

# **Product Compliance Datasheet**

MARKETING NAME...... Vostro 5590

**REGULATORY MODEL......**: P88F

REGULATORY TYPE..... P88F001

EMC EMISSIONS CLASS......: B

EFFECTIVE DATE...... August 16, 2019

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## I. 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. Dell manufacturers and markets Multimedia Equipment (MME), Information Technology Equipment (ITE), Audio Visual Equipment (A/V), Industrial, Scientific, Medical Equipment (ISM) or combinations of these. Generally, products Electromagnetic Compatibility (EMC) and Product Safety compliance is based on International IEC and CISPR standards and their national equivalent along with national standards for Radio (wireless), Telecommunications (Modem) and Energy. Dell products have been verified to comply with the Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU of the European Parliament and the Council. Dell product does 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:

- EMC Class B product is intended for use in residential/domestic environments but may also be used in nonresidential/non-domestic environments.
- EMC Class A product is intended for use in non-residential/non-domestic environments.
   Class A product 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 regulatory 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. Dell products with the CE marking have been verified to comply with Energy Related Products (ErP) Directive 2009/125/EC of the European Parliament and of the Council. https://www.dell.com/ErP User Information. REACH (Registration, Evaluation, Authorization and Restriction of Chemicals), Regulation (EC) 1907/2006 of the European Parliament and of the Council is the European Union's (EU) chemical substances regulatory framework. Dell complies with the REACH regulation. For information on SVHC (Substances of Very High Concern), see www.dell.com/REACH. This products compliance documentation, such as this datasheet and the European Union Declaration of Conformity are available on the product support page, manuals tab http://www.dell.com/support. Additional compliance documentation for the product is available upon submitting a request at http://www.dell.com/regulatory compliance. Please include product identifiers such as marketing name, regulatory model, regulatory type and country that compliance information is needed in the email request.



### II. Global Environmental Information

Environmental (Voluntary Marks)					
Country Approval Compliance					
Global	Add Spec Version				

Adapter Certification and Declarations			
Country Authority/Mark			
Australia/New Zealand	Australia/NZ MEPS		
Canada	NRCan		
US – California Energy Commission	Adapter & Battery Charger		
European Union	Regulation EC No 278/2009		
South Korea	South Korea MEPS		

# III. 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  $\mu$ A with ground wire intact (if a ground wire is provided) and 500  $\mu$ 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 Product\_Compliance@Dell.com. Please include product identifiers such as marketing name, regulatory type and country for which compliance information is needed.

# IV. Declaration of Similarity

Object of the Declaration			
Product Type Notebook			
Regulatory Model Number	P88F		
Regulatory Type Number	P88F001		
Trade Name/ Trade Mark	DELL		
Marketing Name(s)	Vostro 5590		

Dell Inc. herby declares that the products identified by the product designations listed in this declaration are strictly identical in design (shape, opening, etc.) components, materials, manufacturing process, and markings except for product designation – Trade Name and/or Trade Mark as specified in this declaration.

The products may have very minor differences which do not impact the level of conformity. All products identified by the product designations in this declaration have the same level of conformity according to the certificate(s) provided.

The Trade Name / Trade Mark and/or Marketing Name(s) are the property of Dell Inc.



Any differences in the product designation are for marketing purposes only.

Date of Issue	August 16, 2019		Dell Inc.
Title	Dell Global Product	Signature on behalf of Dell Inc.	Compliance and Environmental Affairs

### V. 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.

# VI. Trade (Import/Export) Compliance Data

For any questions related to importing & exporting classification of Dell products, please obtain information from the following link: <a href="http://www.dell.com/learn/us/en/uscorp1/import-export">http://www.dell.com/learn/us/en/uscorp1/import-export</a> or send email request to <a href="https://www.dell.com/learn/us/en/uscorp1/import-export">www.dell.com/learn/us/en/uscorp1/import-export</a> or send email request to <a href="https://www.dell.com/uscorp1/import-export">www.dell.com/uscorp1/import-export</a> or send email request to <a href="https://www.dell.com/uscorp1/import-export">www.dell.com/uscorp1/import-export</a> or send email request in the email request.

