

REGULATORY MODELP45F www REGULATORY TYPEP45F001 EFFECTIVE DATEJune 09, 2014 EMC EMISSIONS CLASSB			
TABLE	OF CONTENTS		
I.	GLOBAL ENVIRONMENTAL INFORMATION		
II.	NFPA 99 CONFORMITY	2	
III.	POWER CORDS AND USER DOCUMENTATION		
IV.	DATASHEET RESPONSIBLE PARTY NAME AND ADDRESS		
V.	TRADE (IMPORT/EXPORT) COMPLIANCE DATA		
VI.	SYSTEM DIMENSION AND WEIGHT		
VII.	PERFORMANCE DATA (ErP Lot 3 information is located in section XIII Appendix A)		
VIII.	PRODUCT MATERIALS INFORMATION		
IX.	PACKAGING		
Х.	BATTERIES	5	
XI.	DESIGN FOR ENVIRONMENT	6	
XII.	RECYCLING/ END-OF-LIFE SERVICE INFORMATION	6	
XII.	HELPFUL LINKS	6	
XIII.	APPENDIX A: ErP Lot 3 Product (Energy Consumption) Information	6	

STATEMENT OF COMPLIANCE

This product has been determined to be compliant with the applicable standards, regulations, and directives for the countries where the product is marketed. The product is affixed with regulatory marking and text as necessary for the country/agency. Generally, Information Technology Equipment (ITE) product compliance is based on IEC and CISPR standards and their national equivalent such as Product Safety, IEC 60950-1 and European Norm EN 60950-1 or EMC, CISPR 22/CISPR 24 and EN 55022/55024. Dell products have been verified to comply with the EU RoHS Directive 2011/65/EU. Dell products do not contain any of the restricted substances in concentrations and applications not permitted by the RoHS Directive.

EMC Emissions Class refers to one of the following use environments:

Mashua AF 7FAC

- EMC Class B products are intended for use in residential/domestic environments but may also be used in non-residential/non-domestic environments.
- EMC Class A products are intended for use in non-residential/non-domestic environments. Class A products may also be utilized in residential/domestic environments but may cause interference and require the user to take adequate corrective measures.

For Product Safety and EMC compliance, this product has been assigned a unique regulatory model and regulatory type that is imprinted on the product labeling to provide traceability to the regulatory approvals noted on this datasheet. This datasheet applies to any product that utilizes the assigned regulatory model and type including marketing names other than those listed on this datasheet. ErP compliance is tied to the CE mark.

REACH (Registration, Evaluation, Authorization and Restriction of Chemicals, 1907/2006) is the European Union's (EU) chemical substances regulatory framework. Dell complies with the REACH directive. For information on SVHC (Substances of Very High Concern), see <u>www.dell.com/REACH</u>.

Compliance documentation, such as certification or Declaration of Compliance for the product is available upon request to <u>regulatory_compliance@dell.com</u>. Please include product identifiers such as marketing name, regulatory module, regulatory type and country that compliance information is needed in request.

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Environmental (Voluntary Marks)				
Country	Compliance			
Global ENERGY STAR (Configuration Dependent)		Computers , Version 6.0		
Varies by country – see EPEAT (Configuration Dependent) EPEAT.net		Silver		
China	CEL	Yes		
India	BEE Star	Yes		

I. GLOBAL ENVIRONMENTAL INFORMATION

Adapter Certification and Declaration

Country	Authority/Mark	
Australia/New Zealand	Australia/NZ MEPS	
South Korea	South Korea MEPS	
Canada	NRCan	
California Energy Commission	Adapter & Battery Charger	
EU	Regulation EC No 278/2009	

II. NFPA 99 CONFORMITY

Select Dell systems have been tested and found to comply with the touch current requirements as defined in 10.3.5 of National Fire Protection Association standard NFPA 99:2012. The touch current does not exceed 100 μ A with ground wire intact (if a ground wire is provided) and 500 μ A with ground disconnected at 127 V AC, 60 Hz when tested in accordance with 10.3.5 of NFPA 99: 2012. To determine if this product complies with the above requirements, send a request to <u>regulatory_compliance@dell.com</u>. Please include product identifiers such as marketing name, regulatory type and country for which compliance information is needed.

III. POWER CORDS AND USER DOCUMENTATION

Dell products are provided with the power cord and user documentation suitable for the intended country of delivery. Products that are relocated to other countries should use nationally certified power cords and plugs to ensure safe operation of the product. Contact Dell to determine if alternate power cords or user documentation in other languages is available for your market.

