

Built for business



SECURE

Only Dell provides innovative data security solutions that meet security challenges and business concerns head-on to protect your most critical and at-risk asset, your data. With Dell Data Security solutions, end users can work where and how they want knowing that data is protected. - Dell Data Guardian protects data where ever it goes. - Dell Endpoint Security Suite, powered by Cylance, stops up to 99% of malware.



MANAGEABLE

The world's most manageable desktop is built to allow flexible and automated BIOS and system configurations through Dell Client Command Suite free tools. We make it easy to deploy, monitor and update your OptiPlex fleet.



RELIABLE

Features a reliable, built-to-last chassis that has undergone extensive testing including military-grade MIL-STD 810G, as well as component, accessory and lifecycle testing to ensure premium quality from concept to production.

A. Source: "Analysis of Customer Hardware Failure Rates Global qualitative and quantitative customer study" October 2017. GLG Expert Interviews and GLG Survey of Information Technology Decision Makers (n=1,000). Respondents world-wide ranked Dell as first for PC quality benchmarking.

B. Source: IDC CY16Q4 WW Client PC Sub Form Factor Forecast Tracker.

C. 1 SupportAssist not available on Linux, Windows 10S, Windows RT, Windows 10 CM/JT Government Edition, Android, Ubuntu or Chrome based products. SupportAssist automatically detects and proactively alerts Dell to: operating system issues, software upgrades, driver updates and patches, malware, virus infected files, failures of hard drives, batteries, memory, internal cables, thermal sensors, heat sinks, fans, solid state drives and video cards.

2 Predictive analysis failure detection includes hard drives, solid state drives and batteries.



Product Compliance Datasheet

MARKETING NAME.....OptiPlex 7060 Micro / OptiPlex 5060 Micro / OptiPlex 3060 Micro

REGULATORY MODEL.....D10U

REGULATORY TYPE.....D10U003

EMC EMISSIONS CLASS.....B

EFFECTIVE DATE.....May 17, 2018

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I. Statement of Compliance

This equipment has been determined to be compliant with the applicable standards, regulations, and directives for the countries where the equipment is marketed. The equipment is affixed with regulatory marking and text as necessary for the country/agency. Dell manufactures and markets Multimedia Equipment (MME), Information Technology Equipment (ITE), Audio Visual Equipment (A/V), Industrial, Scientific, Medical Equipment (ISM) or combinations of these. Generally, equipment Safety and EMC compliance is based on International IEC and CISPR standards and their national equivalent along with national standards for Radio (wireless), and Energy. Dell products have been verified to comply with the EU RoHS Directive 2011/65/EU. Dell equipment 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 equipment is intended for use in residential/domestic environments but may also be used in nonresidential/non-domestic environments.
- EMC Class A equipment is intended for use in non-residential/non-domestic environments. Class A equipment may also be utilized in residential/domestic environments but may cause interference and require the user to take adequate corrective measures.

For Safety and EMC compliance, this equipment has been assigned a unique regulatory model and regulatory type that is imprinted on the equipment regulatory labeling to provide traceability to the regulatory approvals noted on this datasheet. This datasheet applies to any equipment 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 www.dell.com/REACH. Compliance documentation, such as certification or Declaration of Compliance for the equipment is available upon request to product_compliance@dell.com. Please include equipment identifiers such as marketing name, regulatory model, regulatory type and country that compliance information is needed in request.

II. Global Environmental Information

Environmental (Voluntary Marks)		
Country	Approval	Compliance
Global	ENERGY STAR (Configuration Dependent)	Spec Version 6.1
Global	TCO Certified Desktop 5.0	
China	CECP	Yes
China	CEC	Yes
Japan	Green PC Label	Yes
South Korea	Eco Label	Yes
Taiwan	Greenmark	Yes
Varies by Country – see EPEAT.net	EPEAT (Configuration Dependent)	Gold





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 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 Product_Compliance@Dell.com. Please include product identifiers such as marketing name, regulatory type and country for which compliance information is needed.

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. Trade (Import/Export) Compliance Data

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

VI. Product Dimensions and Weight

Depth, mm/cm	Width, mm/cm	Height, mm/cm	Weight, kg
178mm	36mm	182mm	2.82 Kg ((depending upon installed options)

For Display, Imaging products please refer to the user manual for weight and dimension information.

VII. Performance Data

ErP Lot 3 & Lot 26 information is located in section XIV Appendix A

For additional information on ENERGY STAR models refer to the following databases:

<http://www.dell.com/en-us/work/learn/power-and-cooling-energy-star>

USA: <https://www.energystar.gov/productfinder/>

EU: <http://www.eu-energystar.org/db-currentlists.htm>



Computers:

Service Level	Energy Consumption (Wattage)	BTU Calculation	Description of Service Level
*Maximum	95.46	326.47	The system is running programs to maximize the power consumption.
Idle Mode	9.18	31.40	As specified EPA Energy Star Computer mode.
S3 "Sleep" Mode	1.33	4.53	Suspend-to-RAM (low-power/sleep mode)
Off	0.31	1.07	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)	0.18	0.62	AC adapter connected to mains with system detached otherwise known as "No-load" condition.

* **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 [here](#) for Dell's Client Energy Savings Calculator, Data Center Capacity Planner, and Monitor Power Savings Calculator. Information on Energy Efficiency is available [here](#)

* 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

VIII. 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, > Metal: SGCC <
- This product contains 35.5% post-consumer recycled plastic/closed loop recycled plastics (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 ¹ > 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

¹ 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)



Printed circuit boards (without components) >25g are BFR PVC free ²	☒ 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	3060 & 5060 : Brominated Epoxy 7060 : Phosphorus-based flame retardant

Flame Retardants Used in Mechanical Plastic Parts > 25 grams

Resin Material Name	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
N/A	N/A	N/A	N/A	N/A

Mercury Information

Number of bulbs	Average per bulb
0	N/A

Additional information:

- RoHS and REACH declaration - see product material information 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](#)

² 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)



IX. Packaging

Information on Dell's sustainable packaging effort available [here](#).

Additional materials restricted in Packaging as per Dell's Restricted Material Guidance document found [here](#).

