Foreword

This is a Supporting Document (SD), intended to complement the Common Criteria version 3 and the associated Common Evaluation Methodology for Information Technology Security Evaluation.

SDs may be “Guidance Documents”, that highlight specific approaches and application of the standard to areas where no mutual recognition of its application is required, and as such, are not of normative nature, or “Mandatory Technical Documents”, whose application is mandatory for evaluations whose scope is covered by that of the SD. The usage of the latter class is not only mandatory, but certificates issued as a result of their application are recognized under the Common Criteria Recognition Arrangement (CCRA).

Technical Editor:
National Information Assurance Partnership (NIAP)

Document history:
V1.0, July 2019 (Initial)

General Purpose:
The purpose of this SD is to define evaluation methods for the functional behavior of peripheral sharing devices that support Analog Audio Output peripherals.

Field of special use:
This Supporting Document applies to the evaluation of TOEs claiming conformance with the PP-Module for Analog Audio Output Devices, Version 1.0, July 2019.

Acknowledgements:
The NIAP Technical Community members, with representatives from industry, government agencies, Common Criteria Test Laboratories, and members of academia supported the development of this SD.
Table of Contents

1 Introduction ........................................................................................................................................ 4
   1.1 Technology Area and Scope of Supporting Document .............................................................. 4
   1.2 Structure of the Document .......................................................................................................... 4
   1.3 Terminology ................................................................................................................................ 4
       1.3.1 Glossary ............................................................................................................................... 4
       1.3.2 Acronyms ............................................................................................................................ 5
2 Evaluation Activities for SFRs ........................................................................................................ 6
   2.1 Test Environment for Evaluation Activities .............................................................................. 6
   2.2 PSD Evaluation Activities ......................................................................................................... 7
       2.2.1 User Data Protection (FDP) ................................................................................................. 7
   2.3 TOE SFR Evaluation Activities ................................................................................................. 11
       2.3.1 User Data Protection (FDP) ............................................................................................... 11
3 Evaluation Activities for Optional Requirements ....................................................................... 15
4 Evaluation Activities for Selection-Based Requirements ............................................................ 16
5 Evaluation Activities for SARs .................................................................................................... 17
6 Required Supplementary Information ............................................................................................ 18
7 References ....................................................................................................................................... 19
1 Introduction

1.1 Technology Area and Scope of Supporting Document

The scope of the PP-Module for Analog Audio Output Devices is to describe the security functionality of analog audio output peripheral devices to be connected to Peripheral Sharing Devices in terms of [CC] and to define functional and assurance requirements for such products. The PP-Module is intended for use with the following Base-PPs:

- Protection Profile for Peripheral Sharing Devices, version 4.0 (PP_PSD_V4.0 or PSD PP)

This SD is mandatory for evaluations of TOEs that claim conformance to the following PP-Module:

- PP-Module for Analog Audio Output Devices (MOD_AO_V1.0)

Although Evaluation Activities (EAs) are defined mainly for the evaluators to follow, in general they will also help Developers to prepare for evaluation by identifying specific requirements for their TOE. The specific requirements in EAs may in some cases clarify the meaning of Security Functional Requirements (SFR), and may identify particular requirements for the content of Security Targets (ST) (especially the TOE Summary Specification), user guidance documentation, and possibly supplementary information (e.g. for isolation documentation).

1.2 Structure of the Document

EAs can be defined for both SFRs and Security Assurance Requirements (SAR). These are defined in separate sections of the SD.

If any EA cannot be successfully completed in an evaluation then the overall verdict for the evaluation is a ‘fail’. In rare cases, there may be acceptable reasons why an EA may be modified or deemed not applicable for a particular TOE, but this must be agreed with the Certification Body for the evaluation.

In general, if all EAs (for both SFRs and SARs) are successfully completed in an evaluation then it would be expected that the overall verdict for the evaluation is a ‘pass’. To reach a ‘fail’ verdict when the EAs have been successfully completed would require a specific justification from the evaluator as to why the EAs were not sufficient for that TOE.

