



ECMA/TC38-TG3/2015/026 (Rev. 1 – 15 April 2015)

## Annex B2 - Product environmental attributes Desktop/All-in-One Computers

The declaration may be published only when all rows and/or fields marked with \* are filled-in (n.a. for not applicable). Additional information regarding each item may be found under P15.

Brand *	Lenovo	Logo	
Company name *	Lenovo		
Contact information *	Lenovo Global Environmental Affairs		Lenovo
e-mail address	Alvin L Carter		
	alcarter@lenovo.com		
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Additional information	The latest version of this document can be found at:		
	http://www.lenovo.com/ecodeclaration		

	based on product specification or test results based obtained from sample testing), that the product nts given in this declaration.
Type of product *	AIO
Commercial name *	ideacentre AIO 730s-24
Model number *	F0DX, F0DY
Issue date *	2018.1.31
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.

#### About Annex B2

Annex B2 reflects Product environmental attributes relevant for Computers and Computer Monitors. The following items from the ECMA-370 Main body are not shown in the template:

P4.1 – P4.3 Consumable materials

P9.1 TEC and Print speed

P10.2 - P10.3 Chemical emissions from printing products

P11.1 - P11.3 Consumable materials for printing products.

Model nu	mber *	F0DX, F0DY	Logo	Lon		
Issue dat	e *	2018.1.31		Lend		<b>)</b> <sub>TM</sub>
Product	environ	mental attributes - Legal requirements		Require	men	met
Item				Yes	No	n.a.
P1		ous substances and preparations				
P1.1*	Products	s do comply with current European RoHS Directive. (See legal reference and NOTE	B1)	$\boxtimes$		
P1.2*	Commer	s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.				
P1.3*	hydrobro trichloro	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), omofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrach ethane, methyl bromide (see legal reference). Comment: Legal reference has no maration values.				
P1.4*		s do not contain more than; $0,005\%$ polychlorinated biphenyl (PCB), $0,005\%$ polych $\alpha$ (PCT) in preparations (see legal reference).	lorinated			
P1.5*		s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 cart ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	oon atoms in t	ne 🔀		
P1.6*	(see lega	th direct and prolonged skin contact do not release nickel in concentrations above 0 al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	,5 μg/cm²/wee	ek 🔀		
P1.7*		Article 33 information about substances in articles is available at (add URL or mail ow.lenovo.com/social_responsibility/us/en/environment.html	contact):			
P2	Batterie	s				
P2.1*		oduct contains a battery or an accumulator, the battery/accumulator is labeled with t Information on proper disposal is provided in user manual. (See legal reference)	he disposal			
P2.2*	Batteries referenc	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadme)	nium. (See leg	al 🔀		
P2.3*	Batteries	s and accumulators are readily removable. (See legal reference)		$\boxtimes$		
P3		nity verification & Eco design (ErP)				
P3.1*	The Dec	duct is CE-marked to show conformance with applicable legal requirements (see legal requirements):  diaration of Conformity can be requested at (add link or e-mail address):  diameter www3.lenovo.com/us/en/social responsibility/EU DoC desktops	gal reference).			
P3.2*		duct complies with the Eco design requirements for energy-related products,		X		
	•	al reference).			ш	ш
	Required	d information is; given in item P15 or added to this document,		$\boxtimes$		
		available at (add URL):				
P5	Product	: packaging				

Packaging and packaging components do not contain more than 0,01% lead, mercury, cadmium and

The packaging materials are marked with abbreviations and numbers indicating the nature of the material(s)

The product packaging material is free from ozone depleting substances as specified in the Montreal

NOTE B1 Restriction applies to the homogeneous material, unless other specified and expressed in weight %. Stating "Yes" means that the product is compliant with the mandatory requirements.

hexavalent chromium by weight of these together.

Comment: Legal reference has no maximum concentration values.

Information for recyclers/treatment facilities is available (see legal reference).

used (see legal reference).

Treatment information

Protocol (see legal reference).

P5.1\*

P5.2\*

P5.3\*

**P6** P6.1\*

Model number *	FODX, FODY	Logo	Lonovo
Issue date *	2018.1.31		Lei IOVO.

