

Supporting Document
Mandatory Technical Document
PP-Module for Video/Display Devices



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National Information Assurance Partnership

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).

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General Purpose:

The purpose of this SD is to define evaluation methods for the functional behavior of peripheral sharing devices that support video output peripherals.

Field of special use:

This Supporting Document applies to the evaluation of TOEs claiming conformance with the PP-Module for Video/Display Devices.

Acknowledgements:

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1 Introduction

1.1 Technology Area and Scope of Supporting Document

The scope of the PP-Module for Video/Display Devices is to describe the security functionality of display types of 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 Video/Display Devices (MOD_VI_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_VI_V1.0 in addition to the terms listed below.

Term	Definition
Resistor	An electrical component that reduces the current flow through ports.

TOE Display Interface	TOE console port used to connect display or video sink.
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1.3.2 Acronyms

Reference the acronyms section of the PSD PP and MOD_VI_v1.0.

2 Evaluation Activities for SFRs

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

MOD_VI_V1.0 relies on several PSD PP SFRs 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 this PP-Module. This section also defines the EAs for the mandatory SFRs that are introduced in the 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-VI_V1.0, CFG_PSD-KM-VI_V1.0, CFG_PSD-AO-VI_V1.0, CFG_PSD-KM-UA-VI_V1.0, and CFG_PSD-AO-KM-UA-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:

- Display devices encompassing all display protocols the TOE supports (Video Graphics Array (VGA), High-Definition Multimedia Interface (HDMI), Digital Visual Interface (DVI)-I/D, DisplayPort, and USB Type-C with DisplayPort as alternate function)
- Oscilloscope capable of sampling at least one single-ended signal or one differential signal at 400 MHz or above
- 3.3v power supply
- 100 Ohm resistor
- Multi-meter capable of measuring voltage in millivolts and resistance above 2 Mega-Ohms
- Monitor Control Command Set (MCCS) Control Console Software
- I2C Programmer
- Conditional – If the TOE supports DisplayPort video interfaces:
 - o DisplayPort AUX Channel Analyzer
 - o DisplayPort Source generator device or Peripheral Component Interconnect (PCI) card
- Conditional – If the TOE supports HDMI or DVI video interfaces:
 - o HDMI sink test device
 - o HDMI source generator or PCI card
- Conditional – If the TOE supports VGA video interfaces:
 - o VGA sink test device
 - o VGA source generator or PCI card
- Conditional – If the TOE supports USB-Type C with DisplayPort as alternate function video interfaces
 - o USB sniffer
 - o USB source generator or PCI card

- Optional: Spectrum analyzer with single-ended and differential probes. Spectrum analyzer bandwidth should be at least 20% higher than the highest video bandwidth the TOE supports
- Optional: Video breakout device compatible with TOE display interfaces

When conducting testing, each TOE interface must be tested but not all interfaces must be tested simultaneously. For example, if testing a 16-port device, the evaluator may use four connected computers, but must change the connected ports several times to ensure all TOE display interfaces and all TOE computer video interfaces are 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 Video/Display 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)

FDP_APC_EXT.1 Active PSD Connections

Isolation Document

The evaluator shall examine the Isolation Document and verify it describes how the TOE ensures that no data or electrical signals flow between connected computers in both cases (powered on, powered off).

TSS

There are no guidance 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

The evaluator shall perform the following tests:

Test 1-VI: Video Source Selection and Identification, TOE Off and Failure States

This test verifies the TOE switching function operates properly and will stop the video output display when in an OFF or FAILURE state.

Step 1: Configure the TOE and the Operational Environment in accordance with the operational guidance.

Step 2: Play a different video with embedded audio on a number of computers for each TOE computer video interface.

Step 3: Connect each computer to a TOE computer video interface.

Step 4: Connect a display to each TOE display interface.

Step 5: Turn on the TOE.

Step 6: For each connected computer, ensure it is selected and verify that the video and its accompanying audio from the selected computer(s) are received on the proper display(s).

Step 7: [Conditional: if “multiple connected displays” is selected in FDP_CDS_EXT.1.1 then] verify that video generated by the TOE has clear identification marking or text to properly identify the source computer shown.

Step 8: Turn off the TOE and verify that no video appears on any connected display.

Step 9: Power on the TOE and cause the TOE to enter a failure state. Verify that the TOE provides the user with a visual indication of failure and that no usable video appears on any connected display.

Step 10: Repeat steps 3 to 9 for each unique display protocol and port type supported by the TOE.

Test 2-VI: Computer Video Interface Isolation

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

This test verifies that the TOE does not transfer data to any non-selected computer video interface.

Step 1: Configure the TOE and the Operational Environment in accordance with the operational guidance. Connect only the first computer interface cable to one computer. Turn on the TOE.

Step 2: Switch the TOE primary display to computer #1.

Step 3: Observe the primary display to verify that the selected computer is the one that is shown.