Similarly, at the more granular level of Assurance Components, if the EAs for an Assurance Component and all of its related SFR EAs successfully completed in an evaluation then it would be expected that the verdict for the Assurance Component is a ‘pass’. To reach a ‘fail’ verdict for the Assurance Component when these EAs have been successfully completed would require a specific justification from the evaluator as to why the EAs were not sufficient for that TOE.

1.3 Terminology

1.3.1 Glossary

For definitions of standard CC terminology, see [CC] part 1.

Reference the terms sections of the PSD PP and MOD_AO_V1.0 in addition to the terms listed below.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amplified Speaker</td>
<td>Computer audio peripheral device that uses an amplifier to strengthen analog audio signals that drive one or more speakers.</td>
</tr>
<tr>
<td>Analog Microphone</td>
<td>Computer audio peripheral device that converts sound waves into analog data stream.</td>
</tr>
<tr>
<td>Designated Frequencies</td>
<td>The following frequencies that are used in testing: 100 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, 10 kHz, 12 kHz, 15 kHz, 20 kHz, 30 kHz, 40 kHz, 50 kHz, and 60 kHz.</td>
</tr>
<tr>
<td>Extended Audio Frequency Range</td>
<td>The range from 1 Hz to 60 kHz.</td>
</tr>
</tbody>
</table>

1.3.2 Acronyms

Reference the terms sections of the PSD PP and MOD_AO_V1.0.
2 Evaluation Activities for SFRs

The EAs presented in this section are intended to supplement those defined in the PSD PP.

The Analog Audio Output PP-Module relies on several SFRs from the PSD PP to help in the implementation of its required functionality. These SFRs are listed in this section along with any impact to how they are to be evaluated in a TOE that includes the Analog Audio Output PP-Module. This section also defines the EAs for the mandatory SFRs that are introduced in the Analog Audio Output PP-Module.

Successful completion of these EAs assists in the completion of the relevant portions of ASE_TSS.1, ADV_FSP.1, AGD_OPE.1, and ATE_IND.1, which are required to be applied to the entire TOE as per CFG_PSD-AO-KM-UA-VI_V1.0, CFG_PSD-AO-KM-VI_V1.0, and CFG_PSD-AO-VI_V1.0.

2.1 Test Environment for Evaluation Activities

In order to ensure that the TOE demonstrates the functionality required by the EAs, it is necessary for the evaluator to ensure that they have appropriate equipment to conduct the required testing. In addition to the equipment that is relevant for testing any PSD as defined in the PSD PP, the following additional equipment should be used in testing:

- Amplified speakers – the tests in this SD depend upon the use of high-quality system 2.1 standard and higher amplified speakers with a separate subwoofer.
- Tone generator software application – the tests in this SD require the use of a tone generator software application that can generate sine wave audio at configurable pitch (in Hz) and volume levels.
- Computer microphone (analog) – the tests in this SD require the use of an analog microphone to be connected to the TOE to demonstrate that it will not transmit audio signals when this occurs.
- 3.5 mm stereo plug with open end wires or solderable tabs – this plug is used by some of the tests in this Supporting Document to enable audio signal injection or detection at the TOE analog audio interfaces.
- Digital voltmeter – the tests in this SD require the use of a digital voltmeter to measure the DC voltage over TOE peripheral interfaces to confirm that current is not supplied to a connected microphone.
- Audio signal generator – the tests in this SD require the use of an audio signal generator that is capable of generating a sine wave with positive/negative bias from DC up to 100 KHz to test that the TOE does not experience audio signal leakage.
- Audio spectrum analyzer software – the tests in this SD require the use of software with a Fast Fourier Transform (FFT) capability that can display real-time audio spectrum data, including frequencies, attenuation dB, and voltage of audio signals, and is used to detect signal leakage between interfaces. Note that any use of a computer with audio spectrum analyzer software may be replaced by an audio spectrum analyzer or an Oscilloscope with FFT capability.
- Oscilloscope – the tests in this SD require the use of an oscilloscope to detect signal leakage between peripheral interfaces. Any oscilloscope with an FFT capability and bandwidth of at least 1 MHz may be used. Note that any use of an oscilloscope may be replaced by a computer with audio spectrum analyzer software or an audio spectrum analyzer.
- Tone generator software – the tests in this SD require the use of tone generator software to verify how data is routed.
- USB dummy load – the tests in this SD require the use of a USB dummy load to verify that electrical signals are not sent to non-selected computers.
This equipment is required in addition to that which is relevant for testing any PSD as defined in the PSD PP. Additional equipment may apply if the TOE claims support for additional peripheral types as defined by the other PP-Modules that extend the PSD PP.