Produc	t environmental attributes - Market requirements (See General NOTE GN below)			
		Require	ment	met
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.
P7	Design, Disassembly, recycling			
P7.1*	Parts that have to be treated separately are easily separable		Ц_	
P7.2*	Plastic materials in covers/housing have no surface coating.		$\boxtimes$	
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.	$\boxtimes$		
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.	$\boxtimes$		
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.	$\boxtimes$		
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	$\boxtimes$		
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 (e.g. plastics, metal, aluminum):			
	Material type: ABS+PCR65%, Material type: Metal*2( SECC+SPCC) Material type:			
P7.12	ABS+PC, PC, POM, ABS Insulation materials of external electrical cables are PVC free.			$\overline{}$
P7.13	Insulation materials of internal electrical cables are PVC free.	-	$\overline{\mathbb{X}}$	-
P7.14	External plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) bromine and 0,1%			
F7.14	weight (1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants, and		Ш	Ш
	polyvinyl chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in parts			
	containing more than 25% post-consumer recycled content.			
P7.15	Printed circuit boards, PCBs (without components) are low halogen: all PCBs > 25 g are low halogen as defined in IEC 61249-2-21. (See 1NOTE B2)			
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: Marking:			
P7.17	Alt. 1: Chemical specifications of flame retardants in printed circuit boards > 25 g (without components):			
	TBBPA (additive), TBBPA (reactive) (See NOTE B3), Other: Brominated Epoxy Resin, CAS #:		Ш	
	26265-08-7			
	Alt. 2: Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g			
P7.18	according ISO 1043-4:  Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in			
F1.10	concentrations above 0.1%:	$\boxtimes$		
	1. Chemical name: POLYCARBONATE, CAS #: 24936-68-3 (See NOTE B4)		ш	ш
	2. Chemical name: ACRYLONITRILE BUTADIENE, CAS #: 9003-56-9			
	3. Chemical name: FLAME RETARDANT, CAS #: 5945-33-5			
	Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:			
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been			$\boxtimes$
	assigned the following Risk phrases; and Hazard statements:			
	The source(s) for these classifications is/are found at (add URL(s)): , (See note B5)			
P7.20*	Postconsumer recycled plastic material content is used in the product (See Note B6):			$\boxtimes$
	If YES; at least one of the two alternatives below shall be answered;			
	a) Of total plastic parts' weight > 25 g, the postconsumer recycled plastic material content (calculated as			
	a percentage of total plastic by weight) is 31.6%.			
	Or h). The weight of recycled metarial is 405 %			
	b) The weight of recycled material is <b>195</b> g.			

GENERAL NOTE Standard references should direct to the latest version of a standard. If an older version of a standard is used, section P15 shall be used for explanation.

NOTE B2 IEC 61249-2-21 defines maximum limits of 900 ppm for each of the substances chlorine and bromine and a maximum limit of 1500ppm of these substances combined. The standard does not address fluorine, iodine and astatine which are included in the group of halogens.

NOTE B3 and B4 A Guidance document on Chemical substances is available; see <a href="http://www.ecma-international.org/publications/standards/Ecma-370.htm">http://www.ecma-international.org/publications/standards/Ecma-370.htm</a>

NOTE B5 If a certain substance has been assigned a certain risk phrases / hazard statement in the referenced source, this does not necessarily mean the substance has been tested for all of the hazards referred to by a certain customer.

NOTE B6 Applies to a product containing plastic parts whose combined weight exceeds 100 g with the exception of printed circuit boards, cables, connectors and electronic components and bio-based plastic material.

