile a	nd leather parts with direct skin contact do not contain more than 0.003% Azo colorants that split amines. (See legal reference and Note B1)			\boxtimes		
P1.8*	Wooden pentach	parts do not contain arsenic and chromium as a wood preservation treatment as well as orophenol and derivatives (see legal reference). ht: Legal reference has no maximum concentration values.					
P1.9*	Parts wit						
P1.10*	REACH	ht: 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 contact): ww.lenovo.com/social_responsibility/us/en/materials.html					
P2	Batterie	S					
P2.1*	more tha marked	oduct contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains an 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is I in user manual. (See legal reference)					
P2.2*	Button c	ells used in the product do not contain more than 2% by weight of mercury. Other batteries or ators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference)	\square				
P2.3*	Batteries design c	s and accumulators are easily removable by either users or service providers (as dependent on the f the product). Exception: Batteries that are permanently installed for safety, performance, medica ntegrity reasons do not have to be "easily removable". (See legal reference)					
P3		EMC connection to the telephone network and labeling					
P3.1*	The proc	duct complies with legally required safety standards as specified (see legal reference).	\boxtimes				
P3.2*	The proo	luct complies with legally required standards for electromagnetic compatibility (see legal e).					
P3.3*	If produc	t is intended for connection to a public telecom network or contains a radio transmitter, it complies ally required standards for radio and telecommunication devices (see legal reference).	3				
P3.4*		duct is labeled to show conformance with applicable legal requirements (see legal reference).	\boxtimes				
P4	Consun	nable materials					
P4.1*		o conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (see erence and Note B1).					
P4.2*		er is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).			\boxtimes		
P4.3*	product/	/toner formulation/preparation is classified as hazardous according to applicable regulations, the packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these tents 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.						
P5.2*	Plastic p	ackaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference).	\square				
P5.3*	Protocol	duct packaging material is free from ozone depleting substances as specified in the Montrea (see legal reference). ht: Legal reference has no maximum concentration values.	al 🔀				

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

Model n	umber *	80M8,80N0						
Issue da	ate *	2015-2-25 Logo	I	lenovo				
Produc	t environ	mental attributes - Market requirements - Environmental conscious design	Re	quire	ment	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							
		mbly, recycling						
P7.1*		at have to be treated separately are easily separable		\boxtimes				
P7.2*		naterials in covers/housing have no surface coating.			\square			
P7.3*		arts >100g consist of one material or of easily separable materials.		\boxtimes				
P7.4*	Plastic p		\boxtimes					
P7.5	Plastic p	ools.	\boxtimes					
P7.6*	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools. Labels are easily separable. (This requirement does not apply to safety/regulatory labels).							
	Product	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				Π		
P7.9.	Spare pa	arts are available after end of production for: 5 years				Ē		
P7.10		s available after end of production for: 5 years				Ħ		
-		and substance requirements						
P7.11*		cover/housing material type:						
		type: >PC+ABS-FR(40)< Material type: >PC+ABS-TD15FR(40)< Material type: >P (TD+MD)15FR(40)<						
P7.12	Electrica	I cable insulation materials of power cables are PVC free.			\square			
P7.13		I cable insulation materials of signal cables are PVC free		Ħ		Ħ		
P7.14		/housing plastic parts >25g are free from chlorine and bromine.				H		
P7.15		ed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-2	I. (See					
P7.16		, etarded plastic parts >25g in covers / housings are marked according ISO 1043-4:						
P7.17	Alt. 1							
	TBBPA (al specifications of flame retardants in printed circuit boards >25g (without components): (additive) , TBBPA (reactive) , Other; chemical name: <i>Brominated Epoxy Resin</i> , 26265—08—7	3					
		al specifications of flame retardants in printed circuit boards (without components) >25g acco 3-4: Brominated Epoxy Resin See P14	rding					
P7.18		etarded plastic parts >25g contain the following flame retardant substances/preparati ations above 0.1%:	ons in					
	1. Chem 2. Chem	ent: No legal limits exist, this is a market requirement. ical name: <i>YGN5151RFL</i> , CAS #: <i>confidential</i> ical name: <i>YGN5001RFD</i> , , CAS #: <i>confidential</i> ical name: <i>ER5151RFL</i> , CAS #: <i>confidential</i>						
	Alt. 2 Chemica	al specifications of flame retardants in plastic parts >25g according ISO 1043-4: <i>FR(40)</i>		\square				
P7.19	R40, R4	arts >25g are free from flame retardant substances/ preparations above 0.1% classified as R 6, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)	45,					
P7.20		plastic parts' weight >25g, recycled material content is 2.6% .						
P7.21		plastic parts' weight >25g, biobased material content is 0% .						
P7.22		urces are free from mercury		\bowtie	\Box			
P8	Batterie	ry is used specify: Number of lamps: and max. mercury content per lamp: mg						
P8.1*		chemical composition: LI-ION						
P8.2	,	meet the requirements of the following voluntary program/s: US RBRC				_ <u>H</u>		

Annex B of ECMA-370 4th edition, June 2009

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.

