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Universal serial bus interfaces for data and power - Part 1-5: Common components - USB Audio 3.0 device class definition

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**Universal serial bus interfaces for data and power - Part 1-5:
Common components - USB Audio 3.0 device class definition
(IEC 62680-1-5:2019)**

Interfaces de bus universel en série pour les données et
l'alimentation électrique - Partie 1-5: Composants communs
- Définition de classes de dispositifs USB Audio 3.0
(IEC 62680-1-5:2019)

Schnittstellen des Universellen Seriellen Busses für Daten
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Audio 3.0 Geräteklassendefinition
(IEC 62680-1-5:2019)

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EN IEC 62680-1-5:2019 (E)**European foreword**

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NORME INTERNATIONALE



**Universal serial bus interfaces for data and power –
Part 1-5: Common components – USB Audio 3.0 device class definition**

**Interfaces de bus universel en série pour les données et l'alimentation
électrique –
Partie 1-5: Composants communs – Définition de classes de dispositifs USB
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Part 1-5: Common components – USB Audio 3.0 device class definition**

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Partie 1-5: Composants communs – Définition de classes de dispositifs USB
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UNIVERSAL SERIAL BUS INTERFACES FOR DATA AND POWER –**Part 1-5: Common components – USB Audio 3.0 device class definition**

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International Standard IEC 62680-1-5 has been prepared by technical area 18: Multimedia home systems and applications for end-user networks, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

The text of this standard was prepared by the USB Implementers Forum (USB-IF). The structure and editorial rules used in this publication reflect the practice of the organization which submitted it.

The text of this International Standard is based on the following documents:

CDV	Report on voting
100/3157/CDV	100/3227/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

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The IEC 62680 series is based on a series of specifications that were originally developed by the USB Implementers Forum (USB-IF). These specifications were submitted to the IEC under the auspices of a special agreement between the IEC and the USB-IF.

This standard is the USB-IF publication USB Device Class Definition for Audio Devices Release 3.0.

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UNIVERSAL SERIAL BUS DEVICE CLASS DEFINITION FOR AUDIO DEVICES

Release 3.0

September 22, 2016

SCOPE OF THIS RELEASE

This document is the Release 3.0 of this Device Class Definition.

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1 INTRODUCTION

1.1 SCOPE

The Audio Device Class Definition applies to all devices or functions embedded in composite devices that are used to manipulate audio, voice, and sound-related functionality. This includes both audio data (analog and digital) and the functionality that is used to directly control the audio environment, such as Volume and Tone Control. The Audio Device Class does not include functionality to operate transport mechanisms that are related to the reproduction of audio data, such as tape transport mechanisms or CD-ROM drive control.

1.2 PURPOSE

The purpose of this document is to describe the minimum capabilities and characteristics an audio device shall support to comply with the USB. This document also provides recommendations for optional features.

1.3 RELATED DOCUMENTS

- *Universal Serial Bus Specification*, Revision 2.0 (referred to in this document as the *USB Specification*). In particular, see Chapter 5, “USB Data Flow Model” and Chapter 9, “USB Device Framework.”
- *Universal Serial Bus 3.1 Specification*, Revision 1.0 (referred to in this document as the *USB 3.1 Specification*). This document covers details specific to SuperSpeed and SuperSpeed+ devices.
- *Universal Serial Bus Device Class Definition for Audio Data Formats* (referred to in this document as USB Audio Data Formats).
- *Universal Serial Bus Device Class Definition for Terminal Types* (referred to in this document as USB Audio Terminal Types).
- ANSI S1.11-1986 standard.
- MPEG-1 standard ISO/IEC 111172-3 1993.
- MPEG-2 standard ISO/IEC 13818-3 Feb. 20, 1997.
- Digital Audio Compression Standard (AC-3), ATSC A/52A Aug. 20, 2001. (available from <http://www.atsc.org/>)
- ANSI/IEEE-754 floating-point standard.
- ISO/IEC 60958 International Standard: *Digital Audio Interface and Annexes*.
- ISO/IEC 61937 standard.

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