Model number *	F0DX, F0DY	Logo	Lanava
Issue date *	2018.1.31		LEI IOVO,

Product	environmental at	tributes - Market re	equirements (conti	nued)	Requirement met
Item			,	,	Yes No n.a.
	Material and subs	tance requirements	(continued)		
P7.21*	Biobased plastic m	aterial content is used	in the product (See No	OTE B7):	
			s below shall be answe		
			•	material content (calcu	lated as a percentage
	of total plastic	by weight) is %	).		
		the biobased plastic n	naterial is g.		
P7.22*			less than 0,1 mg/lamp.		
P8	Batteries	specify: Number of lan	nps: and maxim	um mercury content pe	r lamp: mg
P8.1*		omposition: Lithium N	langanese Dioxide		
P9		tion (See NOTE B8)			
P9.1			s or energy consumption		
Energy mo	de *	Power level at	Power level at	Power level at	Reference/Standard for energy
Peak (On-I	max)	100 V AC W	115 V AC W	230 V AC W	modes and test method *  Full load
•		**	**	**	7 411 7044
Categor	<u>yI1</u>				
Short Idle	State - WOL	25.404 W	25.932 W	26.388 W	Use for ENERGY STAR V6
Enabled					registration (P <sub>idle</sub> )
Long Idle	State - WOL	9.528 W	9.696 W	10.068 W	Use for ENERGY STAR V6
Enabled					registration (P <sub>idle</sub> )
Sleep (S3)	- WOL Enabled	0.780 W	0.828 W	0.852 W	Use for ENERGY STAR V6 registration(P <sub>sleep</sub> )
Sleep (S3)	- WOL Disabled	W	W	W	Reference
Off (S5) - V	NOL Enabled	0.612 W	<b>0.624</b> W	<b>0.696</b> W	Use for ENERGY STAR V6
					registration(P <sub>off</sub> )
Off (S5) - V	WOL Disabled	W	W	W	Use for ErP
		W	W	W	Reference
Categor	vI2				
		00 000 144	00.770\4	07.00	
Short Idle Enabled	State - WOL	<b>26.292</b> W	<b>26.772</b> W	27.36 W	Reference
	0/ / 1//0/	0.004104	40.440.04	40.000.14	
Long lale   Enabled	State - WOL	9.804 W	10.116 W	10.332 W	Reference
Litabica					
Sleep (S3)	- WOL Enabled	0.816 W	0.852 W	0.876 W	Reference
Sleep (S3)	- WOL Disabled	W	W	W	Reference
Off (S5) - V	WOL Enabled	0.636 W	0.636 W	0.708 W	Reference
Off (S5) - V	WOL Disabled	W	W	W	Reference
		W	W	W	Reference
Categor	yI3				
	State - WOL	27.012 W	27.960 W	28.692 W	Reference
Enabled	State - WOL	27.012 VV	27.300 VV	20.032 VV	Nels ence
Long Idle	State - WOL	10.572 W	10.764 W	10.932 W	Reference
Enabled					

NOTE B8 A Guidance document on Energy Efficiency is available; see <a href="http://www.ecma-international.org/publications/standards/Ecma-370.htm">http://www.ecma-international.org/publications/standards/Ecma-370.htm</a>

NOTE B9 A Guidance document on Acoustic Noise is available; see <a href="http://www.ecma-international.org/publications/standards/Ecma-370.htm">http://www.ecma-international.org/publications/standards/Ecma-370.htm</a>

NOTE B7 The following is to be excluded from the calculation of percentage: printed circuit boards, labels, cables, connectors and electronic components and postconsumer recycled plastic

Sleep (S3	B) - WOL Enabled	<i>0.876</i> W	<b>0.888</b> W	<b>0.912</b> W	Reference
Sleep (S3	B) - WOL Disabled	W	W	W	Reference
Off (S5) -	WOL Enabled	<b>0.624</b> W	<b>0.648</b> W	0.672 W	Reference
Off (S5) -	WOL Disabled	W	W	W	Reference
		W	W	W	Reference
EPS No-lo		W	0.158 W	0.190 W	
	r supply / charger plugged in the lisconnected from the product.)				
PTEC *		W	W	W	
	nergy Consumption				
ETEC *		11:93.16 kWh/year	11:95.07 kWh/year	11:97.25 kWh/year	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.45)$
Annual En	nergy Consumption	12:96.36 kWh/year	12:98.26 kWh/year	12:100.64 kWh/year	+ P <sub>sleep</sub> x 0.05 + P <sub>long_ldle</sub> x 0.15+
		13:99.55 kWh/year	13:102.81 kWh/year	13:105.38 kWh/year	P <sub>short_idle</sub> x 0.35) Enabled: P <sub>idle</sub> : Idle State - WOL Enabled
External P	Power Supply Efficier	\\	Il Efficiency Marking Pro		Litabled, Fidle. Idle State - WOL Ellabled
	esolution * : 2.07 med	, ,	Emolority Marking 1 10		
. ,		ave mode: <b>25</b> minutes			
P9.2*			ion is provided with the	product.	
P9.3	Energy efficiency	class (monitors only):			
P10	Emissions				
			o ISO 9296 (See NOTE		
P10.1		Mode description			t A-weighted sound power level, L <sub>WA,c</sub> (B)
	Idle *	HDD:Idle		* 3.5	
	Operation *	HDD: Operating		* 3.5	
			nd pressure level (dB) $L_{p  m Am}$		n desktop – idle)
	Other mode	Declared A-weighted sour	nd pressure level (dB) $L_{p{\sf Am}}$	22 (operator positio	n desktop – operating)
	Measured accordi	ng to: 🔀 ISO 7779 🗌			
		Other	(only if not covered by	ECMA-74)	