# VII. Product Dimensions and Weight

Depth,	Width,	Height,	Weight, kg		
mm/cm	mm/cm	mm/cm			
237.1mm	356.56mm	Front 17.2mm Rear 18.7mm	1.82Kg (depending upon installed options)		

### VIII. Performance Data

ErP Lot 3 & Lot 26 information is in Appendices A and B, respectively.

For additional information on how Dell's commitment to energy efficiency benefits you go to: Reducing your Footprint

For additional information on ENERGY STAR models refer to the following database: <u>ENERGY STAR Product Finder</u>

The battery[ies] in this product cannot be easily replaced by users themselves.

\*Energy Consumption results are based solely upon the laboratory testing of the System Configuration and in accordance to the described service level. Energy consumption is tested at 230 Volts / 50 Hz.



### Energy Consumption<sup>1</sup>

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 <a href="here">here</a> for Dell's Client Energy Savings Calculator, Data Center Capacity Planner, and Monitor Power Savings Calculator. Information on Energy Efficiency is available <a href="here">here</a>.

### IX. Product Materials Information

Information on Dell's material use is available here.

Dell's Restricted Material for Use guidance document is available here.

- The case material is > PC+ABS <
- This product contains 2.4% post-consumer recycled plastic and /or closed loop recycled plastics (ITE-derived)\*

(\*Measured as a percentage of total amount of plastic (by weight) in the product as per guidance in EPEAT standard as applies to plastics parts)

Mechanical plastic parts <sup>2</sup> > 25 g are BFR/PVC free	⊠ Yes □ No □ NA
Marking of plastics parts greater than 25 grams is in accordance with ISO 11469 (see below)	⊠ Yes □ No □ NA
Printed circuit boards (without components) >25g are BFR PVC free <sup>3</sup>	☑ Yes □ No □ NA
Insulation materials of external electrical cables are PVC free	☐ Yes ☒ No ☐ NA
Insulation materials of internal electrical cables are PVC free	☐ Yes ☒ No ☐ NA
Product is BFR/PVC Free (Accessories & Options may not be BFR/PVC-Free, refer to spec ENV0199)	☐ Yes ☒ No

### Flame Retardants Used in Motherboard

Part	Flame Retardant		
Motherboard	ТВВРА		

<sup>&</sup>lt;sup>3</sup> Dell will adopt the BFR/CFR/PVC-free definition as set forth in the "iNEMI Position Statement on the Definition of 'Low-Halogen' Electronics (BFR/CFR/PVC-Free)." Plastic parts contain <1000 ppm (0.1 percent) of bromine (if the Br source is from BFRs) and <1000 ppm (0.1 percent) of chlorine if the Cl source is from CFRs, PVC or PVC copolymers. All printed circuit board (PCB) and substrate laminates contain bromine/chlorine totaling less than 1,500 ppm (0.15 percent), with maximum chlorine of 900 ppm (0.09 percent) and maximum bromine of 900 ppm (0.09 percent)



<sup>&</sup>lt;sup>1</sup> 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 <a href="https://www.dell.com/learn/us/en/uscorp1/dell-environment">https://www.dell.com/learn/us/en/uscorp1/dell-environment</a>

<sup>&</sup>lt;sup>2</sup> Mechanical plastic part: plastic parts that do not internally carry an electrical signal such as housings, brackets, bezels, latches, etc. that form the basic structure of the product and/or have mechanical functions. Plastic parts such as fans, connectors, printer fuser assemblies, etc. are not considered "mechanical plastic parts" in the context of this specification. Plastics parts do not contain no more than 0,1% weight (1000 ppm) bromine and 0,1% weight (1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants, and polyvinyl chloride (Per Dell Spec ENV0424)