Packaging Materials	Total Weight, (kg)	Sustainable Material Content ³ (e.g Recycled content *, bio-based, Sustainable Forested materials)	% Sustainable Material		
			APJ region	DAO region	EMEA region
Corrugated Fiberboard	0.69	Recycled Content	Min 50%	Min 50%	Min 50%
LDPE (Including EPE Foam)	0.01	Recycled Content	0-80%	0-80%	0%
Molded paper pulp	0.04	Recycled Content	100%	100%	100%
HDPE (including thermoformed) *	N/A	Recycled Content	0-80%	0-80%	0%
Molded Bamboo	N/A	Non-wood, biobased material	100%	100%	100%
Wheat Straw	N/A	Non-wood, biobased material	100%	100%	100%
Mushroom	N/A	Non-wood, biobased material	100%	100%	100%
LDPE Bags	0.01	NA	0%	0%	0%
EPS	N/A	NA	0%	0%	0%
Other, please specify	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	0.0032

XI. Design for Environment

Dell systems are, when applicable, designed for easy assembly, disassembly, and servicing.

For more information on product Recyclability please visit www.dell.com/environmental_information

³ Non-wood, biobased material may include, but is not limited to: bagasse, bamboo, mushroom, straw, agricultural waste or byproduct.
^{*} Recycled content in packaging material is supplier dependent.



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

XIII. 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/environmental_information
- **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>
- **Product Carbon Footprint**
http://content.dell.com/us/en/corp/d/corp-comm/environment_carbon_footprint_products
- **RoHS Compliance**
www.dell.com/rohsinfo
- **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>



A Appendix A: ErP Lot 3 Product Energy Consumption Information

ErP Lot 3 (EU 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 D	Category C	Category B
Processor Speed in GHz	3.2	3.2	3.2
Number of Cores	6	6	2
Total installed System Memory in GB	32	2	32
Graphics	Integrated	Integrated	Integrated
WOL enabled in "Sleep" Mode	Yes	Yes	Yes
WOL enabled in "Off" Mode	No	No	No
As Tested: Lowest Power State	0.31	0.30	0.31
As Tested: PoFF(W) WOL Disabled	0.31	0.30	0.31
As Tested: PoFF(W) WOL Enabled			
As Tested: Psleep(W) WOL Disabled	1.21	1.21	1.33
As Tested: Psleep(W) WOL Enabled	1.33	1.41	1.43
As Tested: Pidle(W)	7.52	8.27	9.18
Base TEC Limit (kWh)	150.00	134	112
TBC Adders Limit (kWh)	53.00	25.00	55.00
Base + Adders TEC Limit (kWh)	203.00	159.00	167.00
Results TEC	28.42	31.03	34.30

Power Supply Model #	Internal or External	Link to efficiency report
HA130PM160	External	http://oee.nrcan.gc.ca/pmi-lmp/index.cfm?action=app.formHandler&operation=details-details&ref=16667999&appliance=EPS&nr=1
DA130PE1-00	External	http://oee.nrcan.gc.ca/pmi-lmp/index.cfm?action=app.formHandler&operation=details-details&ref=5478056&appliance=EPS&nr=1
LA130PM121	External	http://oee.nrcan.gc.ca/pmi-lmp/index.cfm?action=app.formHandler&operation=details-details&ref=14419074&appliance=EPS&nr=1
LA65NS2-01	External	http://oee.nrcan.gc.ca/pmi-lmp/index.cfm?action=app.formHandler&operation=details-details&ref=5485275&appliance=EPS&nr=1
HA65NS5-00	External	http://oee.nrcan.gc.ca/pmi-lmp/index.cfm?action=app.formHandler&operation=details-details&ref=5470487&appliance=EPS&nr=1
DA65NM111-00	External	http://oee.nrcan.gc.ca/pmi-lmp/index.cfm?action=app.formHandler&operation=details-details&ref=5478051&appliance=EPS&nr=1
LA90PM111	External	http://oee.nrcan.gc.ca/pmi-lmp/index.cfm?action=app.formHandler&operation=details-details&ref=14419075&appliance=EPS&nr=1
DA90PM111	External	http://oee.nrcan.gc.ca/pmi-lmp/index.cfm?action=app.formHandler&operation=details-details&ref=14419075&appliance=EPS&nr=1



lmp/index.cfm?action=app.formHandler&operation=details-
details&ref=5478054&appliance=EPS&nr=1

* **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 [here](#) for Dell's Client Energy Savings Calculator, Data Center Capacity Planner, and Monitor Power Savings Calculator. Information on Energy Efficiency is available [here](#)

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For more details visit www.dell.com/environmental_information

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

For Optiplex 7060 Micro Computers Category B:

Service Level	Sound Power (L_{WAd} , bels) (1 bel=10 decibels, re 10^{-12} Watts)	Sound Pressure Bystander Position (L_{pAn} , decibels) (re 2×10^{-5} Pa)
Hard Drive Accessing	3.3	20.6
Optical Drive Accessing	N/A	N/A
Idle	3.3	18.4

Computers Category C:

Service Level	Sound Power (L_{WAd} , bels) (1 bel=10 decibels, re 10^{-12} Watts)	Sound Pressure Bystander Position (L_{pAn} , decibels) (re 2×10^{-5} Pa)
Hard Drive Accessing	3.2	20.0
Optical Drive Accessing	N/A	N/A
Idle	3.2	19.4

Computers Category D:

Service Level	Sound Power (L_{WAd} , bels) (1 bel=10 decibels, re 10^{-12} Watts)	Sound Pressure Bystander Position (L_{pAn} , decibels) (re 2×10^{-5} Pa)
Hard Drive Accessing	3.2	19.6
Optical Drive Accessing	N/A	N/A



Idle	3.2	19.9
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**For Optiplex 5050 Micro
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 2×10^{-5} Pa)
Hard Drive Accessing	3.3	20.6
Optical Drive Accessing	N/A	N/A
Idle	3.3	18.9

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 2×10^{-5} Pa)
Hard Drive Accessing	3.3	20.8
Optical Drive Accessing	N/A	N/A
Idle	3.3	18.7

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 2×10^{-5} Pa)
Hard Drive Accessing	3.3	19.8
Optical Drive Accessing	N/A	N/A
Idle	3.3	18.4

**For Optiplex 3060 Micro
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 2×10^{-5} Pa)
Hard Drive Accessing	3.3	20.2
Optical Drive Accessing	N/A	N/A
Idle	3.3	18.7



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 2×10^{-5} Pa)
Hard Drive Accessing	3.3	20.5
Optical Drive Accessing	N/A	N/A
Idle	3.3	18.5

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 2×10^{-5} Pa)
Hard Drive Accessing	3.3	20.2
Optical Drive Accessing	N/A	N/A
Idle	3.3	20.1



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

ErP Lot 26 (EU 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.