Model nu	mper *	F0DX, F0DY					Logo	Lon	21/6	
Issue dat	e *	2018.1.31						Lend		тм
Product	environr	nental attributes	- Market requirer	ments (cor	ntinued)			Requir	emení	t met
Item			-	•	•			Yes	No	n.a
		nagnetic emission								
P10.4	program	(s):	requirement for low	frequency el	lectromagnetic field	s of the foll	owing voluntar	ry		
P12		mics for computing								
P12.1*	•		nomic requirements o		•	-	gies.			$\boxtimes$
P12.2*	The phys	sical input device m	eets the requirement	s of ISO 999	95 and ISO 9241-41	0.				$\boxtimes$
P13		ng and documenta								
P13.1*	Product	packaging material packaging material packaging material	type(s): PEP	weight (kg weight (kg weight (kg	): <b>0.928</b>					
P13.2*	Product	plastic primary pack	aging is free from P\	VC.						
P13.3*	consume	er recovered fiber co				percentage	of minimum	post-		
P13.4*		media for user and <sub>l</sub> ronic, <mark>X</mark> Paper,	oroduct documentation	on (tick box):						
P13.5	Ùser and		tem if paper documer ation on paper media							
	Element	hlorine-free al chlorine-free								
		ed chlorine-free						$\boxtimes$		
P14		ry programs								
P14.1	The prod	luct meets the requ	irements of the follow	ving voluntar	y program(s):					
	ENERG' Eco-labe Eco-labe		Criteria version: 6. Criteria version: Criteria version:	1	Date: <b>2018.1.24</b> Date: Date:	Product of Product of Product of	0 ,	puter AIO I	1&12&13	3
P15	Addition	nal information (Se	e NOTE B10)				<u> </u>			
P9			pecific configuration							
	informati knowled	on contained in this ge available at the t here is approximat	epresentations, guara document. All inform ime of completion, ar e and provided for in	nation provid nd supplier s	led by supplier in th hall have no obliga	is documer tion to upda	nt is provided bate such inform	pased on sup nation. The i	oplier's nformat	
P9	See Ene	rgy Star Qualified N	lotebooks & Tablet C				code=CO			

NOTE B10 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 B2

Reference	Declaration item
Directive 2011/65/EU (RoHS Directive) * * Specific exemptions apply for certain products and applications.	P1.1
Regulation (EC) 1907/2006(REACH, Annex XVII	P1.2, P1.4, P1.6, P1.7
Regulation (EC) 2037/2000, 2038/2000, 2039/2000 (Marketing and use of Ozone layer depleting substances)	P1.3, P5.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
Directive 2013/56/EC (Battery and accumulators Directive) *  * These provisions shall not apply where, for safety, performance, medical or data integrity reasons, continuity of power supply is necessary and requires a permanent connection between the appliance and the battery or accumulator.	P2.1, P2.2, P2,3, P8.1
Directive 2006/95/EC (Low Voltage Directive)	P3.1
Directive 2004/108/EC (EMC Directive)	P3.1
Directive 1999/5/EC (R&TTE Directive)	P3.1
Regulation (EC) 801/2013 amending Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment, and amending Regulation (EC) No 642/2009 with regard to ecodesign requirements for televisions	P3.1, P3.2
Regulation (EC) No 1272/2008 (CLP Regulation)	P7.19
Directive 2004/12/EC ( Packaging Directive)	P5.1
Decision 97/129/EC (Secondary packaging legislation)	P5.2
Directive 2012/19/EU (WEEE directive)	P6.1