### Flame Retardants Used in Mechanical Plastic Parts > 25 grams

Resin Material Name	Plastic Part Marking per ISO 11469:2016	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
FR3002	>(PC+ABS) <	FR(40)	halogen free organic phosphorus compounds	NA
MB1700	>(PC+ABS) <	FR(40)	halogen free organic phosphorus compounds	NA
GN5001RFD	>(PC+ABS) <	FR(40)	halogen free organic phosphorus compounds	NA
FR3021	>(PC/ABS-TD15) <	FR(40)	halogen free organic phosphorus compounds	NA
TMB1615	TMB1615 >(PC/ABS-TD15) < FR(40)		halogen free organic phosphorus compounds	NA
GN5151RFL	>(PC/ABS+TD15) <	FR(40)	halogen free organic phosphorus compounds	NA

### **Mercury Information**

Number of bulbs	Average per bulb	
If none, enter 0	0 mg	

### Additional information:

 RoHS and REACH declaration - see Materials - Restricted Material Compliance section at: www.dell.com/environmental\_information

Products MSDS (Material Safety Data Sheets):

Batteries: Battery MSDS Documentation and Declaration

Printer Toner and Ink: MSDS Documentation



# X. Packaging

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

Packaging Materials	Total Weight, (g)	Sustainable Material Content[1] (e.g Recycled content	% Sustainable Material		
i ackaging materials	rotal Weight, (g)	*,bio-based, Sustainable Forested materials)	APJ	DAO	EMEA
			region	region	region
Corrugated Fiberboard	367	Recycled Content	Min 35%	Min 35%	Min 35%
Molded paper pulp	190	Recycled content	100%	100%	100%
HDPE (including thermoformed) *	13	Recycled Content	0-80%	0-80%	0%

### XI. Batteries

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

Battery Description – Batteries	Battery Type	Battery Weight (kg)	Rating
CR-2032 coin cell	Lithium	0.0021	
Rechargeable Battery 3 cell	Lithium Ion	0.19	42Wh
Rechargeable Battery 4 cell	Lithium Ion	0.25	51Wh

# XII. Design for Environment

Dell systems are, when applicable, designed for easy assembly, disassembly, and servicing. For more information on Dell's Environmental product attributes please visit <a href="https://www.dell.com/learn/us/en/uscorp1/dell-environment?s=corp">https://www.dell.com/learn/us/en/uscorp1/dell-environment?s=corp</a>.

# XIII. 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, please visit <a href="www.dell.com/recyclingworldwide">www.dell.com/recyclingworldwide</a> and select the relevant country.



# XIV. Helpful Links

#### Environmental Policy

http://i.dell.com/sites/content/corporate/corp-comm/en/Documents/dell-global-environmental-policy.pdf

#### • Environment Website

https://www.dell.com/learn/us/en/uscorp1/dell-environment?s=corp

### Corporate Social Responsibility 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

### • Product Carbon Footprint

http://content.dell.com/us/en/corp/d/corp-comm/environment carbon footprint products

### • RoHS Compliance

https://www.dell.com/learn/us/en/uscorp1/envt-info-materials

### • REACH Compliance

www.dell.com/REACH

### Recycling Information

- http://www.dell.com/recycling
- Supplier Responsibility

http://content.dell.com/us/en/corp/d/corp-comm/standards-for-suppliers.aspx



# A Appendix A: ErP Lot 3 Product Energy Consumption Information

### European Union (EU) ErP Lot 3 (Commission Regulation (EC) No. 617/2013)

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

ErP Lot 3 provides certain exclusions based upon product type, screen size, and/or the amount of power consumed in idle mode. Product energy and acoustic information might be reported for products

that are out of scope of ErP Lot 3 for informational purposes only.