When conducting testing, the evaluator must ensure that all combinations of switch selections are tested. For example, if testing a device with 2 audio output interfaces and eight computer interfaces, the evaluator may use two connected computers, but must change the connected ports several times to ensure that each of the possible permutations of switch positions is tested.

2.2 PSD Evaluation Activities

The EAs defined in this section are additional activities for the PSD PP that the evaluator shall perform when the ST claims the PP-Module for Analog Audio Output Devices. The evaluator shall perform these actions in addition to those required by the PSD PP (and by any other PP-Modules in the claimed PP-Configuration).

2.2.1 User Data Protection (FDP)

2.2.1.1 Active PSD Connections (FDP_APC_EXT.1)

Isolation Document
The evaluator shall examine the Isolation Documentation to determine that it describes the logic under which the TSF permits audio flows from a connected computer to a connected audio output interface.

The evaluator shall examine the Isolation Documentation to determine that it describes how the TOE enforces audio output data flow isolation from other TOE functions, such that it is not possible for two computers connected to the TOE to use the TOE to communicate with one another. The description shall ensure the signal attenuation in the extended audio frequency range between any computer audio output interfaces is at least 45 dB measured with a 2V input pure sine wave at the extended audio frequency range, including negative swing signal.

The evaluator shall examine the Isolation Documentation to determine that it describes how the TOE prevents the audio output signal from traversing the TOE while the TOE is powered off.

TSS
There are no additional TSS activities for this component.

Guidance
If the ability of the TOE to grant or deny authorization to audio communications is configurable, the evaluator shall verify that the operational guidance describes how to configure the TSF to behave in the manner specified by the SFR. This includes the possibility of both administratively configured TOE settings and any peripherals/connectors that are included with the TOE that cause data flows to behave differently if peripherals are connected through them.

Test
Test Setup
The evaluator shall perform the following setup steps:

- Configure the TOE and the operational environment in accordance with the operational guidance.
- Play a different audio file on a number of computers for each TOE computer analog audio
interface.
• Connect each computer to a TOE computer analog audio interface.
• Turn on the TOE.

Note that for a TOE that provides audio mixing function the evaluator shall maximize the volume on a specific channel where instructed in the following text to assign that specific computer.

Note: Electrical signals are considered not to flow between connected computers and data is considered not to transit the TOE if no signal greater than 45 dB of attenuation at the specific audio frequency is received

**Test 1-AO – Analog Audio Output Data Routing Methods.**

This test verifies the functionality of the TOE routing methods while powered on, powered off, and in failure state.

Step 1: Connect amplified speakers to the TOE audio output device interface. Set the speakers to approximately 25% volume.

Step 2: [Conditional: if “switching can be initiated only through express user action” is selected in FDP_SWI_EXT.1.1 in the PSD PP, then] perform step 3 for each switching method selected in FDP_SWI_EXT.2.2 in accordance with the operational user guidance.

Step 3: For each connected computer, ensure it is selected, listen to the amplified speakers, and verify that the audio is coming from the selected computer(s). Adjust the volume if necessary.

Step 4: Replace the speakers with a computer connected to the TOE analog audio output device interface and run audio spectrum analyzer software on it. Run tone generator software on all connected computers.