Step 4: Remove the non-selected computer video interface cables from the TOE and connect the oscilloscope probe to the TOE #2 computer video interface to verify that no SYNC signal is passed through the TOE. Based on the connection interface protocol, this is performed as follows:

1. Video Graphics Array (VGA) – single ended probe on pins 13 and then 14;
2. High-Definition Multimedia Interface (HDMI) – connect pin 19 to a 3.3V power supply via a 100 Ohm resistor to provide Hot Plug Detect (HPD) signal; Check for signals - differential probe between pins 10 (+) and 12 (-);
3. Digital Visual Interface (DVI)-I – connect pin 16 to a 3.3V power supply via a 100 Ohm resistor to provide HPD signal; Check for signals - single ended probe on pins 8 and C4. Differential probe between pins 23 (+) and 24 (-);
4. DVI-D - connect pin 16 to a 3.3V power supply via a 100 Ohm resistor to provide HPD signal; Check for signals - Differential probe between pins 23 (+) and 24 (-);
5. DisplayPort - connect pin 18 to a 3.3V power supply via 100 Ohm resistor to provide HPD signal; Check for signals - Differential probe between pins 3 (-) and 1 (+) and between 10 (-) and 12 (+);
6. USB Type-C with DisplayPort as Alternate Function – connect pin A8 to a 3.3V power supply via a 100 Ohm resistor to provide HPD signal; Check for signals – Differential probe between pins A2 and A3, A10 and A11; B2 and B3, and B10 and B11.

Step 5: Repeat steps 3 and 4 while selecting other TOE connected computers. Verify that no SYNC signal is present.

Step 6: Repeat steps 3 to 5 with the TOE unpowered. Verify that no SYNC signal is present.

Step 7: With the probe connected to the TOE computer #2 video interface, disconnect / reconnect the computer #1 video cable. Power up the TOE and select computer #1. Attempt to detect the change in the oscilloscope at each one of the TOE #2 computer video interface pins. No changes shall be detected.

Step 8: Repeat step 7 for each one of the other TOE computer video interfaces.

Step 9: Repeat steps 7 and 8, but instead of disconnecting / reconnecting the computer, disconnect and reconnect the display.

Step 10: Repeat steps 7 and 8, but instead of disconnecting / reconnecting the computer, reboot the selected computer.

Step 11: Repeat steps 2 to 10 with each connected computer.

Step 12: [Conditional: if “multiple connected displays” is selected in FDP_CDS_EXT.1.1 then] repeat steps 3 to 10 with each other display connected to the TOE.

Step 13: Repeat this test for each unique display protocol and port type supported by the TOE.

Test 3-VI - Unauthorized Sub-protocols

Note that in the following steps only native video protocol cables shall be used. No conversion from other video protocols is allowed in these tests except as directed in FDP_IPC_EXT.1.1.

This test verifies that unauthorized sub-protocols are blocked.

Perform this test for each of the selections in FDP_PDC_EXT.3.1/VI and FDP_IPC_EXT.1.1.

In the following steps the evaluator shall establish a verified test setup that passes video signals across the TOE.

Step 1: Connect at least one computer with a native video protocol output to the TOE computer #1 video input interface.

Step 2: Connect at least one display with native video protocol to the TOE display output.

Step 3: Power up the TOE and ensure the connected computer is selected.

Step 4: Verify that the video image is visible and stable on the user display.

In the following steps the evaluator shall verify that the test setup properly blocks the unauthorized video sub-protocol traffic.

Step 5: Open the Monitor Control Command Set (MCCS) control console program on the computer and attempt to change the display contrast and brightness. Verify that the display does not change its contrast and brightness accordingly.

Step 6: Disconnect the video cable connecting the display and the TOE and connect the display directly to the TOE. Verify that the video image is visible and stable on the user display.

Step 7: Attempt to change the display contrast and brightness. Verify that the display does change its contrast and brightness accordingly.

Step 8: Connect the following testing device based on the display video protocol being tested at the peripheral display interface:

1. DisplayPort – DisplayPort AUX channel analyzer in series between the display and the TOE
2. HDMI/DVI-I/-DVI-D – HDMI sink test device
3. USB Type-C with DisplayPort as Alternate Function – USB sniffer in series between the display and the TOE
4. VGA – VGA sink test device

Step 9: Attempt to change the display contrast and brightness. Verify that the testing device does not capture any MCCS commands.

Step 10: Replace the computer with a source generator for each selected protocol at the computer video interface. If DVI-I or DVI-D is selected, use an HDMI source generator.

Step 11: Run an EDID write transaction at the generator and verify in the testing device that no EDID traffic is captured.

Step 12: [Conditional, if DisplayPort, DVI-D, DVI-I, HDMI, or USB Type-C is the selected protocol being tested at the computer video interface, then] run Consumer Electronics Control (CEC) and High-bandwidth Digital Content Protection (HDCP) tests or commands at the generator and verify in the testing device that no CEC or HDCP traffic is captured.

Step 13: [Conditional, if DVI-D, DVI-I, or HDMI is the selected protocol being tested at the computer video interface, then] run Audio Return Channel (ARC), HDMI Ethernet and Audio Return Channel (HEAC), and HDMI Ethernet Channel (HEC) tests or commands at the generator and verify in the testing device that no ARC, HEAC, or HEC traffic is captured.

