

#### MARKETING NAME\*: Studio 540, Studio 540n REGULATORY MODEL: DCMA REGULATORY TYPE: 08006 EFFECTIVE DATE: January 12, 2011

Dell Inc. www.dell.com

# TABLE OF CONTENTS FOR PRODUCT SAFETY, EMC & ENVIRONMENTAL DATASHEET

#### Regulatory

- I. <u>Product Safety</u>
- II. Electromagnetic Compatibility
- III. Ergonomics, Acoustics, and Hygienics
- IV. Power Cords and User Documentation
- V. Datasheet Responsible Party Name and Address
- VI. Trade Import/Export Compliance Data

#### Environmental

- VII. System Dimension and Weight
- VIII. Declarations and Certifications
- IX. Performance Data
- X. Product Materials Information
- XI. Packaging
- XII. <u>Batteries</u>
- XIII. Design for Environment
- XIV. Recycling/End-of-Life Service Information
- XV. Dell Corporate Environmental Information

#### I. PRODUCT SAFETY<sup>1</sup>

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

| Country/Region | Authority or Mark   |
|----------------|---------------------|
| Argentina      | IRAM                |
| Belarus        | BELLIS              |
| Cambodia       | ISC                 |
| Canada         | SCC                 |
| China          | CNCA or CCC         |
| Croatia        | KONCAR              |
| European Union | CE                  |
| IECEE          | IECEE CB            |
| Israel         | SII                 |
| Kazakhstan     | OTAN – CKT          |
| Kenya          | KEBS                |
| Mexico         | NYCE or NOM         |
| Moldova        | INSM                |
| Nigeria        | SONCAP              |
| Norway         | NEMKO               |
| Russia         | GOST                |
| Saudi Arabia   | KSA ICCP            |
|                | Safety              |
| Singapore      | Registration Scheme |
| South Africa   | NRCS                |
| Taiwan         | BSMI                |
|                | UKRTEST or          |
| Ukraine        | UKRSERTCOMPUTER     |
| United States  | NRTL                |
| Uzbekistan     | STZ                 |

<sup>\*</sup> Notice: This product has been assigned a unique regulatory model and regulatory type that is imprinted on the product shipping invoice and 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. Requests for specific information on product regulatory approvals should reference the assigned product regulatory model and type.

<sup>&</sup>lt;sup>1</sup> The above-listed Product Safety certifications may vary depending upon the location of the Dell factory and specific product configuration. Certification marks may not be applied on products for countries outside the purchaser's country.



#### II. ELECTROMAGNETIC COMPATIBILITY<sup>2</sup>

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

| Country/Region     | Authority or Mark | Class   |
|--------------------|-------------------|---------|
| Australia /        | ACMA              |         |
| New Zealand        | or C-Tick         | Class B |
| Belarus            | BELLIS            | Class B |
| Bosnia             |                   |         |
| & Herzegovina,     |                   |         |
| Montenegro, Serbia | KVALITET          | Class B |
| Canada             | ICES              | Class B |
| China              | CNCA or CCC       | Class B |
| Croatia            | KONCAR            | Class B |
| European Union     | CE                | Class B |
| Israel             | SII               | Class B |
| Japan              | VCCI              | Class B |
| Kazakhstan         | OTAN – CKT        | Class B |
| Moldova            | INSM              | Class B |
| Norway             | NEMKO             | Class B |
| Russia             | GOST              | Class B |
| South Africa       | SABS              | Class B |
| South Korea        | KCC               | Class B |
| Taiwan             | BSMI              | Class B |
|                    | UKRTEST or        |         |
| Ukraine            | UKRSERTCOMPUTER   | Class B |
| United States      | FCC               | Class B |
| Uzbekistan         | STZ               | Class B |
| Vietnam            | ICT               | Class B |

# III. ERGONOMICS, ACOUSTICS AND HYGIENICS<sup>3</sup>

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

| Country/Region | Authority or Mark |
|----------------|-------------------|
| Russia         | GOST              |

#### 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.

<sup>&</sup>lt;sup>2</sup> The above-listed EMC certifications may vary depending upon the location of the Dell factory and specific product configuration. Certification marks may not be applied on products for countries outside the purchaser's country.

