



# Major Electronic Component Declaration of Conformity (DOC) Guide

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## Overview

This guide provides quick reference information on the requirements for a manufacturer's European Union (EU) Declaration of Conformity (DOC) and United Kingdom (UK) for major electronic components that are sold under the brand name of that manufacturer and used within Oracle products. Typical major electronic components are power supplies, hard disk drives, solid state disk drives, DVD/CD optical drives, tape drives, and PCI / PCI-X / PCIe local bus cards, power cord sets, metallic communications cables, tape cartridges, cleaning cartridges and batteries.

## Audience

Third party suppliers, Oracle Engineering, Oracle Sourcing and Hardware Technical Compliance Engineering

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## 1. Introduction

This guide provides quick reference information on the requirements for a manufacturer's European Union (EU) Declaration of Conformity (DOC) and United Kingdom (UK) for major electronic components that are sold under the brand name of that manufacturer and used within Oracle products. Typical major electronic components are power supplies, hard disk drives, solid state disk drives, DVD/CD optical drives, tape drives, and PCI / PCI-X / PCIe local bus cards, power cord sets, metallic communications cables, tape cartridges, cleaning cartridges and batteries. Added to this list is power cords which also must have a CE mark and accompanying DOC. This document does not replace or override the published EU directives, UK regulations and harmonized/designated standards. If there are any discrepancies between this document and an EU or UK publication with the force of law, then the EU and/or UK document takes precedence.

## 2. Use

This guide is intended for use by Oracle supplier management and development engineers that coordinate purchasing and business arrangements with the manufacturers of major electronic components and would be responsible for collecting the current EU DOC and UK DOC from the supplier for these components. As such, this guide is written for an intended audience that is not working in the disciplines of ElectroMagnetic Compatibility (EMC), Safety or Restriction of Hazardous Substances (RoHS).

All major electronic component manufacturers are responsible for understanding the international EMC, Safety and RoHS standards as well as the EU directives, UK regulations and harmonized/designated standards. They must take responsibility to ensure that their components comply with these requirements with appropriate tests and reports and then declare compliance to the applicable standards using a signed DOC.

To minimize the number of documents that need to be referenced, this guide includes dated references to various standards that will frequently change to newer dates over time. As such, it is expected that this guide will change often. Always ensure you are working with the latest revision that is published on the Oracle Advanced Quality Planning (AQP) site or the Oracle Intranet (<http://emidata.us.oracle.com/regulations/>).

## 3. References

The below listed publications were used as a reference for this guide.

### EU Directives

- Electromagnetic Compatibility (EMC) Directive 2014/30/EU (26 February 2014)
- Low Voltage Directive 2014/35/EU (26 February 2014)
- Radio Equipment Directive 2014/53/EU (16 April 2014)
- Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU (8 June 2011)
- Battery Regulation (EU) 2023/1542 (12 July 2023)

### EU Guides

- The 'Blue Guide on the Implementation of EU Product Rules (26 Jul 2016)
- Guide for the EMC Directive 2014/30/EU (19 December 2018)
- Low Voltage Directive 2014/35/EU Guidelines (August 2018)

### **UK Regulations**

- Electromagnetic Compatibility Regulations 2016
- Electrical equipment (Safety) Regulations 2016
- Radio Equipment Regulation 2017
- Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

### **Standards**

- EN ISO/IEC 17050-1 Conformity Assessment – Supplier's Declaration of Conformity – Part 1: General Requirements (April 2010)
- EN ISO/IEC 17050-2 Conformity Assessment – Supplier's Declaration of Conformity – Part 2: Supporting Documentation (1st Edition, 1 October 2004)

## **4. Purpose of the Declaration of Conformity (DOC)**

ISO/IEC 17050-1:2004 section 4 states: “The purpose of the declaration is to give assurance of conformity of the identified object to specified requirements to which the declaration refers, and to make clear who is responsible for that conformity and declaration.”

EU EMC Directive 2014/30/EU Article 15 section 1 states: “The EU declaration of conformity shall state that the fulfilment of the essential requirements set out in Annex 1 has been demonstrated.” LVD Directive 2014/35/EU Article 1 says essentially the same. The EU declaration of conformity declares compliance with all the requirements of the applicable CE marking directives based on a completed conformity assessment of the product.

Similarly, UK EMC Regulations 2016 section 41(a) and Electrical Equipment (Safety) 2016 section 38(a) state that the declaration of conformity must “state that the fulfilment of the essential requirements has been demonstrated in respect of the apparatus [or electrical equipment].”