CERTIFICADO DE CONFORMIDADE

CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. UL-BR 15.0495

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Certificado de conformidade válido somente acompanhado das páginas de 1 até 29
Certificate of conformity valid with pages from 1 to 29

Fornecedor / Supplier: DELL COMPUTADORES DO BRASIL LTDA

(100120-728) Av. Emancipação: 5000
13194-854 - Hortolândia - SP - Brasil
CNPJ: 72.361.168/0006-25

Produto Certificado / Certified Product: COMPUTADOR DE MESA / DESKTOP COMPUTER
COMPUTADOR PESSOAL / PERSONAL COMPUTER

Família de produto / Product's Family: N/A

Modelo - Tipo / Model - Type: Modelo(s) / Model(s): D18M, D11S, D10U (refer to appendix B), D13S
(refer to appendix A)
Tipo(s) / Type(s): D18M, D11S, D10U, D13S (refer to appendix B),
D13S (refer to appendix A)

(The dots "." in model name can be 0 to 9, A to Z, a to z or blank for marketing purpose)

Marca comercial / Trademark: DELL

Normas Aplicáveis / Applicable standards: IEC 60950-1:2005 (SECOND EDITION) + AM 1:2009 + AM 2:2013, EN 55022:2010+AC:2011, CISPR 22:2008, EN 55024:2010, CISPR 24:2010+A1:2015, IEC 61000-3-2:2014, IEC 61000-3-3:2013, IEC 61000-4-2:2008, IEC 61000-4-3:2008+A1:2007+A2:2010, IEC 61000-4-4:2012, IEC 61000-4-5:2014, IEC 61000-4-6:2013, IEC 61000-4-8:2009, IEC 61000-4-11:2004, e Anexo E da Portaria no. 170/2012

Programa de certificação ou Portaria / Certification Program or Decree: PORTARIA NO. 170/2012 / DECREE NO. 170/2012
PORTARIA NO. 407/2015 / DECREE NO. 407/2015

Relatório de Avaliação e Ensaios / Assessment and Test Report #: BR2263, Vol. 1, Sec. 69; Sec 70; Sec 71; Sec 81

Concessão Para / Concession for

Ostentar o Selo de Identificação da Conformidade do Sistema Brasileiro de Avaliação da Conformidade (SBAC) sobre o(s) produto(s) relacionado(s) neste certificado.
Bearing the Conformity Identification Seal of the Brazilian System of Evaluation of Conformity (SBAC) on the product covered by this certificate.

Emissão / Date of Issue: 06 de Julho de 2015 / July 6, 2015

Revisão / Revision date: 19 de março de 2018 / March 19, 2018

Validade / Expire date: 05 de Julho de 2020 / July 5, 2020

Emerson Luiz Baroni
Gerente de Certificações /
Certification Manager

UL do Brasil Certificações, organismo acreditado pela Coordenação Geral de Acreditação do INMETRO - CGCRE, segundo o registro No.: QCP-0029 confirma que o produto está em conformidade com a(s) Norma(s) e programas ou Portarias acima descritas.

UL do Brasil Certificações, Certification Body accredited by Coordenação Geral de Acreditação do INMETRO - CGCRE according to the register No.: QCP-0029 confirms that the product is in compliance with the standards and certification Program or Decree above mentioned.



Organismo de Certificação /
Certification Body

UL do Brasil Certificações

Av. Engenheiro Luis Carlos Berrini, 105 - 24º Andar
São Paulo - SP - Brasil - 04571-010
T: 55.11.3049.8300 / W: brazil.ul.com

41-JC-F0033 rev 8.0

CERTIFICADO DE CONFORMIDADE

CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 15.0495**

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Certificate of conformity valid with pages from 1 to 29

Solicitante / Applicant **Dell Inc.**
(854985-006) **One Dell Way**
Mail Stop PS4-30
Round Rock, TX 78682-0001

Fabricante / Manufacture **DELL COMPUTADORES DO BRASIL LTDA**
(100120-728) **AV. EMANIPAÇÃO, 5000**
13184-654 - HORTOLÂNDIA - SP - BRASIL

MARCAÇÃO / MARKING: Marca do fabricante, modelo e características elétricas.

CARACTERÍSTICAS NOMINAIS / RATINGS:
VP: 3A / 4A 100-240V~ 50-60Hz, Class I, IP20
3.34A, 19.5Vdc, Class III, IP20

LISTA DE ACESSÓRIOS / LIST OF ACCESSORIES: N/A

MODELO DE CERTIFICAÇÃO / CERTIFICATION MODEL: 5

VERSÃO DO PROJETO DO PRODUTO / PRODUCT DESIGN VERSION: N/A

LISTA DE COMPONENTES CRÍTICOS / LIST OF CRITICAL COMPONENTS:

Componente/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marcas de conformidade/ Mark(s) of conformity
Front bezel (Decorative part)	Interchangeable	Interchangeable	HB min.	UL 94	UL
Rubber stand Cover bottom opening	Interchangeable	Interchangeable	HB min.	UL 94	UL
Enclosure	Interchangeable	Interchangeable	Metal, min. 0.8mm thickness	—	Tested in the equip.
Fire enclosure	Interchangeable	Interchangeable	Metal, min. 0.8mm thickness	—	Tested in the equip.
Internal Plastic	Interchangeable	Interchangeable	V-2 min.	UL 94	UL

Organismo de Certificação / **UL do Brasil Certificações**
Certification Body
Av. Engenheiro Luís Carlos Berrini, 105 - 24º Andar
São Paulo - SP - Brasil - 04571-010
T: 55.11.3049.8300 / W: brazil.ul.com

