TABLE OF CONTENTS FOR PRODUCT SAFETY, EMC & ENVIRONMENTAL DATASHEET

Regulatory
I. **Product Safety**
II. **Electromagnetic Compatibility**
III. **Ergonomics, Acoustics, and Hygienics**
IV. **Power Cords and User Documentation**
V. **Datasheet Responsible Party Name and Address**

Environmental
VI. **Product Materials Information**
VII. **Energy and Acoustics Data**
VIII. **Design for Environment**
IX. **Recycling/End-of-Life Service Information**
X. **Packaging and Printing**
XI. **Batteries**
XII. **Dell Corporate Environmental Information**

I. **PRODUCT SAFETY**

The product has been certified and bears the Mark, as applicable, of the Product Safety authorities as indicated below.

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Authority or Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>IRAM</td>
</tr>
<tr>
<td>Belarus</td>
<td>BELLIS</td>
</tr>
<tr>
<td>Canada</td>
<td>SCC</td>
</tr>
<tr>
<td>European Union</td>
<td>CE</td>
</tr>
<tr>
<td>Germany</td>
<td>NEMKO</td>
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<tr>
<td>IECCEE</td>
<td>IECCE CB</td>
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<tr>
<td>Israel</td>
<td>SII</td>
</tr>
<tr>
<td>Mexico</td>
<td>NYCE or NOM</td>
</tr>
<tr>
<td>Russia</td>
<td>GOST</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>KSA ICCP</td>
</tr>
<tr>
<td>South Africa</td>
<td>NRCS</td>
</tr>
<tr>
<td>Taiwan</td>
<td>BSMI</td>
</tr>
<tr>
<td>Ukraine</td>
<td>UKRTEST or UKRSERTCOMPUTER</td>
</tr>
<tr>
<td>United States</td>
<td>NRTL</td>
</tr>
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</table>

II. **ELECTROMAGNETIC COMPATIBILITY**

The product has been certified and bears the Mark, as applicable, of the EMC authorities as indicated below.

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Authority or Mark</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia / New Zealand</td>
<td>ACMA or C-Tick</td>
<td>Class A</td>
</tr>
<tr>
<td>Belarus</td>
<td>BELLIS</td>
<td>Class A</td>
</tr>
<tr>
<td>Canada</td>
<td>ICES</td>
<td>Class A</td>
</tr>
<tr>
<td>European Union</td>
<td>CE</td>
<td>Class A</td>
</tr>
<tr>
<td>Israel</td>
<td>SII</td>
<td>Class A</td>
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<tr>
<td>Japan</td>
<td>VCCI</td>
<td>Class A</td>
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<tr>
<td>Russia</td>
<td>GOST</td>
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</tr>
<tr>
<td>South Africa</td>
<td>SABS</td>
<td>Class B</td>
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<td>South Korea</td>
<td>KCC</td>
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<td>Taiwan</td>
<td>BSMI</td>
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<tr>
<td>Ukraine</td>
<td>UKRTEST or UKRSERTCOMPUTER</td>
<td>Class A</td>
</tr>
<tr>
<td>United States</td>
<td>FCC</td>
<td>Class A</td>
</tr>
</tbody>
</table>

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1 The above-listed Product Safety certifications may vary depending upon the location of the factory and specific product configuration. Certification marks may not be applied on products for countries outside the purchaser’s country.

2 The above-listed EMC certifications may vary depending upon the location of the factory and specific product configuration. Certification marks may not be applied on products for countries outside the purchaser’s country.
III. ERGONOMICS, ACOUSTICS AND HYGIENICS

The product has been certified and bears the Mark, as applicable, of the Ergonomics, Acoustics and Hygienics authorities as indicated below.