Step 5: Turn off the TOE, and for each connected computer, use the tone generator program to generate a sine wave audio tone for each of the designated frequencies and verify that no audio is present in the audio spectrum analyzer software on the computer connected to the TOE analog audio output device interface.

Step 6: Power on the TOE, cause the TOE to enter a failure state, and verify that the TOE provides the user with an indication of failure. For each connected computer use the tone generator program to generate a sine wave audio tone for each of the designated frequencies and verify that no audio is present in the audio spectrum analyzer software on the computer connected to the TOE analog audio output device interface.

**Test 2-AO – Analog Audio Output Interface Isolation**

[Conditional: perform this test if “switching through express user action” is selected in FDP_SWI_EXT.1.1 in the PSD PP.]

This test verifies that no data or electrical signals flow between connected computers while the TOE is powered on or off.

Step 1. Continue with the setup from Test 1.

Step 2: Connect a computer to the TOE analog audio output device interface. Run audio spectrum analyzer software on all computers.

Step 3: Perform steps 4-13 for each TOE analog audio computer interface.
Step 4: Turn on the TOE and ensure the first computer is selected.

Step 5: Use the tone generator program on the first computer to generate a sine wave audio tone for each of the designated frequencies. Verify that the audio is present in the audio spectrum analyzer software on the computer connected to the TOE analog audio output device interface and is not present in the audio spectrum analyzer software on any of the non-selected computers.

Step 6: For each other TOE analog audio computer interface, select that computer and use the tone generator program on the first computer (now no longer selected) to generate a sine wave audio tone for each of the designated frequencies. Verify that the audio is not present in the audio spectrum analyzer software on the selected computer, the other non-selected computers, or the computer connected to the TOE analog audio output device interface.

Step 7: Power off the TOE and use the tone generator program on the first computer to generate a sine wave audio tone for each of the designated frequencies. Verify that the audio is not present in the audio spectrum analyzer software on any of the other connected computers.

Step 8: Restart the TOE, select the first computer, and replace it with an external audio signal generator.

Step 9: For each non-selected computer connected to the TOE analog audio output computer interface, replace it with an oscilloscope set to measure the peak-to-peak voltage and perform steps 10-14.

Step 10: Perform steps 11-13 with the signal generator set to the following settings:

- Pure sine wave around the average voltage of half output (positive signal only), with the output signal set to 2.00 V peak-to-peak, calibrating the signal with the oscilloscope as needed
- Signal average to 0v (negative swing)

Step 11: Set the signal generator to generate the designated frequencies and verify the signal on the oscilloscopes is 11.2 mV or less. This level of signal ensures signal attenuation of 45 dB in the extended audio frequency range.

Step 12: For each other TOE analog audio computer interface, select it, set the signal generator to generate the designated frequencies, and verify the signal on the oscilloscopes is 11.2 mV or less.

Step 13: Power off the TOE and set the signal generator to generate the designated frequencies and verify the signal on the oscilloscopes is 11.2 mV or less.

Test 3-AO – No Flow between Computers with Other Peripheral Device Types

[Conditional: Perform this test only if a PP-Module aside from the Analog Audio Output PP-Module is part of the PP-Configuration being claimed AND if “switching through express user action” is selected in FDP_SWI_EXT.1.1 in the PSD PP.]

This test verifies that power events at one TOE USB computer interface do not affect the analog audio output computer interface of another computer.

Note: “No sound appears” is defined as a temporary jump of at least 4 dB from the existing ambient noise floor.

Step 1: Connect a computer to the TOE analog audio output peripheral interface and run audio spectrum analyzer software on it and each connected computer.

Step 2: Perform steps 3-9 for each connected computer.
Step 3: Ensure the first computer is selected and perform steps 4-8 while the TOE is powered on and powered off.

[Conditional: Perform steps 4 and 5 only if the PP-Module for Video/Display Devices is part of the PP-Configuration being claimed.]