41-IC-F0033 rev 8.0

CERTIFICADO DE CONFORMIDADE

CERTIFICATE OF CONFORMITY

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Power supply for building-in	Lite-On Technology Corp. (DELL)	L240EPM-00; L240AM-00; L240EM-00	I/P:100-240Vac, 4A, 50-60Hz, Cl. I. DC-outputs 16.5A max. +12VA, 16A max. +12VB, 2.5A max. +12VSB. Maximum continuous total DC output power shall not exceed 240W.	IEC 60950-1: 2005+A1+A2 EN 60950-1 2006+A11+A1 +A12+A2 UL 60950-1	CB by Nemko (Cert. No.: NO85503), N, UL
	Chicony Power Technology Co., Ltd.(DELL)	H240EM-00; H240AM-02 HAB5NS5-C0	I/P:100-240Vac, 4A, 50-60Hz, Cl. I. DC-outputs 16.5A +12VADC, 16A +12VBDC 2.5A +12VSB, Max. output power is 240W.		CB by Nemko (Cert. No.: NO85302), N, UL
	Delta Electronics Inc. (DELL)	D240EPM-00	I/P:100-240Vac, 4A, 50-60Hz, Cl. I. DC-outputs +12VA/16.5A, +12VB/16A, +12VSB /2.5A, OUTPUT MAX POWER 240W		CB by Nemko (Cert. No.: NO84798), N, UL
	Delta Electronics Inc. (DELL)	D240EM-00	I/P:100-240Vac, 4A, 50-60Hz, Cl. I. DC-outputs +12VA/16.5A, +12VB/16A, +12VSB /2.5A, OUTPUT MAX POWER 240W		CB by Nemko (Cert. No.: NO85131), N, UL
	Acbel Polytech Inc. (DELL)	AC240AM-00; AC240EM-00	I/P:100-240Vac, 4A, 50-60Hz, Cl. I. DC-outputs +12VA/16.5A, +12VB/16A, +12VSB /2.5A, OUTPUT MAX POWER 240W		CB by Nemko (Cert. No.: NO85533), N, UL
Alt. power supply for building-in	Beatec Power Electronics Co., Ltd. (DELL)	B240AM-00; B240EM-00	I/P:100-240Vac, 4A, 50-60Hz, Cl. I. DC-outputs 16.5A +12VA, 16A +12VB, 2.5A +12VSB; TOTAL 240W MAX	IEC 60950-1: 2005+A1+A2 EN 60950-1 2006+A11+A1 +A12+A2 UL60950-1	CB by Nemko (Cert. No.: NO85472), N, UL
	Electronics sales & Marketing(A-P) Ltd. (DELL)	F240EPM-00	I/P:100-240Vac, 4A, 50-60Hz, Cl. I. DC-outputs +12VA 16.5A, +12VB 16A, +12VSB 2.5A, OUTPUT MAX POWER 240W		CB by Nemko (Cert. No.: NO85204), N, UL
	Shenzhen Huntkey Electric Co., Ltd.(DELL)	HU240AM-00	I/P:100-240Vac, 4A, 50-60Hz, Cl. I. DC-outputs +12VAdc 16.5A, +12VBdc 16A, +12VSBdc 2.5A, Max. output power: 240W.		CB by Nemko (Cert. No.:NO85149), N, UL
	Lite-On Technology Corp. (DELL)	L240AS-01, L240ES-00, L240EPS-00	I/P:100-240Vac, 4A, 50-60Hz, Cl. I. DC-outputs: 16.5A MAX +12VA, 16A MAX +12VB Standby mode: 0.5A +12VA, 2.5A +12VB, Max. total output current 2.5A. Maximum continuous total DC output power shall not exceed 240W.	IEC 60950-1: 2005+A1+A2 EN 60950-1: 2005 +A11+A1+A12+A 2 UL 60950-1 JEC 60950-1: 2005+A1+A2 EN 60950-1: 2005 +A11+A1+A12+A 2 UL 60950-1	CB by Nemko (Cert. No.: NO83733), N; UL
	Chicony Power Technology Co., Ltd.(DELL)	H240ES-02, H240AS-02	I/P:100-240Vac, 4A, 50-60Hz, Cl. I. DC-outputs: 16.5A +12VA, 16A +12VB Max. output power is 240W or Standby mode: 0.5A +12VA, 2.5A +12VB, +12VA & +12VB shall not exceed 2.5A.		CB by Nemko (Cert. No.: NO83345), N, UL

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Alt. Optical Disk Drive (Optional)	Interchangeable	Interchangeable	Max. 2.5A 5Vdc, max. 3.0A 12Vdc. Laser class 1.	IEC 60950-1, EN 60950-1, IEC 60825-1, UL 60950-1, UL 94	Verify by Nemko or other cert. body, UL
Front bezel	Interchangeable	Interchangeable	Min. V-1.	UL 94	UL
CPU Fan	Asia Vital Components Co., Ltd.	DS08025R12UV (V can be ABCD, where A,B,C,D may be A-Z, 0-9 or "-" for marketing purpose only)	12Vdc, 0.7A max., 53.82CFM min.	EN 60950-1, UL 507	TUV, UL
	Delta Electronics Inc.	UR0812SH	12Vdc, 0.5A max., 52.63CFM(min.)	EN 60950-1, UL 507	VDE, UL
	Sunonwealth Electronic Machine Industry Co., Ltd.	MF60251V2-0Z (Z stands for 15 characters. Each character stands for one of the following signs: 0-9, A-Z, (,), -, /, or blank for marketing purpose only)	12Vdc, 0.3A max., 48.0CFM(min.)	EN 60950-1, UL 507	TUV, UL
	Foxconn Technology Co., Ltd.	PVAD80G12Q	12Vdc, 0.65A max., 58.0CFM(min.)	EN 60950-1, UL 507	TUV, UL
CPU Fan At	Shenzhen Dongweifeng Electronic Technology Co., LTD.	EF(X)-08E12(Y)(Z), where (X) may be S, H, B, C or F, (Y), may be W, (Z) may be blank, may be -WWWW, W can be 0 to 9 or A to Z.	12Vdc, 0.7A max., 55.45 CFM (min.)	EN 60950-1, UL 507	TUV, UL
	Interchangeable	Interchangeable	12Vdc, 0.7A max, 46.0CFM (min.)	EN 60950-1, UL 507	Verify by Nemko or other cert. body
	Cheng Hons Electronics Co., Ltd.	CHB8012XYWZZ, CHA8012XY-ZZ-WWW ("X" Stands for A, B, C, D, or E, "Y" Stands for B, S or BS, "W" Stands for - or blank, "Z" Stands for 0-9, A-Z or blank)	12Vdc, 0.44A max., 43.5 CFM(min.)	EN 60950-1, UL 507	TUV, UL