<sup>&</sup>lt;sup>3</sup> The above-listed Ergonomics, Acoustics and Hygienics certifications may vary depending upon the location of the Dell factory and specific product configuration. Certification marks may not be applied on products for countries outside the purchaser's country.



### 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 <u>Regulatory\_Compliance@Dell.com</u>

# VI. TRADE (IMPORT/EXPORT) COMPLIANCE DATA

| System US Harmonized Tariff System (USHTS)<br>Number  | 8471.50.0150 |
|---|--------------|
| System US Export Control Classification Number (ECCN) | 4A994        |

For additional questions regarding importing & exporting classification of Dell products, please send an e-mail to: <u>US\_Export\_Classification@Dell.com</u>

#### VII. SYSTEM DIMENSION AND WEIGHT

| Depth, cm | Width, cm | Height, cm | Weight, kg |
|-----------|-----------|------------|------------|
| 43.5      | 17        | 36.2       | 12.5       |

#### **VIII. DECLARATIONS AND CERTIFICATIONS**

This system received the following approvals and may be labeled with one or more of these marks depending on point of purchase:

| Approvals               | Certificate # | Yes / No /<br>N/A |
|-------------------------|---------------|-------------------|
| China: CECP             | TBD           | Yes               |
| Energy Star 5.0 Capable | N/A           | Yes               |

\* EPEAT registered where applicable/supported see product links for respective registration status by country: <u>Desktops</u>, <u>Monitors</u>, <u>Notebooks</u>, <u>Workstation-Desktops</u>, and <u>Workstation-Notebooks</u>.

Information on Dell's participation in various Eco-labels and Green Standards can be found here.

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 <u>www.dell.com/rohsinfo</u>.

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 <u>www.dell.com/chinarohs</u>.

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 <u>here</u>.

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 <a href="https://www.dell.com/REACH">www.dell.com/REACH</a>

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

#### IX. PERFORMANCE DATA

#### **System Configuration**

The Energy Consumption and Declared Noise Emissions data is based on a configuration including:

| Processor     | Intel E4700, 2.6 GHz |
|---------------|----------------------|
| Hard Drive(s) | 320G                 |
| CD-ROM        | DVD RW               |
| Memory        | 1GB @ 800MHz * 2     |
| Video Card    | Integrated           |
| Sound Card    | Integrated           |
| Network Card  | Integrated           |
| Power Supply  | 300W                 |

#### **Energy Consumption<sup>4</sup>**

| Service Level                       | Energy Consumption (Wattage) | Description of Service Level   |
|-------------------------------------|------------------------------|--|
| *Maximum                            | 111.9                        | The data provided is the highest wattage<br>reading while running an Industry<br>Benchmark suite of tests. |
| Idle                                | 49.08                        | As specified by the EPA Computer spec<br>4.0 or system is sitting at the main<br>Windows screen.           |
| ACPI-S3 "Standby"<br>Mode (WOL on ) | 1.97                         | Suspend-to-RAM (low power mode).   |
| ACPI-S4<br>"Hibernate" Mode         | 1.33                         | Suspend-to-Disk (a lower power mode).  |
| Off-S5<br>(LPM-OFF)                 | 1.32                         | System is turned off with the Low power<br>Mode feature disabled via the BIOS.                             |

\*Maximum 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. Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour. Off data is not meant to show compliance to US Executive Order 13221. When applicable, Dell product information related to US Executive Order 13221 may be obtained at: <a href="http://oahu.lbl.gov/index.html">http://oahu.lbl.gov/index.html</a>.

<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.