Step 4: For each other connected computer, disconnect and reconnect the video cables from the TOE computer interface several times. Verify that no sound appears on the audio analyzer software on the first computer.

Step 5: Disconnect and reconnect the first computer’s video cables from the TOE computer interface several times. Verify that no sound appears on the audio analyzer software on the other connected computers.

Step 6: [Conditional: If the PP-Module for Keyboard/Mouse Devices or PP-Module for User Authentication Devices is part of the PP-Configuration being claimed, then:] for each other connected computer, disconnect and reconnect the USB cable from the TOE USB computer interface several times. Verify that no sound appears on the audio analyzer software on the computer connected to the TOE analog audio output peripheral interface or any connected computers.

Step 7: [Conditional: If the PSD PP-Module for Keyboard/MouseDevices is part of the PP-Configuration being claimed, then:] disconnect and reconnect the peripheral device type(s) selected in FDP_PDC_EXT.3.1/KM from the TOE KM peripheral device interface several times. Verify that no sound appears on the audio analyzer software on the other connected computers.

Step 8: [Conditional: If the PP-Module for User Authentication Devices is part of the PP-Configuration being claimed and “external” is selected in FDP_PDC_EXT.4.1, then:] disconnect and reconnect the UA peripheral device from the TOE UA peripheral device interface several times. Verify that no sound appears on the audio analyzer software on the other connected computers.

Step 9: [Conditional: If the PP-Module for User Authentication Devices is part of the PP-Configuration being claimed, then:] connect an authentication session to the first computer and verify that no sounds appears on the audio analyzer software on the other connected computers.

Test 4-AO – No Flow between Connected Computers over Time

This test verifies that the TOE does not send data to different computers connected to the same interface at different times. Repeat this test for each TOE Analog Audio Output port.

Step 1: Ensure only one computer is connected and it is selected. Run a tone generator program on the connected computer and the audio analyzer software on a non-connected computer.

Step 2: Perform steps 3-11 while the TOE is powered on and powered off.

Step 3: Perform steps 4-5 for each of the designated frequencies.

Step 4: Use the tone generator program on the connected computer to generate a sine wave audio tone.

Step 5: Disconnect the connected computer, wait two minutes, connect the other computer, and verify that the generated audio frequency is not present in the audio spectrum analyzer software.

Step 6: Replace the connected computer with an external audio signal generator.

Step 7: Perform steps 8-11 with the signal generator set to the following settings:
Pure sine wave around the average voltage of half output (positive signal only), with the output signal set to 2.00 V peak-to-peak, calibrating the signal with the oscilloscope as needed.

Signal average to 0v (negative swing)

Step 8: Perform steps 9-11 for each of the designated frequencies.

Step 9: Use the signal generator to generate the signal.

Step 10: Disconnect the signal generator, wait two minutes, and replace it with an oscilloscope set to measure the peak-to-peak voltage.

Step 11: Verify the signal on the oscilloscope is 11.2 mV or less at the generated frequency.

2.2.1.2 Peripheral Device Connection (FDP_PDC_EXT.1)

FDP_PDC_EXT.1 Peripheral Device Connection

Isolation Document
There are no Isolation Document EAs for this component beyond what the PSD PP requires.

TSS
There are no TSS EAs for this component beyond what the PSD PP requires.

Guidance
There are no guidance EAs for this component beyond what the PSD PP requires.

Test
Test 1-AO

The evaluator shall verify that the TOE ports properly reject unauthorized devices and devices with unauthorized protocols as per the unauthorized peripheral device connections.

For this test, verify device rejection through TOE user indication in accordance with the operational user guidance or an immediate cessation of traffic following device detection or enumeration, or incompatibility of the device interface with the peripheral interface.

Step 1: Ensure the TOE is powered off and audio analyzer software is running on the connected computer.

Step 2: Connect an analog microphone to the TOE analog audio output peripheral interface.

Step 3: Power on the TOE, speak loudly into the microphone from approximately one-inch distance, and verify no audio is present in the audio analyzer software.