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Authority or Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>GS</td>
</tr>
<tr>
<td>Russia</td>
<td>GOST</td>
</tr>
</tbody>
</table>

IV. 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.

V. DATASHEET RESPONSIBLE PARTY NAME AND ADDRESS

Dell Inc.
Department: Global Regulations and Standards
MS: PS4-30
Round Rock, Texas 78682, USA
512-338-4400
Regulatory_Compliance@Dell.com

VI. PRODUCT MATERIALS INFORMATION

Dell is a member of the Electronic Industry Citizenship Coalition (http://www.eicc.info/)

Through internal design controls and supply chain declarations, this system has been verified to comply with the EU RoHS Directive. For more details, see www.dell.com/rohsinfo.

All Dell products shipping directly into China which are manufactured on or after March 1st, 2007, will be China RoHS compliant. For more details, see www.dell.com/chinarohs.

All Dell products shipping to South Korea are compliant with South Korea RoHS requirements, declarations here.

Information on Japan RoHS (J-MOSS) chemical disclosures is available here.

REACH (Registration, Evaluation, Authorization and Restriction of Chemicals, EC 1907/2006) is the European Union’s (EU) chemical substances regulatory framework. Dell complies with the REACH directive. For more details, see www.dell.com/REACH

Dell’s Energy Star qualified products are listed on the EPA website here.

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3 The above-listed Ergonomics, Acoustics and Hygienics certifications may vary depending upon the location of the factory and specific product configuration. Certification marks may not be applied on products for countries outside the purchaser’s country.

4 Waste Handling. Local regulations should be observed when disposing of this product due to the presence of the materials and substances as listed above.
Restricted Materials List
Dell provides a detailed restricted materials guidance document at: Restricted Materials Guide. Below is a subset of those materials. Dell products do not contain any of the following substances (in concentrations exceeding legal threshold limits):

- Asbestos (EU 76/769/EEC)
- Azo dyes/colorants in components that come into direct contact with human skin
- Cadmium and its compounds (except for use in applications exempted by the EU RoHS Directive)
- Class I and Class II CFCs (chlorofluorocarbons) and HCFCs (hydrofluorocarbons)
- Chloroparaffins, short chained (10-13 carbon chain)
- Chromium VI and its compounds (except for use in applications exempted by the EU RoHS Directive)
- Halogenated dioxins or furans (i.e. polychlorinated dibenzodioxines, polychlorinated dibenzofurans)
- Lead and its compounds (except for use in applications exempted by the EU RoHS Directive)
- Mercury (except for use in applications exempted by the EU RoHS Directive)
- Nickel and its compounds in components that are likely to result in prolonged skin exposure
- PCBs (polychlorobiphenyls) or PCTs (polychloroterphenyls)
- PBBs (polybromobiphenyls) or PBDEs (polybrominated diphenylethers)
- PVC (polyvinyl chloride) in plastic parts greater than 25 grams
- Polychlorinated naphthalenes (PCNs)
- Tributyl tin (TBT) and triphenyl tin (TPT) compounds

Flame Retardants
Flame retardants are occasionally needed to meet strict fire safety codes. Dell avoids the use of Brominated Flame Retardants (BFRs) when possible by using plastics that can be flame retarded with non-halogenated compounds and by using design strategies that reduce the need to use flame retarded plastics all together. Through industry partnerships Dell is actively working to evaluate the viability of halogen-free alternatives and to help establish supply chain capability and capacity.

- Dell currently prohibits the use of PBBs and PDBEs (including DecaBDE) for all applications.
- Dell currently prohibits the use of all other BFRs (including TBBP-A and HBCD) in plastics parts for many products including desktops, notebooks, and servers.
- Power and signal electrical cable may use PVC as an insulating material to ensure product safety.
- All cover/housing plastics > 25 grams are halogen free.
- Printed circuit boards with components are not all halogen free.
- Plastic parts > 25 grams are free from flame retardant substances/preparations above 0.1% classified as R45/46, R50/51/53, and R60/61.
- More information can be viewed at: Halogen Position.

VII. ENERGY AND ACOUSTICS DATA

Dell now offers an online tool to help Enterprise customers predict realistic values for system heat, power consumption, acoustic sound power level (per ISO9298), total weight, total current, flow rate, air temperature rise, and other performance data. Because these measurements are highly dependant on configuration, the tool allows the user to specify processor types, speeds, memory, PCI cards, HDDs, and power supplies.