IV. DATASHEET RESPONSIBLE PARTY NAME AND ADDRESS

Dell Inc. Department: Global Regulations and Standards MS: PS4-30 Round Rock, Texas 78682, USA <u>Regulatory_Compliance@Dell.com</u>

V. TRADE (IMPORT/EXPORT) COMPLIANCE DATA



For any questions related to importing & exporting classification of Dell products, please obtain information from the following link: <u>www.dell.com/import_export_compliance</u> or send request to <u>WW_Export_Compliance@dell.com</u>

VI. SYSTEM DIMENSION AND WEIGHT

Depth,	Width,	Height,	Weight, kg
mm/cm	mm/cm	mm/cm	
267.1mm	318.4mm	26.5mm	2.32Kg (depending upon installed options)

VII. PERFORMANCE DATA (ErP Lot 3 information is located in section XIII Appendix A)

* Energy Consumption results are based solely upon the laboratory testing of the System Configuration listed above. Energy consumption is tested at 230 Volts / 50 Hz.

Energy Consumption*

Energy efficiency benefits the environment and lowers the total cost of equipment ownership by reducing power consumption. Dell offers energy calculators that help estimate power needs, potential emissions avoidance and potential cost savings. Click <u>here</u> for Dell's Client Energy Savings Calculator, Data Center Capacity Planner, and Monitor Power Savings Calculator. Information on Energy Efficiency is available <u>here</u>

* This document is informational only and reflects laboratory performance. Your product may perform differently, depending on the software, components and peripherals you ordered. Accordingly, the customer should not rely upon this information in making decisions about electrical tolerances or otherwise. No warranty as to accuracy or completeness is expressed or implied. For more details visit www.dell.com/environmental_information

Declared Noise Emissions in accordance with ISO 9296 (tested in accordance with ISO 7779)

VIII. PRODUCT MATERIALS INFORMATION¹

Information on Dell's material use is available here.

To review Dell's Restricted Material Guidance document click here.

- The case material is, > PC+ABS <
 - This product contains 0% post-consumer recycled plastic
 - Marking of plastic parts greater than 25 grams are done in accordance with ISO 11469 (see below) **Product is BFR/PVC Free Tyes No**

Flame Retardants Used in Motherboard

Part	Flame Retardant
Motherboard	ТВВРА

Flame Retardants Used in Mechanical Plastic Parts > 25 grams

¹ Waste Handling. Local regulations should be observed when disposing of this product due to the presence of the materials and substances as listed above.



Resin Material Name	Marking per ISO 1146 9:2000, 11469:1996	Flame Retardant Marking per ISO 1043-4 (i.e. FR(16), FR(40), etc.)	Flame Retardant (i.e. TBBPA, triaryl phosphate ester, etc.)	List applicable R-Phrase(s) or Hazard Statement(s) per EU Directive 67/548/EEG or 1272/2008
SABIC, CM6140	>PC+ABS- (ED+TD)8FR(40)<	8FR(40)	Organo Phosphate	N/A
SABIC, C7230P	>PC+ABS- (TALC)FR(40)<	8FR(40)	Organo Phosphate	N/A
MITSUBISHI, TMB1700	>PC+ABS- FR(40)<	FR(40)	Organo Phosphate	N/A
MITSUBISHI, TMB1700	>PC+ABS- FR(40)<	FR(40)	Organo Phosphate	N/A
BAYER, FR3021	>PC+ABS-TD15 FR(40)<	FR(40)	Organo Phosphate	N/A

Mercury Information

Number of bulbs	Average per bulb
0	0 mg

India RoHS Declaration DECLARATION OF CONFORMITY WITH GAZETTE OF INDIA: EXTRAORDINARY, E-WASTE (MANAGEMENT & HANDLING) RULES (INDIA ROHS)

Manufacturer Name and Address: Dell Inc. One Dell Way Round Rock, Texas, USA 78682

Dell Inc. declares that all Dell branded products have been designed and manufactured in compliance with E-Waste (Management & Handling) Rules² on the reduction in the use of hazardous materials in the manufacture of electrical and electronic equipment and their maximum allowed concentrations by weight in the homogenous material (except for the exemptions listed in schedule II).

Substance	Concentration
Lead	0.1%
Mercury	0.1%
PBB (Polybrominated Biphenyls)	0.1%
PBDE (Polybrominated Diphenyl Ethers)	0.1%
Hexavalent Chromium	0.1%
Cadmium	0.01%

Compliance has been verified via internal design controls, supplier declarations, and/or analytical test data. The undersigned below possesses the complete technical documentation relating to the declaration of compliance.