## **5. Essential Elements of the Declaration of Conformity (DOC)**

The DOC must contain, at least, the following:

- a reference to all applicable CE marking directives in a single DOC
- an unique identification or description of the electrical equipment to which it refers allowing traceability  
(Note: At minimum, the DOC must list the manufacturer's compliance model number that is used to tie the safety report approvals to a like number written on the component's agency compliance label with the CE mark. If this number is not found on the outside of the box and in the plain language description in the shipping documentation, then the additional identification or description information that is on the outside of the box and in the shipping documentation should be added to the DOC to prevent customs from having to open the box packaging to identify the product. For example, Oracle prefers that Oracle part numbers are added to the DOC especially for components that are custom for use in Oracle products.)
- the name and address of the manufacturer and, where applicable, the name and address of his authorized representative in the Community
- a dated reference to the harmonized standards or specifications under which conformity is declared to ensure the conformity of the electrical equipment with the provisions of the Directives
- the date of that declaration
- statement that explicitly states: “This declaration of conformity is issued under the sole responsibility of the manufacturer.”

- the identity and signature of the person empowered to bind the manufacturer or his authorized representative

Some manufacturers will keep their EU DOCs and their UK DOCs separate, while others will combine them into one declaration of conformity (DOC). See appendix 3 for an example format for a combined DOC.

## 6. Specific Directives and Standards for Major Electronic Components

Manufacturers must provide a signed DOC for all major electronic components that will be shipped into EU and UK as upgrades (X-options) or field replacement units (FRUs). In contrast, a DOC is not necessary for components that are only shipped as a component within a system.

As all of the components used by Oracle are made for the information technology equipment (ITE) family of products, the directives and standards required on the DOC will be similar. However, we do recognize minor differences between a few groupings of components. This section lists the minimum directives and standards that must be listed on the DOC for each component group, but additional standards from both Europe and other geographies may be added.

### 6.1 Major DC Electrical Components with Input Voltage Rating < 75 VDC

Example major electrical components having input voltage rating under 75 VDC include – but are not limited to – hard disk drives (HDD), solid state disk (SSD) drives, DVD/CD optical disk drives, tape drives (without power supply), DC-DC power supplies, DIMM, SFP, and PCI / PCI-X / PCIe local bus cards. These components do not fall into the scope of the EU Low Voltage Directive 2014/35/EC and the UK Electrical Equipment (Safety) Regulations 2016 which only cover electrical equipment “with a rating of between 50 and 1000 V for alternating current and between 75 and 1500 V for direct current” (Article 1). Hence, these components do not require a declaration to the EU Low Voltage Directive 2014/35/EC and the UK Electrical Equipment (Safety) Regulations 2016. However, because components are used in systems that do fall under the scope of the EU Low Voltage Directive 2014/35/EC and the UK Electrical Equipment (Safety) Regulations 2016, Oracle still requires these components to be evaluated to EN62368-1 safety standard so the components can be integrated easily into our systems. These evaluations must be performed by a 3rd party safety agency like TUV (Bauart), UL/Demko (D mark), etc. Therefore, the minimum standards that must be listed on the DOC for these components are listed below.

Required Today (Minimum)	Required Soon (Preferred)
<b>EU Directives</b> <ul style="list-style-type: none"> <li>EMC Directive 2014/30/EU</li> <li>RoHS Directive 2011/65/EU</li> </ul> <b>UK Regulations</b> <ul style="list-style-type: none"> <li>Electromagnetic Compatibility Regulations 2016</li> <li>Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012</li> </ul> <b>Standards</b> <ul style="list-style-type: none"> <li>EN55032:2015 + A11:2020</li> <li>EN55035:2017 + A11:2020</li> <li>EN IEC 63000:2018</li> </ul>	<b>EU Directives</b> <ul style="list-style-type: none"> <li>EMC Directive 2014/30/EU</li> <li>RoHS Directive 2011/65/EU</li> </ul> <b>UK Regulations</b> <ul style="list-style-type: none"> <li>Electromagnetic Compatibility Regulations 2016</li> <li>Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012</li> </ul> <b>Standards</b> <ul style="list-style-type: none"> <li>EN55032:2015 + A11:2020</li> <li>EN55035:2017 + A11:2020</li> <li>EN IEC 63000:2018</li> </ul>

Either on the DOC or on a separate 3rd party accredited safety agency certificate, these components must cite compliance with the below safety standard because it will be incorporated into information technology equipment that must comply with EU Low Voltage Directive 2014/35/EC, the UK The Electrical Equipment (Safety) Regulations 2016 and the below standard.

