

#### 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.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 *	II-in-One Desktop PC				
Commercial name *	Lenovo N308				
Model number *	10153, F0AH				
Issue date *	2014/05/12				
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).	ol 🔀	

Model number *	Lenovo N308	MT : 10153, F0AH		
Issue date *	2014/05/12		Logo	lenovo.

Product	environmental attributes - Legal requirements	Require	men	t 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)			
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).	$\boxtimes$		
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).	$\boxtimes$		
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).			$\boxtimes$
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 Product packaging			
P5.1*	Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium an hexavalent chromium by weight of these together.			
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 Montree 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 %.

Model number *	Lenovo N308	MT : 10153, F0AH		
Issue date *	2014/05/12		Logo	lenovo.

Product	t environmental attributes - Market requirements - Environmental conscious design Re	quire	men	t 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	X	П	$\Box$
P7.2*	Plastic materials in covers/housing have no surface coating.	Ħ	X	Ħ
P7.3*	Plastic parts >100g consist of one material or of easily separable materials.			一一
P7.4*	Plastic parts >25g have material codes according to ISO 11469 referring ISO 1043.			
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.			
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	$\boxtimes$		
	Product lifetime			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives	$\boxtimes$		
P7.8*	Upgrading can be done using commonly available tools			
P7.9.	Spare parts are available after end of production for: 5 years			
P7.10	Service is available after end of production for: 5 years			
	Material and substance requirements			
P7.11*	Product cover/housing material type:			
	Material type: ABS Material type: Material type:			
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)			
P7.16	Flame retarded plastic parts >25g in covers / housings are marked according ISO 1043-4:  Marking: > ABS <			
P7.17	Alt. 1  Chemical specifications of flame retardants in printed circuit boards >25g (without components):  TBBPA (additive) , TBBPA (reactive) , Other; chemical name: <i>Epoxy Resin</i> , CAS #: 26265-08-7			
	Alt. 2 Chemical specifications of flame retardants in printed circuit boards (without components) >25g according ISO 1043-4: <i>Brominated Epoxy Resin See P14</i>			
P7.18	Alt. 1 Flame retarded plastic parts >25g contain the following flame retardant substances/preparations in concentrations above 0.1%: plastic parts >25g doesn't contain flame retardant  Comment: No legal limits exist, this is a market requirement.  1. Chemical name:  CAS #:  Supplier:  CAS #:  Supplier:			
	3. Chemical name: CAS #: , Supplier: Alt. 2 Chemical specifications of flame retardants in plastic part			
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 15.3%.			
P7.21	Of total plastic parts' weight >25g, biobased material content is 0%.			
P7.22	Light sources are free from mercury If mercury is used specify: Number of lamps: and max. mercury content per lamp: mg	$\boxtimes$	Ш	Ш
P8	Batteries			
P8.1*	Battery chemical composition: Lithium Ion /Lithium Manganese Dioxide			
P8.2	Batteries meet the requirements of the following voluntary program/s:			

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 *	Lenovo N308	MT : 10153, F0AH		
Issue date *	2014/05/12		Logo	lenovo.