² E-Waste (Management & Handling) Rules 2011, by the Ministry of Environment & Forests, Government of India dated May 12, 2011.



For additional information please visit:

- Restricted Material Compliance <u>www.dell.com/environmental_information</u>
- Products MSDS (Material Safety Data Sheets):

Batteries:

http://www.dell.com/content/topics/topic.aspx/global/shared/about_dell/values/regulatory_compliance/en/d ell_battery_declaration_january2011?c=us&l=en&s=corp&~ck=anavml Printer Toner and Ink:

http://www.dell.com/downloads/global/corporate/environ/comply/MSDS_doc.pdf

IX. PACKAGING

Information on Dell's sustainable packaging effort available <u>here</u>. Additional materials restricted in Packaging as per Dell's Restricted Material Guidance document found <u>here</u>.

<Standard Box>

	Total Weight	% of Post-Consumer Recycled Content (PCR)		
Packaging Materials	of each Material type, (kg)	APJ region	DAO region	EMEA region
Corrugated Fiberboard	0.7220	100%	100%	100%
EPS	N/A	N/A	N/A	N/A
EPE (LDPE)	0.0140	80%	80%	80%
Molded paper pulp	N/A	N/A	N/A	N/A
HDPE (including thermoformed)	0.0070	0%	0%	0%
Molded Bamboo	N/A	N/A	N/A	N/A
LDPE Bags	N/A	N/A	N/A	N/A
Other, please specify (OPP)	N/A	N/A	N/A	N/A

<SKinny Box (DAO Region Only)>

	Total Weight	% of Post-Consumer Recycled Content (PCR)		
Packaging Materials	of each Material type, (kg)	APJ region	DAO region	EMEA region
Corrugated Fiberboard	0.7090	N/A	100%	N/A
EPS	N/A	N/A	N/A	N/A
EPE (LDPE)	0.0140	N/A	80%	N/A
Molded paper pulp	N/A	N/A	N/A	N/A
HDPE (including thermoformed)	0.0070	N/A	0	N/A
Molded Bamboo	N/A	N/A	N/A	N/A
LDPE Bags	N/A	N/A	N/A	N/A
Other, please specify (OPP)	N/A	N/A	N/A	N/A

X. BATTERIES

Below is a listing of batteries that could be present in the product:

Battery Description – Batteries	Battery Type	Battery Weight (kg)
CR-2032 coin cell	Lithium	Max: 0.0032



Worldwide Regulatory Compliance Engineering and Environmental Affairs

Rechargeable Battery 4 cell	Lithium Ion	Max: 0.236

XI. DESIGN FOR ENVIRONMENT

Dell systems are, when applicable, designed for easy assembly, disassembly, and servicing. For more information on product Recyclability please visit <u>www.dell.com/environmental_information</u>

XII. RECYCLING/ END-OF-LIFE SERVICE INFORMATION

Take back and recycling services are offered for this product in certain countries. If you want to dispose of system components, contact Dell for instructions by emailing <u>recycling_emea@dell.com</u> or visit <u>www.dell.com/recyclingworldwide</u> and select the relevant country.

XII. HELPFUL LINKS

- Environmental Policy
 http://i.dell.com/sites/content/corporate/corp-comm/en/Documents/dell-global-environmental-policy.pdf
- Environment Website www.dell.com/earth
- Corporate Sustainability Report
 http://www.dell.com/Learn/us/en/uscorp1/report?c=us&l=en&s=corp&delphi:gr=true
- ISO 14001 Certification
 http://i.dell.com/sites/content/corporate/corp-comm/en/Documents/dell-iso14001-worldwide.pdf
- Materials Restricted for Use
 http://www.dell.com/downloads/global/corporate/environ/restricted_materials_guid.pdf
- Chemical Use Policy
 http://i.dell.com/sites/doccontent/corporate/environment/en/Documents/chemical-use-policy.pdf
- Client Energy Calculator
 http://www.dell.com/content/topics/topic.aspx/global/products/landing/en/client-energy-calculator?c=us&l=en
- **Product Carbon Footprint** http://content.dell.com/us/en/corp/d/corp-comm/environment_carbon_footprint_products
- RoHS Compliance
 <u>www.dell.com/rohsinfo</u>
- REACH Compliance
 www.dell.com/REACH
- Recycling Information
 www.dell.com/recycling
- Supplier Responsibility
 http://content.dell.com/us/en/corp/d/corp-comm/standards-for-suppliers.aspx

XIII. APPENDIX A: ErP Lot 3 Product (Energy Consumption) Information

The ErP Lot 3 Standard includes requirements for certain product specific information to be provided by the manufacturer. This is applicable to Desktops, Integrated Desktops, Notebooks, Tablets, Slates, Notebook Thin Clients, Desktop Thin Clients, Workstations, Mobile Workstations, Computer Servers, and Small Scale Servers.