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System Fan (Optional)	Asia Vital Components Co., Ltd.	DASAP020R2UV (V can be A,B,C,D where A,B,C,D may be A-Z, 0-9 or "." for marketing purpose only)	12Vdc, 0.6A max., 48.0CFM(min.)	EN 60950-1, UL 507	TUV, UL
	Delta Electronics Inc.	AUB0812HHD	12Vdc, 0.4A max., 46.31CFM(min.)	EN 60950-1, UL 507	VDE, UL
	Sunonwealth Electronic Machine Industry Co., Ltd.	MF8020(VX-Q0Z (Z stands for 80 characters. Each character stands for one of the following signs: 0-9, A-Z, (.), ".", or blank)	12Vdc, 0.32A max., 40.8CFM(min.)	EN 60950-1, UL 507	TUV, UL
	Foxconn Technology Co., Ltd.	PVAC80F12H	12Vdc, 0.36A max., 40.0CFM(min.)	EN 60950-1, UL 507	TUV, UL
RTC battery	Interchangeable	Interchangeable	12Vdc, 0.6A max., 40.0CFM (min.)	EN 60950-1, UL 507	Verify by Nemko or other cert. body
	Jihm Hong Technology Co Ltd	CR2032	Max. abnormal charging current 10mA	UL 1642	UL (MH45581)
	Mitsubishi Electric Home Appliance Co Ltd	CR2032	Max. abnormal charging current 10mA	UL 1642	UL (MH21249)
	Vio-Dawn Enterprise Co Ltd	CR2032	Max. abnormal charging current 10mA	UL 1642	UL (MH20850)
PCB	Panasonic Corporation, Panasonic Corporation Of North America	CR2032	Max. abnormal charging current 10mA	UL 1642	UL (MH12270)
	Interchangeable	Interchangeable	V-1 min., 105°C	UL 796	UL
	Interchangeable	Interchangeable	4ohm, max. 2.5Watt	-	Test in the equipment
	Interchangeable	Interchangeable	3.3Vdc or 12Vdc	-	Test in the equipment
Main Board 1 (type:VF0122)					
Polyswitch (F10 for KMOCM1, F5 for HDM1, F8 for Display ports and F19 for on board VGA port) 1)	Polytronics Technology Corp.	SPR-P150	6Vdc, 1.5A max.	EN 60730-1, UL 1434	TUV, UL
	Litefuse Inc.	0805L150ULXXYY YYY (X or Y stand for A to Z, 0 to 9 or blank)	5Vdc, 1.5A max.	EN 60730-1, UL 1434	TUV, UL
	Bourns Inc.	MF-PSML150	6Vdc, 1.5A max.	EN 60730-1, UL 1434	TUV, UL
	Interchangeable	Interchangeable	6Vdc, 1.5A max.	EN 60730-1, UL 1434	Verify by Nemko or other cert. body, UL

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Polyswitch for USB ports (F2, F3, F4) 1)	Polytronics Technology Corp. Littelfuse Inc.	SPR-P200T SPR-P260T	6Vdc, 2.0A max.	EN 60730-1 UL 1434	TUV, UL
		0805L200ULTHX XXXXXX (X or Y stand for A to Z, 0 to 9 or blank)	6Vdc, 2.0A max.	EN 60730-1 UL 1434	TUV, UL
	Bourns Inc.	MF-PSML200	6Vdc, 2.0A max.	EN 60730-1 UL 1434	TUV, UL
	Interchangeable	Interchangeable	6Vdc, 2.0A max.	EN 60730-1 UL 1434	Verify by Nemko or other cert. body, UL
Power Distribution Switch for USB port (U17) 1)	Global Mixed-mode Technology Inc.	G524BX1X2X3X4 X1=1, 2, 3, or 4, X2=TP, P8, F5 or T1 X3=1 X4=U	Rating: Input Voltage = 2.7 Vdc to 5.5 vdc Operational Current Rating per output 2.1 A Overcurrent Protection Current Rating per output: 2.2A to 2.8A	IEC 60950-1 (ed.2);am1	CB by TUV-Rh
	DIODES INC	AP2822GxxTR- G1 (where x is N or blank and y is K, KA, KB or KE.)	Input Voltage: 2.7 -5.5 Vdc Output 1: Output Continuous Rating: 2.0 A Output Current Limit: 3.2 A	IEC 60950-1 (ed.2);am1	CB by UL
	uPI Semiconduct or Corp.	uP7549xyyz zz= P, Q, R, S, T, U; yy= S8, M8, SA8, RA8, RU8, MA8 MC5, zz=10, 15, 20, 25	Input Voltage: 2.7 -5.5 Vdc Output Current Limit: 1.9A-5.0A	IEC 60950-1 (ed.2);am1;am2	CB by TUV-Rh
Polyswitch for PS2/COM port Card (F4) 1)	Polytronics Technology Corp.	SMD1206P150TFT	6Vdc, 1.5A max.	EN 60730-1 UL 1434	TUV, UL
	Bourns Inc.	MF-NSMP150	6Vdc, 1.5A max.	EN 60730-1, UL 1434	TUV, UL
	Interchangeable	Interchangeable	6Vdc max., 1.5A max.	EN 60730-1, UL 1434	Verify by Nemko or other cert. body, UL
Main Board 2 (type:SF1015)					
Polyswitch (F10 for PS/2, F5 for HDMI and F6 for Display ports) 1)	Polytronics Technology Corp. Littelfuse Inc.	SPR-P150	6Vdc, 1.5A max.	EN 60730-1 UL 1434	TUV, UL
		0805L150ULXX YYYYY (X or Y stand for A to Z, 0 to 9 or blank)	6Vdc, 1.5A max.	EN 60730-1 UL 1434	TUV, UL
	Bourns Inc.	MF-PSML150	6Vdc, 1.5A max.	EN 60730-1 UL 1434	TUV, UL
	Interchangeable	Interchangeable	6Vdc, 1.5A max.	EN 60730-1, UL 1434	Verify by Nemko or other cert. body, UL