Required Today (Minimum)	Required Soon (Preferred)
<b>Standards</b>	<b>Standards</b>
<ul style="list-style-type: none"> <li>EN62368-1:2014</li> </ul>	<ul style="list-style-type: none"> <li>EN62368-1:2014</li> </ul>

Note: All due dates written in the tables are as published as EU harmonized standards and as UK designated standards. Oracle will require the DOCs to be updated to these standards earlier than these dates to support system DOC approvals. At minimum, the component DOCs should be updated to these standards no later than six months in advance of the due dates shown in italics unless granted an exception by the assigned Oracle compliance engineer.

## 6.2 All Electrical Components Having an AC Input Voltage

All components having an AC input voltage must meet the same standards as that of the full system. These components definitely fall within the scope of the Low Voltage Directive 2014/35/EC which covers electrical equipment “with a rating of between 50 and 1000 V for alternating current and between 75 and 1500 V for direct current” (Article 1). These components must receive a 3rd party evaluation to EN60950-1 that be performed by a 3rd party safety agency like TUV (Bauart), UL/Demko (D mark), etc. Beyond the requirements given for DC components, the AC components must meet a few extra applicable standards including Harmonics (EN61000-3-2 or EN61000-3-12) and Flicker (EN61000-3-3 or EN61000-3-11). Therefore, the minimum standards that must be listed on the DOC for these components are listed below.

### Common to all electrical components running on AC input voltage

Required Today (Minimum)	Required Soon (Preferred)
<b>EU Directives</b> <ul style="list-style-type: none"> <li>EMC Directive 2014/30/EU</li> <li>Low Voltage Directive 2014/35/EU</li> <li>RoHS Directive 2011/65/EU</li> </ul> <b>UK Regulations</b> <ul style="list-style-type: none"> <li>Electromagnetic Compatibility Regulations 2016</li> <li>Electrical Equipment (Safety) Regulations 2016</li> <li>Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012</li> </ul>	<b>EU Directives</b> <ul style="list-style-type: none"> <li>EMC Directive 2014/30/EU</li> <li>Low Voltage Directive 2014/35/EU</li> <li>RoHS Directive 2011/65/EU</li> </ul> <b>UK Regulations</b> <ul style="list-style-type: none"> <li>Electromagnetic Compatibility Regulations 2016</li> <li>Electrical Equipment (Safety) Regulations 2016</li> <li>Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012</li> </ul>

### Applicable Standards if AC Rated Input Current ≤ 16 A

Required Today (Minimum)	Required Soon (Preferred)
<b>Standards</b> <ul style="list-style-type: none"> <li>EN55032:2015 + A11:2020</li> <li>EN55035:2017 + A11:2020</li> <li>EN61000-3-2:2014</li> <li>EN61000-3-3:2013</li> <li>EN62368-1:2014</li> <li>EN IEC 63000:2018</li> </ul>	<b>Standards</b> <ul style="list-style-type: none"> <li>EN55032:2015 + A11:2020</li> <li>EN55035:2017 + A11:2020</li> <li>EN61000-3-2:2014</li> <li>EN61000-3-3:2013</li> <li>EN62368-1:2014</li> <li>EN IEC 63000:2018</li> </ul>

**Applicable Standards if AC Rated Input Current > 16A and ≤ 75 A**

<b>Required Today (Minimum)</b>	<b>Required Soon (Preferred)</b>
<b>Standards</b> <ul style="list-style-type: none"> <li>• EN55032:2015 + A11:2020</li> <li>• EN55035:2017 + A11:2020</li> <li>• EN61000-3-11:2000</li> <li>• EN61000-3-12:2011</li> <li>• EN62368-1:2014</li> <li>• EN IEC 63000:2018</li> </ul>	<b>Standards</b> <ul style="list-style-type: none"> <li>• EN55032:2015 + A11:2020</li> <li>• EN55035:2017 + A11:2020</li> <li>• EN61000-3-11:2000</li> <li>• EN61000-3-12:2011</li> <li>• EN62368-1:2014</li> <li>• EN IEC 63000:2018</li> </ul>

Note: All due dates written in the tables are as published as EU harmonized standards and as UK designated standards. Oracle will require the DOCs to be updated to these standards earlier than these dates to support system DOC approvals. At minimum, the component DOCs should be updated to these standards no later than six months in advance of the due dates shown in italics unless granted an exception by the assigned Oracle compliance engineer.