			3, <mark>80N</mark> 0						
Issue date *	20	15-2-25					Logo	lenovo	
Product er	nvironmen	tal attrib	utes - Market	requirements (continued)			Requirement	me
ltem				•	-			Yes No	n.a
	Energy con								
				els or energy cons					_
Energy mode			ower level at 100 V AC	115 V AC	230 V AC	method *	andard for	energy modes and test	
Peak (On-m	iax)	6	5 W	65 W	65 W	Full load			
Category									
Short Idle S	State - WOL	Enabled	8.30 W	8.25 W	8.36 W	Use for ENER	GY STAR	V6 registration (P _{idle})	
Long Idle S	tate - WOL	Enabled	6.73 W	5.67 W	5.99 W	Use for ENER	GY STAR	V6 registration (P _{idle})	
Sleep (S3) -	WOL Enab	oled	0.72 W	0.76 W	0.78 W	Use for ENER	GY STAR	V6 registration(P _{sleep})	
Sleep (S3) -	WOL Disal	bled	0.72 W	0.76 W	0.78 W	Reference			
Off (S5) - W	OL Enabled	d	0.30 W	0.30 W	0.32 W	Use for ENER	GY STAR	V6 registration(Poff)	
Off (S5) - W	OL Disable	d	0.30 W	0.30 W	0.32 W	Use for EuP			
Category I2			1	1	<u>I</u>	1			
Short Idle S		Enabled	8.12 W	8.15 W	8.25 W	Use for ENER	GY STAR	V6 registration(Pidle)	
Lona Idle S	tate - WOL	Enabled	5.98 W	6.09 W	6.16 W			V6 registration(Pidle)	
	WOL Enab		0.98 W	0.97 W	0.98 W			V6 registration	
	WOL Disal		0.98 W	0.97 W	0.98 W	(Poloon) Reference			
	OL Enabled		0.36 W	0.36 W	0.36 W		CV STAD	V6 registration(Poff)	
							JT STAK	vo registration(Fon)	
Off (S5) - W		a	0.36 W	0.36 W	0.36 W	Use for EuP			
Category I3									
Short Idle S			8.91 W	8.79 W	8.89 W			V6 registration(Pidle)	
Long Idle S			6.17 W	6.15W	6.20 W			V6 registration(Pidle)	
Sleep (S3) -	WOL Enab	oled	0.96 W	0.96 W	0.95 W	Use for ENER	GY STAR	V6 registration	
Sleep (S3) -	WOL Disal	bled	0.96 W	0.96 W	0.95 W	Reference			
Off (S5) - W	OL Enabled	d	0.30 W	0.34 W	0.32 W	Use for ENER	GY STAR	V6 registration(Poff)	
Off (S5) - W	OL Disable	d	0.30 W	0.34 W	0.32 W	Use for EuP			
EPS No-load (External po plugged in th disconnected	wer supply / ne wall outle	t but	0.063 W	0.064 W	0.076 W				
PTEC * Typical Ener	rgy Consum	ption	W	W	W				
TEC * Typical Ener	rgy Consum	ption	kWh/week	kWh/week	kWh/week				
Etec * Annual Ener	gy Consum	ption	32.42 kWh/year	32.18 kWh/year	32.41 kWh/year	+ P _{long_Idle} x 0.	10+ P _{short} _		
Display reso	lution* : 13	66*768 M		5) - WOL Enabled; I	P _{sleep} : Sleep Mode(S3) - WOL Enable	d; P _{idle} : Idle	e State - WOL Enabled	
Print Speed			es per minute						
Default time	to enter ene	ergy save	mode: 25 minute	S					
P9.2* I	Information a	about the	energy save func	tion is provided wi	th the product.				
E		TAR® vers		nents of the followi dated August, 2		gram/s: Product catego	ory: /1//2//3		
	Emissions	aion Da							
	Noise emis: Mode		clared according e description	to ISU 9296	Declared A-weighted	1		A-weighted level $L_{p Am}$ (dB)	

			sound power level L_{WAd} (B)	Operator position Bystander position Desktop (only if product is no operator attended)] ot
	Idle	* HDD:Idle	* 2.7	19.0	
	Operation	* HDD: Operating	* 3.8	29.5	
	Other mode	N/A	N/A	N/A	
	Measured acco	ording to: ISO7779 ECMA-74	ed by ECMA-74 wit	h L _{pAm} measurement distance m)	
P10.2	The product me	eets the acoustic noise requirements of the		•	