Step 4: Disconnect the microphone and reconnect it to the TOE peripheral interface.

Step 5: Speak loudly into the microphone from approximately one-inch distance, and verify no audio is present in the audio analyzer software.

2.3 TOE SFR Evaluation Activities

2.3.1 User Data Protection (FDP)

2.3.1.1 Audio Filtration (FDP_AFL_EXT)

FDP_AFL_EXT.1 Audio Filtration
**Isolation Document**
There are no Isolation Document EAs for this component.

**TSS**
The evaluator shall check the TSS to verify that the TOE audio function implementation properly filters the audio passing through the TOE.

**Guidance**
There are no guidance EAs for this component.

**Test**
Step 1: Connect a computer to the TOE analog audio output peripheral interface and run audio analyzer software on it.

Step 2: For each connected computer, ensure it is selected, use its tone generator software to generate a sine wave audio tone for each of the frequencies in the Audio Filtration Specifications table and verify in the audio analyzer software that they are attenuated by at least the amount specified in the Audio Filtration Specifications table.

Step 3: Connect an oscilloscope to the TOE analog audio output peripheral interface and set it to measure the peak-to-peak voltage.

Step 4: For each connected computer, perform step 5 with the signal generator set to the following settings:
- Pure sine wave around the average voltage of half output (positive signal only), with the output signal set to 2.00 V peak-to-peak, calibrating the signal with the oscilloscope as needed
- Signal average to 0V (negative swing)

Step 5: Set the signal generator to generate the frequencies in Audio Filtration Specifications table and verify the signal on the oscilloscope does not exceed the corresponding maximum voltage after attenuation.

2.3.1.2 Peripheral Device Connection (FDP_PDC_EXT)

**FPD_PDC_EXT.2/AO Authorized Devices (Audio Output)**

**Isolation Document**
There are no Isolation Document EAs for this component.

**TSS**
There are no TSS EAs for this component.

**Guidance**
The evaluator shall verify that the operational guidance describes devices authorized for use with the TOE in accordance with the authorized peripheral device connections.

**Test**
The evaluator shall verify that the TOE ports do not reject authorized devices and devices with authorized protocols as per the authorized peripheral device connections.

Repeat this test for each of the following devices: analog headphone, and analog speakers.

Step 1: Ensure the TOE is powered off.
Step 2: Connect the authorized device to the TOE peripheral interface.

Step 3: Power on the TOE. Verify the TOE user indication described in the operational user guidance is not present.

Step 4: Play an audio file on the connected computer and verify the sound is heard through the authorized device.

Step 5: Disconnect the authorized device, then reconnect it to the TOE peripheral interface.

Step 6: Verify the TOE user indication described in the operational user guidance is not present.

Step 7: Play an audio file on the connected computer and verify the sound is heard through the authorized device.

2.3.1.3 Powering Unauthorized Devices (FDP_PUD_EXT)

FDP_PUD_EXT.1 Powering Unauthorized Devices

**Isolation Document**
There are no Isolation Document EAs for this component.

**TSS**
The evaluator shall verify the TSS states that the TOE does not supply power to an unauthorized device connected to the analog audio output interface.

The evaluator shall also verify that the TOE cannot be configured to supply power to a device connected to the analog audio output interface.

**Guidance**
The evaluator shall verify that the guidance states that a microphone should never be connected to the TOE’s analog audio output interface.

**Test**
Step 1: Connect the amplified speakers directly to computer #1’s analog audio output interface (typically green in color). Set the volume at the speakers to approximately 25%.

Step 2: Connect the computer interface audio cable to the TOE audio output computer interface and computer #1’s analog audio microphone input interface (typically pink in color) instead of the computer analog audio output interface.

Step 4: Connect an open 3.5 millimeter stereo plug to the TOE analog audio peripheral interface.

Step 5: Power up the TOE and ensure computer #1 is selected.

