

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	lenovo.			
Internet cite *	llcarter@lenovo.com				
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 Z70-80			
Model number *	20364; 80FG			
Issue date *	2015-01-13			
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 control such as organized by IT-Företagen (see www.itecodeclaration.org).	l 🛛	

Model number *	20364; 80FG		
Issue date *	2015-01-13	Logo	lenovo.

Product	oduct environmental attributes - Legal requirements			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).	\boxtimes		
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*				
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).			
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).	\boxtimes		
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 legal reference and Note B1).			
P4.2*	If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).			\square
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.	I 🔀		
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.	I 🔀		

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

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Product	ct environmental attributes - Market requirements - Environmental conscious design Requirement met				
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).	\boxtimes			
P7	Design Disassembly, recycling				
P7.1*	Parts that have to be treated separately are easily separable	\boxtimes	П		
P7.2*	Plastic materials in covers/housing have no surface coating.		$\overline{\boxtimes}$	$\overline{\Box}$	
P7.3*	Plastic parts >100g consist of one material or of easily separable materials.		Ħ	Ħ	
P7.4*	Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.		Ħ	Ħ	
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).		Ħ	Ħ	
	Product lifetime				
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	Ħ	
P7.9.	Spare parts are available after end of production for: 5 years			Ī	
P7.10	Service is available after end of production for: 5 years	_		Ī	
	Material and substance requirements				
P7.11*	Product cover/housing material type:				
	Material type: Mg/AL Material type: >PC+ABS-TD15-FR(40)< Material type: >PC+ABS	S-FR(40)			
P7.12	Electrical cable insulation materials of power cables are PVC free.		\boxtimes		
P7.13	Electrical cable insulation materials of signal cables are PVC free		\boxtimes		
P7.14	All cover/housing plastic parts >25g are free from chlorine and bromine.	\boxtimes			
P7.15	All printed circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See Note B2)		\boxtimes		
P7.16	Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4:		$\overline{\Box}$		
P7.17	Marking: FR(40)				
P7.17	Alt. 1 Chemical specifications of flame retardants in printed circuit boards >25g (without components):	\boxtimes			
	TBBPA (additive) , TBBPA (reactive) , Other; chemical name: <i>Epichlorohydrin</i> ,		ш	ш	
	tetrabromobisphenol A polymer, CAS #: 26265-08-7				
	All O				
	Alt. 2 Chemical specifications of flame retardants in printed circuit boards (without components) >25g according		Ш	Ш	
	ISO 1043-4: FR(16)				
P7.18	Alt. 1				
	Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%:				
	Comment: No legal limits exist, this is a market requirement.				
	1. Chemical name: YGN5151RFL, CAS #: confidential				
	2. Chemical name: YGN5001RFD , CAS #: confidential				
	3. Chemical name: <i>ER5151RFL</i> , CAS #: <i>confidential</i>				
	Alt. 2 Chemical specifications of flame retardants in plastic parts >25g according ISO 1043-4:				
	FR(40)	\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)	\boxtimes			
P7.20	Of total plastic parts' weight >25g, recycled material content is 4.6 %.				
P7.21	Of total plastic parts' weight >25g, biobased material content is 0%.				
P7.22	Light sources are free from mercury	\boxtimes			
	If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg		_		
P8	Batteries Determination of the state of the				
P8.1*	Battery chemical composition: <i>Lithium Ion</i> Batteries meet the requirements of the following voluntary program/s: <i>US PRPC</i>			Щ.	
ע. אם	Ratteries meet the requirements of the following voluntary program/s: US PRPC			1 1	