### 6.3 Power Cords

All power cords used in Europe fall within the scope of the Low Voltage Directive 2014/35/EC which covers electrical equipment “with a rating of between 50 and 1000 V for alternating current and between 75 and 1500 V for direct current” (Article 1). Any power cords that can be used in Europe must receive a 3rd party evaluation to EN60320-1 that be performed by a 3rd party safety agency like TUV (Bauart), UL/Demko (D mark), etc. In addition, power cords also fall in the scope of RoHS directive 2011/65/EU. {Article 3 section (5) and article 4 section 1} However, power cords alone are not in the scope of the EMC Directive 2014/30/EC, so they do not have to be declared compliant to those standards alone since they are referred to inherently benign in the EMC Directive. The Declaration of Conformity (DOC) must specify the part number for the entire power cord which includes the plug, connector and cable. Therefore, the minimum standards that must be listed on the DOC for these components are listed below.

<b>Required Today (Minimum)</b>	<b>Required Soon (Preferred)</b>
<b>EU Directives</b> <ul style="list-style-type: none"> <li>• Low Voltage Directive 2014/35/EU</li> <li>• RoHS Directive 2011/65/EU</li> </ul> <b>UK Regulations</b> <ul style="list-style-type: none"> <li>• Electrical Equipment (Safety) Regulations 2016</li> <li>• Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012</li> </ul> <b>Standards</b> <ul style="list-style-type: none"> <li>• EN60320-1:2021</li> <li>• EN60320-2-2:1998</li> <li>• EN IEC 63000:2018</li> </ul>	<b>EU Directives</b> <ul style="list-style-type: none"> <li>• Low Voltage Directive 2014/35/EU</li> <li>• RoHS Directive 2011/65/EU</li> </ul> <b>UK Regulations</b> <ul style="list-style-type: none"> <li>• Electrical Equipment (Safety) Regulations 2016</li> <li>• Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012</li> </ul> <b>Standards</b> <ul style="list-style-type: none"> <li>• EN60320-1:2021</li> <li>• EN60320-2-2:1998</li> <li>• EN IEC 63000:2018</li> </ul>

Note: All due dates written in the tables are as published as EU harmonized standards and as UK designated standards. Oracle will require the DOCs to be updated to these standards earlier than these dates to support system DOC approvals. At minimum, the component DOCs should be updated to these standards no later than six months in advance of the due dates shown in italics unless granted an exception by the assigned Oracle compliance engineer.



## 6.4 Metallic Communications Cables

All metallic communications cables used in Europe fall within the scope of RoHS directive 2011/65/EU. {Article 3 section (5) and article 4 section 1} This does not include non-metallic optical cables. However, metallic communications cables alone are not in the scope of the EMC Directive 2014/30/EC and the Low Voltage Directive 2014/35/EC. The Declaration of Conformity (DOC) must specify the part number for the entire communications cable which includes both cable and connectors. Therefore, the minimum standards that must be listed on the DOC for these components are listed below.

Required Today (Minimum)	Required Soon (Preferred)
<b>EU Directives</b> <ul style="list-style-type: none"> <li>RoHS Directive 2011/65/EU</li> </ul> <b>UK Regulations</b> <ul style="list-style-type: none"> <li>Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012</li> </ul> <b>Standards</b> <ul style="list-style-type: none"> <li>EN IEC 63000:2018</li> </ul>	<b>EU Directives</b> <ul style="list-style-type: none"> <li>RoHS Directive 2011/65/EU</li> </ul> <b>UK Regulations</b> <ul style="list-style-type: none"> <li>Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012</li> </ul> <b>Standards</b> <ul style="list-style-type: none"> <li>EN IEC 63000:2018</li> </ul>

Note: All due dates written in the tables are as published as EU harmonized standards and as UK designated standards. Oracle will require the DOCs to be updated to these standards earlier than these dates to support system DOC approvals. At minimum, the component DOCs should be updated to these standards no later than six months in advance of the due dates shown in italics unless granted an exception by the assigned Oracle compliance engineer.

## 6.5 Tape Cartridges and Cleaning Cartridges

All tape cartridges and cleaning cartridges used in Europe fall within the scope of RoHS directive 2011/65/EU and the Radio Equipment Directive 2014/53/EU since they are sold separately and have radio & memory chip technology. However, cartridges alone are not in the scope of the EMC Directive 2014/30/EC and the Low Voltage Directive 2014/35/EC. Therefore, the minimum standards that must be listed on the DOC for these components are listed below.