Energy consumption is measured using the industry standard SPECjbb2005 benchmark at 100% utilization for baseline power measurements. Customers can also change the application loads by selecting 'idle' or 'scientific' under the edit tab. The 'scientific' reading is a more realistic measurement for processor intensive applications or cluster systems.

Please visit: http://www.dell.com/calc for the datacenter calculator tool. Also visit http://www.dell.com/energy for information on Dell’s other energy initiatives.
VIII. DESIGN FOR ENVIRONMENT

Longevity and Upgrading
- To extend the life of your system, you can install or upgrade certain system components (e.g., microprocessor, memory, expansion cards, and storage devices).
- Upgrading can be done with commonly available tools.
- Spare parts are available after the end of production.

Design for Recyclability
- Minimal use of composite structure material.
- Minimal use of non-separable connections, such as gluing and welding between different materials.
- Plastic materials in covers/housing have no surface coating.
- Plastic parts > 25 grams have materials codes according to ISO 11469 referring ISO 1043
- Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.
- Labels are easily separable.

IX. 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, visit www.dell.com/recyclingworldwide and select the relevant country.

- EU WEEE: Dell is dedicated to meeting the requirements of the European Union’s WEEE (Waste from Electrical and Electronic Equipment) Directive and is engaged in the development of country-specific implementation schemes to comply with the national WEEE laws. The directive aims to reduce the waste arising from electrical and electronic equipment, and improve the environmental performance of everything involved in the life cycle of electrical and electronic equipment. The EU WEEE mark is applied to products sold in Europe and many products worldwide. EU recycling information can be found at www.euro.dell.com/recycling.

The following text can be found translated into all pertinent languages in the product’s user documentation.

Waste Electrical and Electronic Equipment (WEEE) Directive
In the European Union, this label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling. For information on how to recycle this product in your country, please visit: www.euro.dell.com/recycling.
• Turkey WEEE/RoHS: Dell is dedicated to meeting the requirements of Turkey’s Regulation on the Restriction of the Use of Hazardous Substances in Electrical and Electronic Equipment. The following text can be found translated into Turkish in the product’s user documentation:

English:
Waste Electrical and Electronic Equipment (WEEE) Directive
In the European Union, this label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling. For information on how to recycle this product in your country, please visit: www.euro.dell.com/recycling. EEE complies with Directive ‘Regulation on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment’.

Turkish:
Waste Electrical and Electronic Equipment (WEEE) Yönergeleri

X. PACKAGING AND PRINTING

• No CFCs (chlorofluorocarbons), HCFCs (hydrofluorocarbons) or other ozone depleting substances are used in packaging material.
• Chromium, lead, mercury, or cadmium are not intentionally added to packaging materials and are not present in a cumulative concentration greater than 100 ppm as incidental impurities.
• No halogenated plastics and/or polymers are used for packaging material.
• Dell complies with the EU Directive 94/62/EEC.
• Packaging materials are labeled in accordance with DIN 6120.

<table>
<thead>
<tr>
<th>Packaging Materials</th>
<th>Weight, kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPE (top)</td>
<td>1.29</td>
</tr>
<tr>
<td>Corrugated Cardboard (carton)</td>
<td>2.65</td>
</tr>
<tr>
<td>Corrugated Cardboard (gift box)</td>
<td>0.95</td>
</tr>
</tbody>
</table>

XI. BATTERIES

• Batteries in this product are not based on mercury, lead or cadmium technologies.
• The product documentation includes instructional information on the proper removal and disposal of the batteries used in this product.

XII. DELL CORPORATE ENVIRONMENTAL INFORMATION

Information on Dell’s Environmental initiatives, policies, programs and goals can be found at www.dell.com/environment.

Product Safety, EMC and Environmental Datasheets for Dell products are located at: www.dell.com/regulatory_compliance_datasheets