# 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	ideacentre AIO730S-24	Logo
Model Number	FODX, FODY	Lenovo
Issue Date	2018.1.31	Lenovo.
Additional information	N/A	

d)	year of manufacture:				2018
e)	Etec value (kWh) per ErP Lot 3 Categor disabled and if the system is tested with				cards (dGfx) are
7)	Etec value (kWh) per ErP Lot 3 Categor enable	y and capability adjus	tments applied when <b>a</b>	II discrete graphics o	cards (dGfx) are
		Category A (according to ErP Lot 3)	Category B (according to ErP Lot 3)	Category C (according to ErP Lot 3)	Category D (according to ErP Lot 3)
	Memory over base [GB]		16		16
ents ting	Additional internal storage	(Yes / No)	Yes (Yes / No)	(Yes / No)	Yes (Yes / No)
capability adjustments applied during testing	Discrete television tuner	(Yes / No)	No (Yes / No)	(Yes / No)	No (Yes / No)
ability a lied du	Discrete Audio Card	(Yes / No)	No (Yes / No)	(Yes / No)	No (Yes / No)
capa	Discrete graphics Card(s) [number / #]	#: (Yes / No)	No #: (Yes / No)	#: (Yes / No)	No #: (Yes / No)
	Category of discrete graphics Card(s)		N/A		N/A
saults	Etec Value (kWh) - dGfx disabled all discrete graphics cards (dGfx) are disabled/ UMA is active for switchable graphics/ product has no graphics cards (dGfx)		36.48		36.66
Test results	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled		N/A Switchable graphic		N/A Switchable graphic
g)	Idle state power demand (Watts);	l			D:9.54 B:9.49
1)	Sleep mode power demand (Watts);				D:0.77 B:0.77
)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		D:0.78
)	Off mode power demand (Watts);				B:0.77 D:0.59
	Off manda with WOL analysis discussed as				B:0.57
:)	Off mode with WOL enabled power dem	and (watts) (where en	iabled);		D:0.6 B:0.6
)	Internal power supply efficiency at 10 %,	er (if applicable):			
	10% 20% 50%	100% Avera	age		
n)	External power supply efficiency (if appli	cable)*:			
	Average active efficiency: 88.52%				
	*internal note: show values for all available external po				
o)	Minimum number of loading cycles that t	he batteries can withs	tand (applies only to n	otebook computers):	N/A
p-1)	Measurement methodology used to dete	rmine information mer	ntioned in points (I) – ir	nternal PSU efficiency:	

		dology used to determine information mentioned in refer to ErP lot7	points (iii) – external i 30 emiderioy.	
(p-3)	Measurement metho	dology used to determine information mentioned in N/A	points (o) – loading cycles batteries:	
(p-4)	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/IEC EN50564:2011 measurement methodology			
(q)	Sequence of steps for achieving a stable condition with respect to power demand::  **Power on->Walt 5 minutes->Stable condition**			
(r)	Description of how sleep and/or off mode was selected or programmed:  **Begin menu->Power->Select sleep or off mode**  **Begin menu->Select sleep or off mode**  **Begin menu->Power->Select sleep or off mode**  **Begin menu->Select sleep or off mode**  **Begin menu->Se			
(s)	Sequence of events required to reach the mode where the equipment automatically changes to sleep and/or off mode:  Set display sleep time for 10 minute, choose sleep mode after 25 minutes, choose off mode after 1 minute			
(t) (u)	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):  Length of time after a period of user inactivity in which the computer automatically reaches a power			
(u)		ver power demand requirement than sleep mode (in		
(v) (w)		re the display sleep mode is set to activate after nergy-saving potential of power management function N/A		10 minutes
(x)	User information on how to enable the power management functionality:  refer to User Guide			
(z)		measurements: — test voltage in V and frequency ir system, — information and documentation on the ir sting:		
		Test voltage in V and frequency in Hz: 23 Total harmonic distortion of the electricity supp		
			<b>,</b> - <b>,</b>	
Addition	nal Notebook Batter			
Addition	nal Notebook Batter	Battery[ies] not user replaceable  The battery[ies] in this product cannot be easily	Battery[ies] user replaceable	n/a
	nal Notebook Batter	Battery[ies] <u>not</u> user replaceable		n/a
Internal/b		Battery[ies] not user replaceable  The battery[ies] in this product cannot be easily		
Internal/b	built-in Battery	Battery[ies] not user replaceable  The battery[ies] in this product cannot be easily		
Internal/b	built-in Battery /detachable Battery	Battery[ies] not user replaceable  The battery[ies] in this product cannot be easily		
Internal/t External/ Bios Bac Other:	built-in Battery /detachable Battery	Battery[ies] not user replaceable  The battery[ies] in this product cannot be easily		
Internal/t External/ Bios Bac Other:	built-in Battery /detachable Battery ckup Battery	Battery[ies] not user replaceable  The battery[ies] in this product cannot be easily		