Required Today (Minimum)	Required Soon (Preferred)
<b>EU Directives</b> <ul style="list-style-type: none"> <li>RoHS Directive 2011/65/EU</li> <li>Radio Equipment Directive 2014/53/EU</li> </ul> <b>UK Regulations</b> <ul style="list-style-type: none"> <li>Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012</li> <li>Radio Equipment Regulations 2017</li> </ul> <b>Standards</b> <ul style="list-style-type: none"> <li>EN IEC 63000:2018</li> <li>EN 300 330 v2.1.1</li> <li>EN 50364:2010</li> <li>EN301 489-1 v1.9.2</li> </ul>	<b>EU Directives</b> <ul style="list-style-type: none"> <li>RoHS Directive 2011/65/EU</li> <li>Radio Equipment Directive 2014/53/EU</li> </ul> <b>UK Regulations</b> <ul style="list-style-type: none"> <li>Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012</li> <li>Radio Equipment Regulations 2017</li> </ul> <b>Standards</b> <ul style="list-style-type: none"> <li>EN IEC 63000:2018</li> <li>EN 300 330 v2.1.1</li> <li>EN 50364:2010</li> <li>EN301 489-1 v1.9.2</li> <li>EN 301 489-1 v2.2.3 (TBA, no date yet)</li> <li>EN 301 489-3 v2.1.1 (TBA, no date yet)</li> </ul>

Note: All due dates written in the tables are as published as EU harmonized standards and as UK designated standards. Oracle will require the DOCs to be updated to these standards earlier than these dates to support system DOC approvals. At minimum, the component DOCs should be updated to these standards no later than six months in advance of the due dates shown in italics unless granted an exception by the assigned Oracle compliance engineer.

## 6.6 Batteries

All batteries used in Europe fall within the scope of Battery Regulation (EU) 2023/1542, must be CE marked and must have a declaration of conformity (DOC). Batteries are out-of-scope for the RoHS directive 2011/65/EU, but they do have substance restrictions within the Battery Regulation (EU) 2023/1542 itself. The minimum directives/regulations/standards that must be listed on the DOC for these components are listed below.

Required Today (Minimum)	Required Soon (Preferred)
<b>EU Directives</b> <ul style="list-style-type: none"> <li>Battery Regulation (EU) 2023/1542</li> </ul>	<b>EU Directives</b> <ul style="list-style-type: none"> <li>Battery Regulation (EU) 2023/1542</li> </ul>

Note: All due dates written in the tables are as published as EU harmonized standards and as UK designated standards. Oracle will require the DOCs to be updated to these standards earlier than these dates to support system DOC approvals. At minimum, the component DOCs should be updated to these standards no later than six months in advance of the due dates shown in italics unless granted an exception by the assigned Oracle compliance engineer.

## 6.7 RFID Devices

As RFID devices like RFID readers and RFID card scanners are intentional radiators that add the requirement to comply with the Radio Equipment Directive 2014/53/EU in addition to the other information technology related directives or regulations applicable to its input voltage whether it be DC input (see section 6.1) or AC input (see section 6.2). Added to the applicable requirements listed in sections 6.1 or 6.2, the DOC must add the below minimum directives/regulations/standards for these RFID devices are listed below.

Required Today (Minimum)	Required Soon (Preferred)
<b>EU Directives</b> <ul style="list-style-type: none"> <li>Radio Equipment Directive 2014/53/EU</li> </ul> <b>UK Regulations</b> <ul style="list-style-type: none"> <li>Radio Equipment Regulations 2017</li> </ul> <b>Standards</b> <ul style="list-style-type: none"> <li>EN 300 330 v2.1.1</li> </ul> <p>Add directives/regulations/standards applicable to input voltage: If DC input, see section 6.1. If AC input, see section 6.2.</p>	<b>EU Directives</b> <ul style="list-style-type: none"> <li>Radio Equipment Directive 2014/53/EU</li> </ul> <b>UK Regulations</b> <ul style="list-style-type: none"> <li>Radio Equipment Regulations 2017</li> </ul> <b>Standards</b> <ul style="list-style-type: none"> <li>EN 300 330 v2.1.1</li> <li>EN301489-1 v2.2.3 (TBA, no date yet)</li> <li>EN301489-3 v2.1.1 (TBA, no date yet)</li> <li>EN IEC 62311:2020 (TBA, no date yet)</li> </ul> <p>Add directives/regulations/standards applicable to input voltage: If DC input, see section 6.1. If AC input, see section 6.2.</p>

Note: All due dates written in the tables are as published as EU harmonized standards and as UK designated standards. Oracle will require the DOCs to be updated to these standards earlier than these dates to support system DOC approvals. At minimum, the component DOCs should be updated to these standards no later than six months in advance of the due dates shown in italics unless granted an exception by the assigned Oracle compliance engineer.