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PolySwitch for USB ports (F1, F2, F3, F4) 1)	Polytronics Technology Corp. Littelfuse Inc.	SPR-P200T	6Vdc, 2.0A max.	EN 60730-1 UL 1434	TUV
		0805L200ULTH XX'YYY'YY (X or Y stand for A to Z, 0 to 9 or blank)	5Vdc, 2.0A max.	EN 60730-1 UL 1434	TUV, UL
	Bourns Inc.	MF-PSML200 MF-PSML260	6Vdc, 2.0A max.	EN 60730-1 UL 1434	TUV, UL
	Interchangeable	Interchangeable	6Vdc, 2.0A max.	EN 60730-1 UL 1434	Verify by Nemko or other cert. body, UL
Power Distribution Switch for USB port (U16) 1)	Texas Instruments Inc.	TPS2546 (Additional suffixes after the model number designate the type of integrated circuit package, integrated circuit lead types or other features that are considered not to affect the functionality of the device.)	Rating: (Electrical ratings is optional) Input Voltage = 4.5 Vdc to 5.5 Vdc Output Continuous Rating: 2.5 A Output Current Limit: 3.1 A	IEC 60950-1 (ed.2);am1	CB by UL
	Pericom Semiconductor Corp.	PI5USB2543ZHE	Single Power Supply: 5Vdc +/- 10% Adjustable Current Limit: 250mA to 2.5A	IEC 60950-1 (ed.2);am1	CB by LCIE
	Pericom Semiconductor Corp.	PI5USB25xyZHEz, where: xx is 44, 46, 47 or 48 and y is blank or A, ZH is packaging type, E is Pb-free, and z is blank for bulk packaging or X for tape and reel packaging.	Input Voltage: 4.5 - 5.5 Vdc Continuous Rating: 30 mA to 2.5 A Current Limit: 100 mA to 3.18 A	IEC 60950-1 (ed.2);am2	CB by UL
Power Distribution Switch for USB port (U17) 1)	Global Mixed-mode Technology Inc.	GS24BX1X2X3X 4 X1=1, 2, 3, or 4, X2=IP, P8, F5 or T1 X3=1 X4=U	Rating: Input Voltage = 2.7 Vdc to 5.5 Vdc Operational Current Rating per output: 2.1 A Overcurrent Protection Current Rating per output: 2.2A to 2.6A	IEC 60950-1 (ed.2);am1	CB by TÜV-Rh
	DIODES INC	AP2822GxyTR- S1 (where x is N or blank and y is K, KA, KB or KE.)	Input Voltage: 2.7 - 5.5 Vdc Output: 1 Output Continuous Rating: 2.0 A Output Current Limit: 3.2 A	IEC 60950-1 (ed.2);am1	CB by UL
	uPi Semiconductor Corp.	uP7549xyyy- zz(x=P,Q,R,S,T,U; yyy=S6, M6, SA6, RA6, RU6, MA6, MC6, zz=10, 15, 20, 25)	Input Voltage: 2.7 - 5.5 Vdc Output Current Limit: 1.8A-5.0A	IEC 60950-1 (ed.2);am1;am2	CB by TÜV-Rh

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Main Board 3 (type: SF0309)					
Polyswitch (F5 for HDMI port, F5 for Display ports 1)	Polytronics Technology Corp.	GPR-P150	6Vdc, 1.5A max.	EN 60730-1 UL 1434	TUV, UL
	Littelfuse Inc.	0805L150ULXX YYYYY (X or Y stand for A to Z, 0 to 9 or blank)	6Vdc, 1.5A max.	EN 60730-1 UL 1434	TUV, UL
	Bourns Inc.	MF-PSM150	6Vdc, 1.5A max.	EN 60730-1 UL 1434	TUV, UL
	Interchangeable	interchangeable	6Vdc, 1.5A max.	EN 60730-1 UL 1434	Verify by Nemko or other cert. body, UL
Power Distribution Switch (U17 for USB 2.0 port, U3423, U3 424, U3425 for USB 3.0, U3429 for PS2 port) 1)	Global Mixed-mode Technology Inc.	G5246X1X2X3X 4 X1=1, 2, 3, or 4; X2=TP, P8, F5 or T1 X3=1 X4=J	Ratings: Input Voltage = 2.7 Vdc to 5.5 Vdc Operational Current Rating per output: 2.1 A Overcurrent Protection Current Rating per output: 2.2A to 2.6A	IEC 60950-1 (ed.2):am1	CB by TUV-Rh
	DIODES INC	AP2822GxyTR- G1 (where x is N or blank and y is K, KA, KB or KE)	Input Voltage: 2.7 -5.5 Vdc Output 1 Output Continuous Rating: 2.0 A Output Current Limit: 3.2 A	IEC 60950-1 (ed.2):am1	CB by UL
	uPI Semiconduc tor Corp.	uP7548xyyy- zz(x=P, Q, R, S, T, U; yyy=S8, M5, SA8, RA8, RU8, MA8, MC8, zz=10, 15, 20, 25)	Input Voltage: 2.7 -5.5 Vdc Output Current Limit: 1.8A-5.0A	IEC 60950-1 (ed.2):am1;am2	CB by TUV- Rh
Power Distribution Switch for USB 3.0 type C (U3418) 1)	Good Mixed-mode Technology Inc.	G517GX1X2X3X 4 (X1=1, 2, 3 or 4; X2=TO, TP or P8; X3=1, 2 or 3; X4= U or D)	Input Voltage: 2.7Vdc to 5.5Vdc; Operational Current Rating per output: 3.0; Protection Current Rating per output: 3.1A to 4.0A	IEC 60950- 1(ed.2):am1+am 2	CB by TUV-Rh
	SILERGY CORP.	SY5258Eyyyyy (y=0-9, A-Z or blank)	3P: 2.5Vdc to 5.5Vdc OP: 5.5Vdc max 4.49A max.	IEC 60950- 1(ed.2):am1+am 2	CB by TUV-Rh
	DIODES INC	AP22284AW5-7 AP222802AW5-7	Input Voltage: 2.7Vdc to 5.5Vdc; Output Continuous Rating: 3.0A; Output Current Limit: 3.8A	IEC 60950- 1(ed.2):am1+am 2	CB by UL