Category	Category A	Category B
Processor Speed in GHz	1.8	1.8
Number of Cores	4	4
Total Installed System Memory in GB	24	24
Graphics	Integrated	G3(with FB Data Width <= 128-bit)
WOL enabled in "Sleep" Mode	Yes	Yes
WOL enabled in "Off" Mode	No	No
As Tested: Lowest Power State	0.37	0.41
As Tested: Poff(W) WOL Disabled	0.37	0.41
As Tested: Poff(W) WOL Enabled		
As Tested: Psleep(W) WOL Disabled	1.05	1.22
As Tested: Psleep(W) WOL Enabled	1.05	1.22
As Tested: Pidle(W)	2.64	2.84
Base TEC Limit (kWh)	27	36
TEC Adders Limit (kWh)	11.00	24.00
Base + Adders TEC Limit (kWh)	38.00	60.00
Results TEC	9.78	10.68

Power Supply Model #	Internal or External	Link to efficiency report
HA65NS5-00	External	http://oee.nrcan.gc.ca/pml- lmp/index.cfm?action=app.formHandler&operation=details- details&ref=5470487&appliance=EPS&nr=1
LA65NS2-01	External	http://oee.nrcan.gc.ca/pml- lmp/index.cfm?action=app.formHandler&operation=details- details&ref=5485275&appliance=EPS&nr=1
LA45NM140	External	http://oee.nrcan.gc.ca/pml- lmp/index.cfm?action=app.formHandler&operation=details- details&ref=30289723&appliance=EPS&nr=1
DA45NM140	External	http://oee.nrcan.gc.ca/pml- lmp/index.cfm?action=app.formHandler&operation=details- details&ref=11776224&appliance=EPS&nr=1
HA45NM140	External	http://oee.nrcan.gc.ca/pml- lmp/index.cfm?action=app.formHandler&operation=details- details&ref=9873972&appliance=EPS&nr=1

<sup>\*</sup> 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<sup>4</sup>

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 <a href="here">here</a> for Dell's Client Energy Savings Calculator, Data Center Capacity Planner, and Monitor Power Savings Calculator. Information on Energy Efficiency is available <a href="here">here</a>.

Internal Power Supplies (not tested by ECOVA)

**Computers Category A:** 

Computers dategory A.			
Service Level	Sound Power	Statistical adder	Sound Pressure
	Declared mean A-		Declared mean A-
	weighted level for verification	weighted emission level	
	L <sub>WA,m</sub> (B)	K <sub>V</sub> (B)	L <sub>pA,m</sub> (dB)
HDD Accessing	2.2	0.4	14.5
ODD Accessing	N/A	N/A	N/A
Idle	2.2	0.4	14.5

**Computers Category B:** 

Computer's Category B.			
Service Level	Sound Power	Statistical adder	Sound Pressure
	Declared mean A-	for verification	Declared mean A-
	weighted level		weighted emission level
	L <sub>WA,m</sub> (B)	K <sub>V</sub> (B)	L <sub>pA,m</sub> (dB)
HDD Accessing	3.0	0.4	17.8
ODD Accessing	N/A	N/A	N/A
Idle	2.2	0.4	16.2

<sup>&</sup>lt;sup>4</sup> 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 <a href="https://www.dell.com/learn/us/en/uscorp1/dell-environment">https://www.dell.com/learn/us/en/uscorp1/dell-environment</a>



# B Appendix B: ErP Lot 26 Network Standby Energy Consumption Information

### European Union (EU) ErP Lot 26 (Commission Regulation (EC) No 801/2013)

The ErP Lot 26 regulation includes Network Standby power requirements to be provided by the manufacturer. This is applicable to multiple product categories. If no information is reported, it's assumed it is out of scope of ErP Lot 26.

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Network Standby Classification	LoNA	
Off/Standby - Watts	0.36	
Network Standby - Watts	1.17	
Number of Network Ports	1	
Location of 'Physical' Network Ports	Side	
Network Port Type	PCIE	
Network Port(s) Activated or Deactivated	Network Port(s) "Activated"	
Network Port Maximum Performance in GB/s	<insert></insert>	
Communication protocol used by equipment	Ethernet - TCPIP	
Description of how to assert Network Standby Mode		
Sequence of events to trigger automatic assertion of Network		
Standby Mode		
Notes regarding operation of the equipment EX: how the user	Information available @	
switches the equipment into network standby	www.dell.com/regulatory_compliance	
Default time for PM function to switch equipment into this mode	and/or	
Inactivity time required to enter Network Standby	www.dell.com/support	
Re-activation trigger		
Measurement Method		