Category	Category A	Category B	
Processor Speed in GHz	1.6	1.6	0
Number of Cores	2	2	0
Total Installed System Memory in GB	8	8	0
Graphics	Integrated	G1	Select
WOL enabled in "Sleep" Mode	No		
WOL enabled in "Off" Mode		No	
As Tested: Lowest Power State	0.42	0.41	
As Tested: Poff(W) WOL Disabled	0.42	0.41	
As Tested: Poff(W) WOL Enabled			
As Tested: Psleep(W) WOL Disabled	0.55	0.52	
As Tested: Psleep(W) WOL Enabled			
As Tested: Pidle(W)	3.31	3.58	
Base TEC Limit (kWh)	36	48	0
TEC Adders Limit (kWh)	1.60	13.60	0.00
Base + Adders TEC Limit (kWh)	37.60	61.60	0.00
Results TEC	11.37	11.99	0.00

Client Computers:

Service Level	Energy Consumption	BTU Calculation	Description of Service Level
*Maximum	23.77	81.29	The system is running programs to maximize the power consumption.
Idle Mode	3.58	12.24	As specified EPA Energy Star Computer mode.
S 3 "S leep" Mode	0.52	1.78	Suspend-to-RAM (low-power/sleep mode)
Off	0.41	1.40	System is turned off but still connected to its AC power source. If the product is a computer, the Low Power Mode feature is enabled via BIOS if available.
External Power Supply "No-Load" (if applicable)	0.07	0.24	AC adapter connected to mains with system detached otherwise known as "No-load" condition.

Power Supply Model	Internal		
	or	Link to efficiency report	
#	External		
AA65NM121	External	http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&operation=details-	
AA051WI121 External		details&ref=5477379&appliance=EPS&nr=1	
HA65NS5-00 External		http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&operation=details-	
11110511055 00	External	details&ref=5470487&appliance=EPS&nr=1	
DA65NM111-00 External		http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&operation=details-	
DA05INMITT-00	External	details&ref=5478051&appliance=EPS&nr=1	
LA65NS2-01	External	http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&operation=details-	
LA051152-01	External	details&ref=5485275&appliance=EPS&nr=1	

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For more details visit <u>www.dell.com/environmental_information</u>

Declared Noise Emissions in accordance with ISO 9296 (tested in accordance with ISO 7779)

Computers Category A:

Service Level	Sound Power (L _{WAd} , bels) (1 bel=10 decibels, re 10 ⁻¹² Watts)	Sound Pressure Bystander Position (L _{pAm} , decibels) (re 2x10 ⁻⁵ Pa)
Hard Drive Accessing	2.8	16.6
Optical Drive Accessing	4.7	34.0
Idle	2.8	16.5

Computers Category B:

Service Level	Sound Power (L _{WAd} , bels) (1 bel=10 decibels, re 10 ⁻¹² Watts)	Sound Pressure Bystander Position (L _{pAm} , decibels) (re 2x10 ⁻⁵ Pa)
Hard Drive Accessing	2.7	16.2
Optical Drive Accessing	4.7	33.2
Idle	2.7	16.6

Computers Category C:

Service Level	Sound Power (L _{WAd} , bels) (1 bel=10 decibels, re 10 ⁻¹² Watts)	Sound Pressure Bystander Position (L _{pAm} , decibels) (re 2x10 ⁻⁵ Pa)
Hard Drive Accessing	N/A	N/A
Optical Drive Accessing	N/A	N/A
Idle	N/A	N/A

Computers Category D:

Service Level	Sound Power (L _{WAd} , bels) (1 bel=10 decibels, re 10 ⁻¹² Watts)	Sound Pressure Bystander Position (L _{pAm} , decibels) (re 2x10 ⁻⁵ Pa)
Hard Drive Accessing	N/A	N/A
Optical Drive Accessing	N/A	N/A
Idle	N/A	N/A