Product environmental attributes - Market requirements (continued) Requirement met						
P9 Energy consumption	n			Yes No	n.a.	
9.1 For the product the fo		els or energy cons	umptions are re	ported: See P14		
Energy mode *	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)	W	W	W	Full load		
Category D2		•				
Short Idle State - WOL Enabled	<i>i</i> W	W	W	Use for ENERGY STAR V6 registration(P <sub>idle</sub> )		
Long Idle State - WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration(P <sub>idle</sub> )		
Sleep (S3) - WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration (P <sub>sleep</sub> )		
Sleep (S3) - WOL Disabled	W	W	W	Reference		
Off (S5) - WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration(Poff)	$\boxtimes$	
Off (S5) - WOL Disabled	W	W	W	Use for EuP		
Category D1	•	•	•			
Short Idle State - WOL Enabled	<i>i</i> W	W	W	Use for ENERGY STAR V6 registration(P <sub>idle</sub> )		
Long Idle State - WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration(P <sub>idle</sub> )		
Sleep (S3) - WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration (P <sub>sleep</sub> )		
Sleep (S3) - WOL Disabled	W	W	W	Reference		
Off (S5) - WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration(Poff)		
Off (S5) - WOL Disabled	W	W	W	Use for EuP		
Category I3			<u>I</u>		_	
Short Idle State - WOL Enabled	<i>i</i> W	W	W	Use for ENERGY STAR V6 registration(P <sub>idle</sub> )		
Long Idle State - WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration(P <sub>idle</sub> )		
Sleep (S3) - WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration (P <sub>sleep</sub> )		
Sleep (S3) - WOL Disabled	W	W	W	Reference		
Off (S5) - WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration(Pott)		
Off (S5) - WOL Disabled	W	W	W	Use for EuP		
Category I2						
Short Idle State - WOL Enabled	/ W	W	W	Use for ENERGY STAR V6 registration(P <sub>idle</sub> )		
Long Idle State - WOL Enabled	w	W	W	Use for ENERGY STAR V6 registration(P <sub>idle</sub> )		
Sleep (S3) - WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration (P <sub>sleep</sub> )		
Sleep (S3) - WOL Disabled	W	W	W	Reference		
Off (S5) - WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration(Poff)		
Off (S5) - WOL Disabled	W	W	W	Use for EuP		
Category I1						
Short Idle State - WOL Enabled	ı W	W	W	Use for ENERGY STAR V6 registration(Pidle)		
Long Idle State - WOL Enabled		W	W	Use for ENERGY STAR V6 registration(P <sub>idle</sub> )		
Sleep (S3) - WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration (P <sub>sleep</sub> )		
Sleep (S3) - WOL Disabled	W	W	W	Reference		
Off (S5) - WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration(P <sub>off</sub> )		
Off (S5) - WOL Disabled	W	W	W	Use for EuP		
EPS No-load	W	W	W	OSC IOI EUI		
(External power supply / charger plugged in the wall outlet but disconnected from the product.)		VV	VV			
PTEC * Typical Energy Consumption	kWh/week	kWh/week	kWh/week			
TEC * Typical Energy Consumption	kWh/week	kWh/week	kWh/week			

ETEC * Annual En	ergy Consumption	W	W	W	$E_{TEC} = (8760 + P_{idle} \times 0.4)$	0/1000) x (P <sub>off</sub> )	<sub>f</sub> x 0.55 + F	sleep X	0.05	
		Poff: Off Mode(S5	5) - WOL Enabled; P	Sleep: Sleep Mode(	S3) - WOL Ena	bled; P <sub>idle</sub> : Idle	State - WO	L Enabl	ed	
Display res	solution* : <b>1600*900</b> N	/legapixels								
Print Spee	d * : Imag	es per minute								П
Default tim	ne to enter energy save	mode: min	utes							干
P9.2*	Information about the			h the product				$\square$	$\overline{}$	片
P9.3*	The product meets th				arom/o:				Ш	
F 9.5	ENERGY STAR® ver Others specify:			ategory: <i>Integra</i>		Computer				
P10	Emissions									
P10.1	Noise emission – De	eclared according to de description	to ISO 9296	Doolored		Declared A	\ waightad			
P10.1	Mode Mod	de description		Declared A-weighted			•			
				sound power		und pressure I	•			
				level $L_{W  extsf{Ad}}$ (	B) Operator	position 🔀	Bystano	ler pos	itions	
						Desktop 🔀	(only if p	roducti	ic not	
					or D	esk side		or atter		
	Idle * /	HDD:Idle		2.8		17	7.3			
		HDD: Operating		2.8			7.9			
		DDD operating		N/A		N	/ <b>A</b>			
	Measured according t		ECMA-74							
D40.0	T	Other	(only if not cover				stance	m)		
P10.2	The product meets th		<u>'</u>	tollowing voluni	ary program/s	;:		Ш.	<u>Ш</u>	
P10.3*	Chemical emissions	<u> </u>		atamaland and	hay an asifuu			$\overline{}$	$\blacksquare$	
P10.4	rest performed according to Edivirt 626 (1867/128 288889) standard; other specify.									
	Dust		-	enzene	TVOC					
P10.5	Chemical emission re				are met fo	or:				X
	Dust	Ozone	Styrene	Benzen	e	TVOC				
P10.6	Electromagnetic em		-		:- £:- - £ 4	fallanda annalı				
P10.6	Computer display me program/s:	ets the requiremen	it for low frequenc	y electromagnet	ic fields of the	lollowing voil	untary	Ш	$\boxtimes$	Ш
P11	Consumable materia	als for printing pr	oducts							
P11.1*	A Safety Data Sheet	(SDS) is available	for the ink/toner pr	reparation, even	if not legally r	equired (see	P4.3).			
P11.2*	Paper containing pos	st-consumer recyc	led fibers can be	used, provided	that it meets	s the requirer	ments of			$\boxtimes$
P11.3*	EN12281. 2-sided (duplex) printi	ing/copying is an ir	ntegrated product t	function				$\overline{}$	$\overline{}$	$\square$
P12	Ergonomics for com		ntogratou produot	TOTIONOTI.						
P12.1*	The display meets the		rements of ISO 924	41-307 for visua	l display techr	nologies.		$\overline{}$		$\Box$
P12.2*	The physical input de	vice meets the rec	uirements of ISO	9995 and ISO 9	241-410.			Ħ		Ħ
P13	Packaging and docu	ımentation	-							
P13.1*	Product packaging m	<b>71</b> \ /		(g): <b>1073.8</b>						
	Product packaging m Product packaging m		EPE weight ( LDPE weight (	g): <b>537.2</b>						
P13.2*	Product plastic packa			(g). <b>30</b>					$\overline{\Box}$	$\overline{\Box}$
P13.3*	Specify media for use	er and product doc	umentation (tick bo	ox):						Ħ
	Electronic X, Paper		`	,						
P13.4*	For paper user and priber: 80 %		tion, please specify	y contained perc	entage of pos	t-consumer re	ecycled			
P14	Additional informati									
	NOTE: Supplier make information contained knowledge available a provided here is appre information.	in this document. at the time of comp	All information pro pletion, and supplie	ovided by suppli er shall have no	er in this docu obligation to ι	ment is provicupdate such in	ded based of the formation.	on sup The in	plier's forma	3
P9	See Energy Star Qua						- 4- 00	_	_	_
	http://www.energyst	ar.gov/index.cfm	?ruseaction=find	_a_product.sh	owProductGr	oup&pgw_co	ode=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 N308	Logo
Model Number	10153, F0AH	_
Issue Date	2014.05.15	lenovo.
Additional information		