## Appendix A: Acronyms

AC	Alternating Current (looks like a sine wave on an oscilloscope)
CD	Compact Disc
CE	French "Conformité Européenne" meaning European conformity
CENELEC	European Committee for Electrotechnical Standardization
CISPR	Comité International Spécial des Perturbations Radioélectriques (English: International Special Committee on Radio Interference)
CSA	Canadian Standards Association
DC	Direct Current (looks like a horizontal line with unchanging voltage on an oscilloscope)
DOC	Declaration of Conformity
DOW	Date of withdrawal of any conflicting National Standard. Effectively, this date becomes the deadline date for migrating to the replacement newer standard revision.
DVD	Digital Versatile Disc (formerly Digital Video Disc)
EMC	ElectroMagnetic Compatibility
ETSI	European Telecommunications Standards Institute
EU	European Union
HDD	Hard Disk Drive
IEC	International Electrotechnical Commission
ISO	International Standards Organization
OJ	Official Journal
PCI	Peripheral Component Interconnect local bus standard
PCI-X	PCI eXtended
PCIe	PCI Express
REACH	Registration, Evaluation, Authorization and restriction of Chemicals
RoHS	Restriction of Hazardous Substances
TBA	To Be Announced
UK	United Kingdom
UKCA	United Kingdom Conformity Assessed
UL	Underwriters Laboratories
VAC	Volts (Alternating Current)
VDC	Volts (Direct Current)

## Appendix B: Standards Titles

<b>Standard</b>	<b>Title</b>
EN50581	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances
EN55032	Electromagnetic compatibility of multimedia equipment – Emission requirements
EN55035	Electromagnetic compatibility of multimedia equipment – Immunity requirements
EN60320-1	Appliance couplers for household and similar general purposes - Part 1: General requirements
EN60320-2-2	Appliance couplers for household and similar general purposes - Part 2-2: Interconnection couplers for household and similar equipment
EN62368-1	Audio/video, information and communication technology equipment {Safety}
EN61000-3-2	Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic current emissions (equipment input current $\leq 16$ A per phase)
EN61000-3-3	Electromagnetic compatibility (EMC) – Part 3-3: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current $\leq 16$ A per phase and not subject to conditional connection
EN61000-3-11	Electromagnetic compatibility (EMC) – Part 3-11: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems – Equipment with rated current $\leq 75$ A per phase and subject to conditional connection
EN61000-3-12	Electromagnetic compatibility (EMC) – Part 3-12: Limits – Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current $> 16$ A and $\leq 75$ A per phase
EN IEC 63000	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances
EN 300 330	Short Range Devices (SRD); Radio equipment in the frequency range 9kHz to 25 MHz and inductive loop systems in the frequency range 9kHz to 30 MHz; Harmonized Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU
EN 301489-1	Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
EN 301489-3	Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 40 GHz
EN IEC 62311	Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz to 300 GHz)
ISO/IEC 17050-1	Conformity assessment – Supplier's declaration of conformity – Part 1: General Requirements
ISO/IEC 17050-2	Conformity assessment – Supplier's declaration of conformity – Part 2: Supporting Documentation

## Appendix C: Example DOC



# Declaration of Conformity

according to ISO/IEC 17050-1 and EN 17050-1

**The undersigned authority declares that the product listed below**

Compliance Model Number: WH1CL  
 Product Family Name: Oracle's Server X9-2, Exadata Database Machine X9M-2 Database Server Upgrades, Exadata Cloud@Customer X9M-2 Database Server Upgrades, Private Cloud Appliance X9-2 Server, Oracle Advanced Support Gateway Server X9-2, Oracle Advanced Support Gateway Server X9-2, TAA Compliant.

Product Options: All

**conforms with the following product specifications:**

<b>Safety</b>	
EN 62368-1:2014 + A11:2017 (2 <sup>nd</sup> Ed)	IEC 62368-1:2018
UL 62368-1:2019, 3 <sup>rd</sup> Edition	IEC 62368-1:2014
CAN/CSA C22.2 No. 62368-1-19, 3 <sup>rd</sup> Edition	IEC 60950-1:2005 + A1:2009 + A2:2013
<b>ElectroMagnetic Compatibility (EMC)</b>	
EN55032:2015 + A11:2020 Class A	CISPR32:2015 Class A
EN55035:2017 + A11:2020	CISPR35:2016
EN61000-3-2:2014	47CFR15 Subpart B (FCC) Class A
EN61000-3-3:2013	ICES-003 Class A
<b>Restriction of Hazardous Substances (RoHS)</b>	
EN IEC 63000:2018	EN50581:2012