Step 6: Measure the DC voltage of stereo plug from the TOE analog audio peripheral interface between the ground terminal and each one of the other two terminals (tip and ring) using a digital voltmeter.

Step 7: Verify the voltage is 0.2 volts or less, ensuring there is no DC bias voltage supplied to the microphone.

2.3.1.4 Unidirectional Data Flow (FDP_UDF_EXT)

FDP_UDF_EXT.1/AO Unidirectional Data Flow (Audio Output)
**Isolation Document**

The evaluator shall examine the Isolation Documentation to determine that it describes how the TOE enforces audio output data flow isolation from other TOE functions, such that the audio output peripheral interface is unidirectional and no data can be routed from a connected peripheral back to a connected computer. The description shall ensure the signal attenuation between any TOE audio output peripheral device interface and any other TOE computer audio output interface is at least 45 dB measured with a 2V input pure sine wave at the extended audio frequency range, including negative swing signal.

**TSS**

There are no TSS EAs for this component.

**Guidance**

There are no guidance EAs for this component.

**Test**

Note: Data is considered not to transit the TOE if no signal greater than 45 dB of attenuation at the specific audio frequency is received.

The evaluator shall perform the following test:

Step 1: Connect a computer to the TOE analog audio output peripheral interface, run its tone generator software, and run audio analyzer software on the connected computer.

Step 2: Perform steps 3-6 for each TOE analog audio output peripheral interface.

Step 3: For each connected computer, ensure it is selected, use the tone generator on the computer connected to the TOE analog audio output peripheral interface to generate the designated frequencies, and verify that the audio is not present on the selected computer’s audio analyzer software.

Step 4: Replace the selected computer with an oscilloscope and connect an external audio signal generator to the TOE analog audio output peripheral interface. Perform step 5 with the signal generator set to the following settings:

- Pure sine wave around the average voltage of half output (positive signal only), with the output signal set to 2.00 V peak-to-peak, calibrating the signal with the oscilloscope as needed;
- Signal average to 0V (negative swing)

Step 5: Set the signal generator to generate the designated frequencies, and verify the signal on the oscilloscope is 11.2 mV or less.
3 Evaluation Activities for Optional Requirements

The PP-Module does not define any optional requirements.
4 Evaluation Activities for Selection-Based Requirements

The PP-Module does not define any selection-based requirements.
5 Evaluation Activities for SARs

To evaluate the SARs specified by CFG_PSD-AO-KM-UA-VI_V1.0, CFG_PSD-AO-KM-VI_V1.0, and CFG_PSD-AO-VI_V1.0, the evaluator shall perform the SAR EAs defined in the PSD PP against the entire TOE as applicable (i.e., both the generic PSD portion and the portion(s) related to support for specific peripheral types).
6 Required Supplementary Information

This Supporting Document refers in various places to the possibility that ‘supplementary information’ may need to be supplied as part of the deliverables for an evaluation. This term is intended to describe information that is not necessarily included in the Security Target or operational guidance, and that may not necessarily be public. Examples of such information could be a Letter of Volatility or isolation documentation. The requirement for any such supplementary information will be identified in the relevant PP, PP-Module, or Supporting Document.

The PSD PP requires an Isolation Document to be included with the TOE for evaluation of isolation requirements. The EAs the evaluator is to perform are captured under the appropriate SFR.
## References

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Part 1: Introduction and General Model, CCMB-2017-04-001, Version 3.1 Revision 5, April 2017</td>
</tr>
<tr>
<td></td>
<td>• Part 3: Security Assurance Components, CCMB-2017-04-003, Version 3.1 Revision 5, April 2017</td>
</tr>
<tr>
<td>[PP_PSD_V4.0 or PSDD PP]</td>
<td>Protection Profile for Peripheral Sharing Devices, Version 4.0, July 2019</td>
</tr>
<tr>
<td>[MOD_AO_V1.0]</td>
<td>PP-Module for Analog Audio Output Devices, Version 1.0, July 2019</td>
</tr>
</tbody>
</table>