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Power Distribution Switch for USB 2.0 port(U18)	Texas Instruments Inc.	TPS2546 (Additional suffixes after the model number designate the type of integrated circuit package, integrated circuit lead types or other features that are considered not to affect the functionality of the device.)	Ratings: (Electrical ratings is optional) Input Voltage = 4.5 Vdc to 5.5 Vdc Output Continuous Rating: 2.5 A Output Current Limit: 3.1 A	IEC 60950-1 (ed.2);am1;am2	CB by UL
	Pericom Semiconductor Corp	PI5USB2543ZHE	Single Power Supply: 5Vdc +/- 10% Adjustable Current Limit: 250mA to 2.5A	IEC 60950-1 (ed.2);am1;am2	CB by LGIE
	Pericom Semiconductor Corp	PI5USB2543ZH Ez, where x is 44, 46, 47 or 48 and y is blank or A, ZH is packaging type, E is Pb-free, and z is blank for bulk packaging or X for tape and reel packaging	Input Voltage: 4.5 - 5.5 Vdc Continuous Rating: 30 mA to 2.5 A Current Limit: 100 mA to 3.18 A	IEC 60950-1 (ed.2);am1;am2	CB by UL
Main Board 4 (type:AF0503)					
Polyswitch (F6 for HDMI port, F6 for Display ports) 1)	Polytronics Technology Corp.	SPR-F150	6Vdc, 1.5A max.	EN 60730-1 UL 1434	TUV, UL
	Litefuse Inc.	0805L150ULXX YYYYY (X or Y stand for A to Z, 0 to 9 or blank)	6Vdc, 1.5A max.	EN 60730-1 UL 1434	TUV, UL
	Bourn Inc.	MF-PSML150	6Vdc, 1.5A max.	EN 60730-1 UL 1434	TUV, UL
	Interchangeable	Interchangeable	6Vdc, 1.5A max.	EN 60730-1 UL 1434	Verify by Notko or other cert. body, UL
Power Distribution Switch for USB 2.0 port(U18)	Texas Instruments Inc.	TPS2546 (Additional suffixes after the model number designate the type of integrated circuit package, integrated circuit lead types or other features that are considered not to affect the functionality of the device.)	Ratings: (Electrical ratings is optional) Input Voltage = 4.5 Vdc to 5.5 Vdc Output Continuous Rating: 2.5 A Output Current Limit: 3.1 A	IEC 60950-1 (ed.2);am1;am2	CB by UL

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	Pericom Semiconductor Corp. Pericom Semiconductor Corp.	P15USB2543ZHE P15USB25xyZH Ez, where xx is 44, 46, 47 or 48 and y is blank or A. ZH is packaging type, E is Pb-free, and z is blank for bulk packaging or X for tape and reel packaging.	Single Power Supply: 5Vdc +/- 10% Adjustable Current Limit: 250mA to 2.5A Input Voltage: 4.5 - 5.5 Vdc Continuous Rating: 30 mA to 2.5 A Current Limit: 100 mA to 3.18 A	IEC 60950-1 (ed.2);am1;am2 IEC 60950-1 (ed.2);am1;am2	CB by LCR CB by UL
Power Distribution Switch (U17 for USB 2.0 port, U3423, U5424, U3425 for USB 3.0, U3429 for PS2 port) 1)	Global Mixed-mode Technology Inc. DIODES INC uP3 Semiconductor Corp.	G524BX1X2X3X4 X1=1, 2, 3, or 4, X2=TP, P6, P5 or T1 X3=1 X4=U AP2822GxyTR-Q1 (where x is N or blank and y is K, KA, KB or KE.) uP7549xyyy- zz(x=P, Q, R, S, T, U; yyy=S8, M5, SA8, RA8, RU8, MA5, MC5, zz=10, 15, 20, 25)	Ratings: Input Voltage = 2.7 Vdc to 5.5 Vdc Operational Current Rating per output: 2.1 A Overcurrent Protection Current Rating per output: 2.2A to 2.8A Input Voltage: 2.7 - 5.5 Vdc Output: 1 Output Continuous Rating: 2.0 A Output Current Limit: 3.2 A Input Voltage: 2.7 - 5.5 Vdc Output Current Limit: 1.9A-5.0A	IEC 60950-1 (ed.2);am1 IEC 60950-1 (ed.2);am1 IEC 60950-1 (ed.2);am1;am2	CB by TUV-Rh CB by UL CB by TUV-Rh
Main Board 5 (type:BF0505)					
Polyswitch (F5 for HDMI port, F6 for Display ports) 3)	Polytronics Technology Corp. Littelfuse Inc. Bourns Inc. interchangeable	SPR-P150 0805L150ULXX YYYYY (X or Y stand for A to Z, 0 to 9 or blank) MF-PSML150 Interchangeable	6Vdc, 1.5A max. 6Vdc, 1.5A max. 6Vdc, 1.5A max. 6Vdc, 1.5A max.	EN 60730-1 UL 1434 EN 60730-1 UL 1434 EN 60730-1 UL 1434 EN 60730-1 UL 1434	TUV, UL TUV, UL TUV, UL Verify by Nemko or other cert. body, UL