year of manufacture: Please see product name plate				
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:				
E TEC value (kWh) and capability adjustments applied when all discrete graphics cards (dGfx) are enabled:;c				
internal power supply efficiency at 10 %, 20 %, 50 % and 100 % of rated output power (if applicable):				
10%: 20%: 50%: 100%: Average:				
external power supply efficiency (if applicable):				
10% 20% 50% 100% Average ;				
or Level: V				
the minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):	NA			
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:				
230 Volts AC, 50 Hz				
the measurement methodology used to determine information mentioned in points (I) – internal PSU efficiency:				
Follow Energy-Star requirement if internal PSU is applicable				
the measurement methodology used to determine information mentioned in points $(m)$ – external PSU efficiency:				
Follow Energy-Star requirement if external PSU is applicable				
	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:  E TEC value (kWh) and capability adjustments applied when all discrete graphics cards (dGfx) are enabled:;c  internal power supply efficiency at 10 %, 20 %, 50 % and 100 % of rated output power (if applicable):  10%: 20%: 50%: 100%: Average:  external power supply efficiency (if applicable):  10% 20% 50% 100% Average ;  or Level: V  the minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):  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:  230 Volts AC, 50 Hz  the measurement methodology used to determine information mentioned in points (I) — internal PSU efficiency:  Follow Energy-Star requirement if internal PSU is applicable  the measurement methodology used to determine information mentioned in points (m) — external PSU efficiency:			

(p-3)	the measurement methodology used to determine information mentioned in points (o) – loadingcycles  NA 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:				
	Follow	w Energy-	Star requirement		
(q)	seque	ence of st	eps for achieving a stable condition with respect to power demand::		
	Follow	w Energy-	-Star requirement		
(r)	descr	ription of h	now sleep and/or off mode was selected or programmed:		
			will enter sleep mode automatically after no user or network activity for a period of time (it wer management setting).		
(s)	seque off m		vents required to reach the mode where the equipment automatically changes to sleep and/or		
	perio	d o	de, the computer will enter sleep mode automatically after no user or network activity for a f time (it depends on power management setting). user could press "Start", and select "Shut down" in OS to allow the computer to shut off		
(t)			of idle state condition before the computer automatically reaches sleep mode, or another in does not exceed the applicable power demand requirements for sleep mode (in minutes):	25	
(u)		•	ime after a period of user inactivity in which the computer automatically reaches a hat has a lower power demand requirement than sleep mode (in minutes):	10	
(v)	the le	ength of t	ime before the display sleep mode is set to activate after user inactivity (in minutes):	10	
(w)	inforn	nation on	the energy-saving potential of power management functionality:		
	Information on the energy-saving potential of power management functionality is shown in OS				
(x)	user	informatio	on on how to enable the power management functionality:		
	Please Lenovo confirm where or which document will show user information about how to enable the power management functionality.				
(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:				
	230 \	/olts AC,	50 Hz		
Additio		ok Batte	ry Information:		
Yes	No	n/a	This notebook computer is operated by battery/ies that cannot be accessed and replaced by a ruser.	non-professional	
			The battery[ies] in this product cannot be easily replaced by users themselves	elves	
A al al ! 4 !					
Additional information					