**This product complies with the requirements of the European Union directives listed below:**

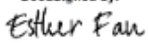
2014/35/EU	Low Voltage Directive
2014/30/EU	EMC Directive
2011/65/EU	Restriction of Hazardous Substances (RoHS) Directive plus delegated directive 2015/863
2012/19/EU	Waste Electrical and Electronic Equipment (WEEE) Directive
2009/125/EC	Ecodesign Energy Related Products (ErP) Directive with implementing EU Regulation 2019/424 for servers and storage

**This product complies with the requirements of the United Kingdom regulations listed below:**

Electrical Equipment (Safety) Regulations 2016  
 Electromagnetic Compatibility Regulations 2016  
 The Restriction of the Use of certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012  
 The Ecodesign for Energy-Related Products and Energy Information (Amendment) (EU Exit) Regulations 2019

**Supplementary Information:**

This declaration of conformity is issued under the sole responsibility of the manufacturer.  
 This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:  
 1) This equipment may not cause harmful interference.  
 2) This equipment must accept any interference received, including interference that may cause undesired operation.  
 This equipment complies with the EEE regulation for the Republic of Turkey. EEE Yönetmeliğine Uygundur.  
 This equipment complies with the Technical Regulation as stated in Ukraine's Resolution #139 of 10 March 2017.  
 This equipment complies with Vietnam Circular No. 30/2011/TT-BCT dated 10 August 2011.  
 This equipment complies with Annex 1 to 4 of Republic of Srpska Ordinance 05.30 / 020-746 / 15.  
 This equipment is not intended to be connected directly to outdoor metallic communications cables.  
 This equipment complies with Morocco low voltage ordinance 2573-14 and EMC ordinance 2574-14.

DocuSigned by:  
  
 Esther Fan 10F131441B4648E...

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15-Aug-2022 | 10:50 AM PDT  
 DATE

TN:2022-1

## Appendix E: Change History

Changes under the old document part number 950-6002-01.