Model nu	imber *	80M8,80N0				
Issue dat	:e *	2015-2-25 Logo	la	eno	10.	
Product	environr	nental attributes - Market requirements (continued)	R	equire	ment	met
Item				Yes	No	n.a.
	Chemic	al emissions from printing products				
P10.3*		formed according to ECMA-328 (ISO/IEC 28360) standard 🗌, other specify:				\square
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 : Dust Ozone Styrene Benzene TVOC				\square
	Electror	nagnetic emissions				
P10.6	Compute	er display meets the requirement for low frequency electromagnetic fields of the following /s:	voluntary	\boxtimes		
P11		able materials for printing products				
P11.1*	A Safety	Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (s	ee P4.3).			\boxtimes
P11.2*	Paper c EN1228	ontaining post-consumer recycled fibers can be used, provided that it meets the requ 1.	irements of			\square
P11.3*	2-sided	(duplex) printing/copying is an integrated product function.	-			\boxtimes
P12	Ergono	nics for computing products				
P12.1*	The disp	lay meets the ergonomic requirements of ISO 9241-307 for visual display technologies.		\boxtimes		
P12.2*	The phy	sical input device meets the requirements of ISO 9995 and ISO 9241-410.				Ē
P13	Packagi	ng and documentation				
P13.1*	Product	packaging material type(s): CARTON weight (kg): 0.296 packaging material type(s): CUSHION weight (kg): 0.085 packaging material type(s): PAPER PAD weight (kg): 0.030				
P13.2*	Product	plastic packaging is free from PVC.		\bowtie		
P13.3*		media for user and product documentation (tick box): ic \square , Paper \square , Other \square				
P13.4*		er user and product documentation, please specify contained percentage of post-consume	r recycled			
P14		nal information (See Note B4)				
	NOTE: S informat knowled provided informat	Supplier makes no representations, guarantees, assurances or warranties whether exprest ion contained in this document. All information provided by supplier in this document is prige available at the time of completion, and supplier shall have no obligation to update such here is approximate and provided for informational purposes only. See a Lenovo Account on.	ovided based h information	on sup . The in	plier's forma	
P9		ergy Star Qualified Notebooks & Tablet Computers for the latest information: ww.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.

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 G51-35	Logo
Model Number	80M8,80M0	_
Issue Date	2015-2-25	lenovo
Additional information		

	Product environmental attributes	
(d)	year of manufacture:	2015
e)	E TEC value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics ca disabled and if the system is tested with switchable graphics mode with UMA driving the display:	rds (dGfx) are
	Category (according to ErP Lot 3): A Etec: 18.33	
f)	E TEC value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics car enabled:	ds (dGfx) are
	Category (according to ErP Lot 3): B Etec: 18.80	
g)	idle state power demand (Watts);	6.20
h)	sleep mode power demand (Watts);	0.98
i)	sleep mode with WOL enabled power demand (Watts) (where enabled);	0.97
j)	off mode power demand (Watts);	0.34
k)	off mode with WOL enabled power demand (Watts) (where enabled);	0.34
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):	
	Average*: 45W:87.58%,87.60%,88.32%; 65W:89.18%,89.04%,89.92%	
	*internal note: show values for all available external power supplies	
0)	the minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):	300CYCLES
p-1)	the measurement methodology used to determine information mentioned in points (I) - internal PSU efficiency:	
	NA	
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: IEC 61960 measurement methodology						
(p-4)		thodology used to	o determine information mentioned in maximum, idle, sleep, off mode roduct IT Eco Declaration:				
		IEC 62623 / IE	C EN50564:2011 measurement methodology				
(q)	sequence of steps for	r achieving a stabl	le condition with respect to power demand::				
		IEC 62623 / IE	C EN50564:2011 measurement methodology				
(r)	description of how sle	ep and/or off mod	de was selected or programmed:				
			Based on user manual				
(S)	sequence of events re off mode:	equired to reach tl	he mode where the equipment automatically changes to sleep and/or				
			Based on user manual				
(t)			efore the computer automatically reaches sleep mode, or another oplicable 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):	NA			
(v)	the length of time be	efore the display	sleep mode is set to activate after user inactivity (in minutes):	10			
(w)	information on the en	ergy-saving poten	tial of power management functionality:				
			Based on user manual				
(x)	user information on h	ow to enable the p	power management functionality:				
			Based on user manual				
(z)		system, — inform	test voltage in V and frequency in Hz, — total harmonic distortion of ation and documentation on the instrumentation, set-up and circuits				
		ang.					
		230V/5	0Hz, Total Harmonic Distortion <2 %				
Addition	Notebook Battery Info	rmation:					
Yes	No	n/a	This notebook computer is operated by battery/ies that cannot be access by a non-professional user.	ssed and replaced			
(Battery	not user (Battery	user	· ·				
replaceat	le) replaceat	ole)	The battery[ies] in this product cannot be easily repla	iced by users			
			themselves				
Addition	al information						
_							