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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Product environmental attributes - warket requirements (continued) Requirement met						
Item					Yes No n.a	
P9	37 34 34 74 74					
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	
Categor	v I1	I	·	·	<u> </u>	
_	State - WOL Enal	bled 8.89 W	8.92 W	9.15 W	Use for ENERGY STAR V6 registration (P _{idle})	
Long Idle	State - WOL Enal	oled 5.56 W	5.86 W	5.74 W	Use for ENERGY STAR V6 registration (P _{idle})	
Sleep (S3)	- WOL Enabled	0.77 W	0.77 W	0.80 W	Use for ENERGY STAR V6 registration(P _{sleep})	
Sleep (S3)	- WOL Disabled	0.77 W	0.77 W	<i>0.80</i> W	Reference	
Off (S5) - I	NOL Enabled	0.25 W	0.25 W	0.29 W	Use for ENERGY STAR V6 registration(P _{off})	
Off (S5) - I	WOL Disabled	0.25 W	0.25 W	0.29 W	Use for EuP	
Categor	y D 1/2					
Short Idle	State - WOL Enal	bled W	W	W	Use for ENERGY STAR V6 registration (P _{idle})	
Long Idle	State - WOL Enab	oled W	W	W	Use for ENERGY STAR V6 registration (P _{idle})	
	- WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration (P _{sleep})	
	- WOL Disabled	W	W	W	Reference	
	WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration(Poff)	
, ,	WOL Disabled	W	W	W	Use for EuP	
EPS No-loa		0.07W	0.07 W	0.13 W		
plugged in	ower supply / char the wall outlet but ed from the produc					
PTEC *		W	W	W		
Typical En	ergy Consumption					
TEC *		kWh/week				
. — -	ergy Consumption	K	kWh/week	kWh/week		
ETEC * Annual Ene	ergy Consumption	31.14 kWh/year	31.47 kWh/year	32.16 kWh/year	E _{TEC} = (8760/1000) x (P _{off} x 0.25 + P _{sleep} x 0.35 + P _{short idle} x 0.3+ P _{long idle} x 0.1)	
			WOL Enabled; P _{sleep}	: Sleep Mode(S3)	- WOL Enabled; P _{idle} : Idle State - WOL Enabled	
Display res	olution* : 1920*1	080 Megapixels				
Print Speed	d * _ : I	mages per minute				
	e to enter energy s					
P9.2*		the energy save function i	•	•		
P9.3*		ts the energy requirements version: <i>Version 6.1</i> Tie		oluntary program category: 11	//s: □ □ □ □	
P10	Emissions					
		 Declared according to IS 	O 9296			
P10.1	Mode	Mode description		Declared A-weighted	<u> </u>	
				sound power	er	
				level L_{WAd} (
					Desktop (only if product is not	
	Idle	* HDD:Idle		* 27	operator attended)	
	Operation	* HDD:Idle * HDD: Operating		* 2.7 * 2.8	24.8	
	Other mode	ODD operating		4.6	38.3	
			CMA-74		1	
				y ECMA-74 with	n L _{pAm} measurement distance m)	
P10.2	P10.2 The product meets the acoustic noise requirements of the following voluntary program/s:					

Model nu	ımber *	20364; 80FG				
Issue dat	te *	2015-01-13	Logo	leno	VO.	
Product	environr	nental attributes - Market requirements (continued)		Require	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:				\boxtimes
P10.4		emission rate (print phase) is (mg/h):				$\overline{\boxtimes}$
	• •	Dust Ozone Styrene Benzene TVOC				
P10.5	Chemica	al emission requirements of the following voluntary program/s are met for :				X
		Oust Ozone Styrene Benzene	TVOC 🗌			
	Electror	nagnetic emissions				
P10.6	program	er display meets the requirement for low frequency electromagnetic fields of the foll /s: RTPX 4.2	owing voluntary			
P11		nable materials for printing products				
P11.1*	A Safety	Data Sheet (SDS) is available for the ink/toner preparation, even if not legally requ	ired (see P4.3).			\boxtimes
P11.2*	Paper c EN1228	ontaining post-consumer recycled fibers can be used, provided that it meets th 1.	e requirements of			
P11.3*	2-sided	(duplex) printing/copying is an integrated product function.				\boxtimes
P12		mics for computing products				
P12.1*	The disp	play meets the ergonomic requirements of ISO 9241-307 for visual display technology	gies.	\boxtimes		
P12.2*	The phys	sical input device meets the requirements of ISO 9995 and ISO 9241-410.		\boxtimes		
P13	Packagi	ng and documentation				
P13.1*	Product Product	packaging material type(s): Carton packaging material type(s): Paper pad packaging material type(s): EPE weight (kg): 0.342 weight (kg): 0.040 weight (kg): 0.038				
P13.2*	Product	plastic packaging is free from PVC.		\boxtimes		
P13.3*		media for user and product documentation (tick box): ic ⊠, Paper ⊠, Other □				
P13.4*	For pape fiber: 8	er user and product documentation, please specify contained percentage of post-co %	nsumer recycled			
P14		nal information (See Note B4)				
B 0	informat knowled provided informat		nt is provided base te such information	d on sup on. The in	plier's format	i
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 Z70-80	Logo
Model Number	20364;80FG	_
Issue Date	2015-01-13	lenovo.
Additional information		

(d)	year of manufacture: 2014	
(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: 16.45	
(f)	E TEC value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics carenabled:	ds (dGfx) are
	Category (according to ErP Lot 3): B Etec: 17.31	
(g)	idle state power demand (Watts);	5.74
(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);	0.29
(k)	off mode with WOL enabled power demand (Watts) (where enabled);	0.29
(l)	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	
(o)	the minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):	500cycles
(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: IEC 61960 measurement methodology (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
(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
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
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(s) Sequence of events required to reach the mode where the equipment automatically changes to sleep and/or
(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) 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): NA
(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, 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-professional user.
(Battery not user replaceable) (Battery user replaceable) The battery[ies] in this product cannot be easily replaced by users
themselves
Additional information