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CERTIFICADO DE CONFORMIDADE

CERTIFICATE OF CONFORMITY

Certificado No. / Certificate No. **UL-BR 15.0495**

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	Pericom Semiconductor Corp Pericom Semiconductor Corp	PI5USB2543ZH-E PI5USB25xxzyZH-Ez, where xx is 44, 46, 47 or 48 and y is blank or A. ZH is packaging type, E is Pb-free, and z is blank for bulk packaging or X for tape and reel packaging.	Single Power Supply: 5Vdc $\pm$ 10% Adjustable Current Limit: 250mA to 2.5A Input Voltage: 4.5 - 5.5 Vdc Continuous Rating: 50 mA to 2.5 A Current Limit: 100 mA to 3.15 A	IEC 60950-1 (ed.2)am1,am2 IEC 60950-1 (ed.2)am1,am2	CB by LCIE CB by UL
Power Distribution Switch (U17 for USB 2.0 port, U3423, U3424, U3425 for USB 3.0, U3429 for KMCOM1) 1)	Global Mixed-mode Technology Inc. DIODES INC uPI Semiconductor Corp.	GS246X1X2X3X4 X1=1, 2, 3, or 4 X2=TP, P8, F5 or T1 X3=1 X4=U AP2822GxyTR-G1 (where x is N or blank and y is K, KA, KB or KE.) uP7549xyyy- zz(x=P, Q, R, S, T, U; yyy=SA, MA, SA8, RA8, RU8, MA8, MC8, zz=10, 15, 20, 25)	Ratings: Input Voltage = 2.7 Vdc to 5.5 Vdc Operational Current Rating per output: 2.1 A Overcurrent Protection Current Rating per output: 2.2A to 2.6A Input Voltage: 2.7 - 5.5 Vdc Output: 1 Output Continuous Rating: 2.0 A Output Current Limit: 3.2 A Input Voltage: 2.7 - 5.5 Vdc Output Current Limit: 1.9A-5.0A	IEC 60950-1 (ed.2)am1 IEC 60950-1 (ed.2)am1 IEC 60950-1 (ed.2)am1,am2	CB by TÜV-Rh CB by UL CB by TÜV-Rh
VGA small board 1 (optional)					
Polyswitch for VGA port (F6) 1)	Bourns Inc. Interchangeable	MF-USMP050 Interchangeable	13.2Vdc, 0.5A max. 13.2Vdc, 0.5A max.	EN 60730-1, UL 1434 EN 60730-1, UL 1434	TÜV, UL Verify by Nemko or other cert. body, UL
VGA small board 2 (optional)					
Polyswitch for VGA port (F1) 1)	Polytronics Technology Corp. Interchangeable	SMDC305P05GT F Interchangeable	8Vdc, 0.5A max. 8Vdc, 0.5A max.	EN 60730-1, UL 1434 EN 60730-1, UL 1434	TÜV, UL Verify by Nemko or other cert. body, UL
VGA small board 3 (optional)					
Polyswitch for VGA port (F1) 1)	Fuzetec Technology Co., Ltd. Interchangeable	FSMD110-121DR Interchangeable	8Vdc, 1.1A max. 8Vdc, 1.1A max.	EN 60730-1, UL 1434 EN 60730-1, UL 1434	TÜV, UL Verify by Nemko or other cert. body, UL
VGA small board 4 (optional)					

**Organismo de Certificação /
Certification Body**

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Polyswitch for VGA port (FS1) 1)	Polytronics Technology Corp. Interchangeable	SMD0603SP050TF Interchangeable	6Vdc, 0.5A max. 6Vdc, 0.5A max.	EN 60730-1 UL 1454 EN 60730-1 UL 1434	TUV: UL Verify by Nemko or other cert. body, UL
Supplementary information: 1) LPS protector.					

Component/ Component	Fabricante/ Manufacturer	Tipo/Modelo Type/Model	Características técnicas/ Technical data	Norma/ Standard	Marca de conformidade/ Mark(s) of conformity
Power supply for building-in (PSU)	Acbel (DELL)	AC180AS-00, AC180ES-00 AA65NM121	IP: 3.0A, 100-240Vac, 50-60Hz C.I.L. DC outputs: 12.0A +12.0VA, 14.0A +12.0VB, 2.5A +12.0VSB Total power 180W max IP: 1.7A 100-240V~ 50-60Hz, C.I. 1 with Class II construction throughout - OVP: 3.34A +18.5V	IEC 60950-1 ed.2; am1; am2, EN 60950-1: 2006+A11+A1+ A12+A2, UL 60950-1 (ed.2)	CB by Nemko, N. UL
Alt. Power supply for building-in (PSU)	Bestec (DELL)	B180AS-00	IP: 3.0A, 100-240Vac, 50-60Hz C.I.L. DC outputs: 12A +12VA, 14A +12VB, 2.5A +12VSB TOTAL 180W MAX	IEC 60950-1 ed.2; am1; am2, EN 60950-1: 2006+A11+A1+ A12+A2, UL 60950-1 (ed.2)	CB by Nemko, N. UL
Alt. Power supply for building-in (PSU)	Chicony (DELL)	H180AS-00 HA130PM162 The 2 in model name can be 0 to 9, for marketing purpose.	IP: 3A, 100-240Vac, 50-60Hz C.I.L. DC outputs: 12A +12VADC, 14A +12VBDC, 2.5A +12VSB Max. output power is 180W Input: 1.8A 100-240V~ 50-60Hz DC-output: 6.7A 19.5V	IEC 60950-1 ed.2; am1; am2, EN 60950-1: 2006+A11+A1+ A12+A2, UL 60950-1 (ed.2)	CB by Nemko, N. UL
Alt. Power supply for building-in (PSU)	Delta (DELL)	D180ES-00	IP: 3.0A, 100-240Vac, 50-60Hz C.I.L. DC outputs: +12VA/12A, +12VB/14A, +12VSB/2.5A OUTPUT MAX POWER 180W	IEC 60950-1 ed.2; am1; am2, EN 60950-1: 2006+A11+A1+ A12+A2, UL 60950-1 (ed.2)	CB by Nemko, N. UL
Alt. Power supply for building-in (PSU)	Delta (DELL)	D180EP-00	IP: 3.0A, 100-240Vac, 50-60Hz C.I.L. DC outputs: +12VA/12A, +12VB/14A, +12VSB/2.5A OUTPUT MAX POWER 180W	IEC 60950-1 ed.2; am1; am2, EN 60950-1: 2006+A11+A1+ A12+A2, UL 60950-1 (ed.2)	CB by Nemko, N. UL
Alt. Power supply for building-in (PSU)	Delta (DELL)	D240EPM-00	IP: 4.0A, 100-240Vac, 50-60Hz C.I.L. DC outputs: +12VA/16.5A, +12VB/16A, +12VSB/2.5A OUTPUT MAX POWER 240W	IEC 60950-1 ed.2; am1; am2, EN 60950-1: 2006+A11+A1+ A12+A2, UL 60950-1 (ed.2)	CB by Nemko, N. UL

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