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

| Service Level        | Sound Power<br>(L <sub>WAd</sub> , bels)<br>(1 bel=10 decibels, re 10 <sup>-12</sup><br>Watts) | Sound Pressure<br>Operator Position<br>(Table-Top Mode/ Floor-<br>Standing Mode)<br>(L <sub>pAm</sub> , decibels) (re 2x10 <sup>-5</sup> Pa) | Sound Pressure<br>Bystander Position<br>(Table-Top Mode/ Floor-<br>Standing Mode)<br>(L <sub>pAm</sub> , decibels) (re 2x10 <sup>-5</sup> Pa) |
|----------------------|--|--|---|
| CD Drive Accessing   | 5.6  | 44.0/40.0  | 38.7/37.6   |
| Hard Drive Accessing | 4.1  | 27.7/22.6  | 26.2/22.7   |
| Idle                 | 4.1  | 27.4/22.6  | 25.9/22.6   |

# X. PRODUCT MATERIALS INFORMATION<sup>5</sup>

#### **Restricted Substances**

This Dell product does **NOT** contain any of the following substances (in concentrations exceeding legal threshold limits):

- Asbestos
- 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

For information on Japan RoHS (J-MOSS) chemical disclosures: <u>www.dell.com/japan\_rohs</u>.

#### Additional Materials Information

- The cables may use PVC as an insulating material to ensure product safety
- The case material is Sheet Metal, ABS
- Product may contain post-industrial recycled content (plastics, metal, glass)

<sup>&</sup>lt;sup>5</sup> Waste Handling. Local regulations should be observed when disposing of this product due to the presence of the materials and substances as listed above.



| Flame Retardants  | Used in Mechanica   | I Plastic Parts > 1                       | 25 grams and Motherboards  |
|-------------------|---------------------|---|----------------------------|
| I fame netaluants | USEU III MECHAIIICA | $\mathbf{n}$ i nastic i ants $\mathbf{z}$ | 25 grains and would boards |

| Part   | Flame Retardant          | ISO 1043-4                                   |
|--|--------------------------|--|
| Motherboard  | 3.Halogen-bromine: TBBPA | 3.FR 16 for aromatic<br>brominated compounds |
| Mechanical Plastic parts > 25 grams:<br>(i.e. Hips, PC+ABS, ABS) |                          |  |
| Part 1 Material: Front Bezel (ABS)                               | N/A                      | N/A  |
| Part 2 Material: SubFrame (ABS)                                  | N/A                      | N/A  |
| Part 3 Material: Sliding Door (ABS)                              | N/A                      | N/A  |

#### XI. PACKAGING

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 or polymers are used for packaging material. Dell complies with the EU Directive 94/62/EEC.

| Packaging Materials  | Weight, kg |
|----------------------|------------|
| Corrugated Cardboard | 1.67       |
| LDPE                 | 0.20       |

Printed user documentation is bleached in a chlorine-free process. (Europe Only)

#### XII. BATTERIES

Batteries in this product are not based on mercury, lead or cadmium technologies. The batteries used in this product are in compliance with EU Directive 91/157/EEC, EU Directive 93/86/EEC, EU Directive 98/101/EEC, and EU Battery Directive 2006/66/EC.

The product documentation includes instructional information on the proper removal and disposal of the batteries used in this product. Below is a listing of batteries present in the product:

| Battery Description – Internal Batteries | Battery Type |
|--|--------------|
| 3-V CR2032 Coin Cell                     | Lithium      |

#### XIII. DESIGN FOR ENVIRONMENT

#### Longevity and Upgrading

Dell systems are, when applicable, designed for easy assembly, disassembly, and servicing. To extend the life of your system, you can install or upgrade certain system components (e.g., microprocessor, memory, expansion cards, and storage devices). Spare parts are available after the end of production for up to five years, or otherwise through the warranty period.



#### Recyclability

For recyclability, this system incorporates the following design guidelines:

- EU WEEE mark is applied to products sold in Europe, EU recycling information can be found at www.euro.dell.com/recycling
- Minimal use of non-separable connections, such as gluing and welding between different materials.
- Minimal use of composite structure materials.
- Mechanical plastic parts greater than 100 grams consist of one material or of easily separable materials.

# XIV. 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.

# XV. DELL CORPORATE ENVIRONMENTAL INFORMATION

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

Product Safety, EMC and Environmental Datasheets for Dell products are located at: <u>www.dell.com/regulatory\_compliance\_datasheets</u>