Rev.	Date	Sections	Brief Description
A	08/24/2009	All	Initial release
B	10/26/2009	6	Corrected a typo error in the alternating current voltage rating for Low Voltage Directive 2006/95/EC (low end boundary is 50VAC).
C	10/27/2009	6	Corrected the base EN61000-3-3 year and allowed DOCs to list harmonized standard “EN55022:1998 + A1:2000 + A2:2003” due to European Union Official Journal entry 2009/C 197/03.
D	12/1/2009	6.2	Corrected the base EN61000-3-3 year for the “Required Soon” column.
E	3/22/2010	6	Added A11:2009 to EN60950-1:2006 plus new revision EN61000-3-3:2008. Header changed on all pages from Sun to Oracle.
F	04/30/2010	6	Added A1:2010 to EN60950-1:2006 + A11:2009 with the due date for this amendment. Made 2 <sup>nd</sup> Edition safety mandatory for components used by Oracle.
G	04/21/2011	6 and App 3	Made EN55022:2006 + A1:2007 and EN61000-3-3:2008 mandatory for components used by Oracle. Updated appendix 3 with an example of the most recent revision of Oracle DOCs.
H	04/25/2011	6	Added the newly released Amendment 12 to EN60950-1 for future standards.
I	04/26/2011	6	Added EN55024:2010 for future standards (preferred but not yet mandatory).
J	05/04/2011	6	Added amendments 1 & 2 to EN61000-3-2.
K	08/26/2011	6.2	Renamed the heading to make this apply to all AC electrical components (not just AC-DC power supplies)
L	08/29/2011	6.2	Renamed the headings over the tables in section 6.2 to make it clear that the key is rated input current is for electrical components, not the power supply inside.
M	08/30/2011	6.1, 6.2 and App 3	Updated the “Required Today (Minimum)” entries for EMC standards in sections 6.1 and 6.2 to be consistent with the target to comply with standards six months in advance of the due date. Inserted a later revision DOC example for appendix 3.
N	09/14/2011	6.1 and 6.2	Fixed a error on the due year for EN55024:2010. Restored EN55024:1998 + A1:2001 + A2:2003 as being adequate for the minimum required today.
P	11/03/2011	6.1 and 6.2	Added new EN55022:2010.
Q	01/19/2012	6.1, 6.2, 6.3 and App 3	Added section 6.3 for power cord category. Added the RoHS directive for all categories.
R	02/22/2012	6.2	Moved EN61000-3-2:2006+A1:2009+A2:2009 over to the “Required Today (Minimum)” column now that we are within six months from the Europe deadline.
S	04/19/2012	6.2	Added EN61000-3-12:2011 to the “Required Soon (Preferred)” column as it becomes mandatory on 6/16/2014.
T	05/02/2012	6.3 and App 2	Updated the power cord section to require EN60320-1 and EN60320-2-2.
U	09/17/2012	6.1, 6.2, 6.3	Moved RoHS Directive 2011/65/EU and A1 & A12 for EN60950-1 to “Required Today (Minimum)” column.
V	12/12/2012	App 3	Provided a more recent DOC example in Appendix 3.
W	03/21/2013	6.1, 6.2, 6.3, 6.4	Added new RoHS standard EN50581. Also added section 6.4 for metallic communications cables.
X	11/08/2013	6.1, 6.2, 6.3, 6.4 & App 3	For 6.1, clarified that evidence of EN60950-1 compliance can be provided by a 3 <sup>rd</sup> party safety agency certificate separate from the Declaration of Conformity (DOC). Made EN50581 required in current standards for all other sections.
Y	01/30/2014	6.1, 6.2, 6.3 & App 3	Added amendment 2 for EN60950-1.
Z	03/31/2014	6.1, 6.2, 6.3 & App 2	Added EN55032 and its title. Updated to the new recast EMC and Low Voltage Directives.
AA	04/07/2014	6.2	Updated “Required Soon” to list EN61000-3-3:2013.
AB	06/21/2014	6.1	Added SFP and DIMM to the list of example electrical components.
AC	12/11/2014	6.2 & App 3	Updated the “Required Today” list to include EN61000-3-12:2011. Provided a more recent DOC example.
AD	02/27/2015	6.1 & 6.2	Updated the “Required Soon (Preferred)” list to have EN62368-1:2014 & EN61000-3-2:2014.
AE	10/20/2015	3, 5, 6.1 & 6.2	Updated the References section to include latest directives (Section 3), updated the required elements in a DOC (Section 5), and added AC:2011 for EN55022 (Sections 6.1 & 6.2).
AF	12/01/2015	6.1 & 6.2	Added AC:2013 to EN55032.
AG	05/24/2016	5	Removed requirement for 2-digit year.
AH	06/16/2016	6.1 & 6.2	Removed outdated standard revisions that are no longer acceptable alternatives for EN60950-1 & EN61000-3-3.
AI	02/24/2017	6.1 & 6.2	Added new revision EN55032:2015+AC:2016 as an option for DOCs.
AJ	04/21/2017	6.1 & 6.2	Removed EN55022 as an option for today’s Europe DOCs. Must use EN55032.
AK	01/04/2018	6.1, 6.2 & 6.3	Added EN55035. Changed the power cord set section to be optional.
AL	03/23/2018	6.1 & 6.2	Updated dates to account for delays in harmonized standards list publication in the EU Official Journal.
AM	10/04/2018	6.1 & 6.2	Updated the EN62368-1 deadline and made EN61000-3-2:2014 mandatory now that we are past the transition date.
AN	06/17/2019	6.5	Added tape storage cartridge and cleaning cartridge section 6.5.
AO	03/16/2021	5, 6.1-6.5	Added required “sole responsibility of the manufacturer” statement. Added EN IEC 63000 requirement. Updated the due date for EN55032:2015 + A11:2020. Removed EN60950-1 which has been superseded by EN62368-1.

## Major Electronic Component Declaration of Conformity (DOC) Guide

Changes under the latest document part number PROC-10084.

<b>Rev.</b>	<b>Date</b>	<b>Section</b>	<b>Brief Description</b>
02	04/19/2021	All	Initial release under new part number PROC-10084 and using a new document template. Updated EU to EN55035+A11 with known mandatory date.
03	01/21/2022	All	Added confidentiality statement. No content change.
04	05/04/2023	6.3 +	Updated minimum standard revision requirements (no longer just preferred) now that we are past the implementation dates. Updated EN60320-1 revision to 2021 in section 6.3 (Power Cords) due 10 Nov 2023.
05	12/06/2023	6.5	Identified EN 50364:2010 as mandatory now that it is both EU harmonized and UK designated.
06	03/15/2024	1, 3, 6.5, 6.6	Added batteries due to new Battery Regulation (EU) 2023/1542 mandating DOCs for batteries. Added EN 301 489-1 v1.9.2 for cartridges.
07	08/16/2024	6.7	Added section 6.7 for RFID devices.

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