Step 14: [Conditional: If “[HDMI] protocol” is selected in FDP_IPC_EXT.1.2, then] perform steps 15 and 16 for both pin 13 (CEC) and 14 (UTILITY).

Step 15: Turn off the TOE. Use a multi-meter to measure the resistance-to-ground of the pin at the TOE HDMI peripheral interface and verify it is greater than 2 Mega-ohms.

Step 16: Attach a single ended oscilloscope probe between the pin and the ground, turn on the TOE, and verify that no changes between 0.0v and 0.2v and between 3.0v and 3.3v are detected.

Step 17: [Conditional: if VGA is not the selected protocol being tested, then] disconnect all devices. Connect the display to a TOE computer video interface and the oscilloscope to the TOE display interface in order to verify that no HPD signal is passed by measuring a signal voltage of less than 1.0V. Based on the selected protocol being tested, this is performed as follows:

1. HDMI – connect scope to pin 19 and verify no HPD signal is detected;
2. DVI-D/DVI-I – connect scope to pin 16 and verify no HPD signal is detected;
3. DisplayPort - connect scope to pin 18 and verify no HPD signal is detected;
4. USB Type-C with DisplayPort as Alternate Function – connect scope to pin A8 and B8 and verify no HPD signal is detected.

Step 18: Repeat this test for each of the selections in FDP_PDC_EXT.3.1/VI and FDP_IPC_EXT.1.2.

Test 4-VI - Video and EDID Channel Unidirectional Rule

This test verifies that the TOE video path is unidirectional from the computer video interface to the display interface with the exception of EDID, which may be read from the display once at power up and then may be read by the connected computers. The evaluator should have at least two high-resolution displays and one low-resolution display for each TOE-supported video protocol.

In the following steps the evaluator should attempt to read display EDID after the TOE completed its self-test / power up. The TOE should not read the new display EDID.

Step 1: Configure the TOE and the Operational Environment in accordance with the operational guidance. Connect a computer and a high-resolution display to the TOE.

Step 2: Ensure the TOE is on, computer #1 is selected, and verify that the display shows video from computer #1 as expected.

Step 3: Turn off the TOE. Disconnect the user display from the TOE.

Step 4: Connect the low-resolution display to the TOE and turn on the TOE. After the video is shown on the display, turn off the TOE.

Step 5: Turn on the TOE. After the TOE has completed the self-test, the TOE may fail to generate video on the user display (i.e., no EDID is read at the TOE power up). If the display is showing video, then run the EDID reading and parsing software on computer #1 and check that there is no active EDID (i.e., the computer is using a default generic display or reading older display settings from the registry).

In the following steps the evaluator shall validate that the TOE video path is unidirectional from the computer video interface to the display interface.

Step 6: Perform steps 7-11 for each TOE computer video interface.

Step 7: Power off the TOE and disconnect the computer #1 video output and the display. Connect the display cable to the TOE computer #1 video interface. Connect the computer #1 video cable to the TOE display interface. This configuration will attempt to force video data through the TOE in the reverse direction.

Step 8: Power up the TOE again.

Step 9: Check that the video is not visible in the display.

Step 10: Perform steps 11 while the TOE is powered on and powered off.

Step 11: Remove the display cable from the TOE and connect the oscilloscope to verify that no SYNC signal is passed through the TOE. Based on the video protocols supported, this is performed as follows:

1. VGA – single ended probe on pins 13 and 14;
2. HDMI – connect pin 19 to a 3.3V power supply via a 100 Ohm resistor to provide HPD signal; Check for signals - differential probe between pins 10 (+) and 12 (-);
3. DVI-I – connect pin 16 to a 3.3V power supply via a 100 Ohm resistor to provide HPD signal; Check for signals - single ended probe on pins 8 and C4. Differential probe between pins 23 (+) and 24 (-);
4. DVI-D - connect pin 16 to a 3.3V power supply via a 100 Ohm resistor to provide HPD signal; Check for signals - Differential probe between pins 23 (+) and 24 (-);
5. DisplayPort - connect pin 18 to a 3.3V power supply via a 100 Ohm resistor to provide HPD signal; Check for signals - Differential probe between pins 3 (-) and 1 (+) and between 10 (-) and 12 (+);
6. USB Type-C with DisplayPort as Alternate Function – connect pin A8 to a 3.3V power supply via a 100 Ohm resistor to provide HPD signal; Check for signals – Differential probe between pins A2 and A3, A10 and A11; B2 and B3, and B10 and B11.

Test 5-VI – No Flow between Connected Computers over Time

This test verifies that the TOE does not send data to different computers connected to the same TOE video interface over time. Repeat this test for each TOE Video port.

Step 1: Configure the TOE and the Operational Environment in accordance with the operational guidance. Run EDID reading and parsing software on two computers and connect a display to the TOE.

Step 2: Connect computer #1 to the TOE, ensure the TOE is on, computer #1 is selected, no other computers are connected, and verify that the display shows video from computer #1 as expected.

Step 3: Capture the TOE EDID content in the software on computer #1 and save as a file with a name that indicates capture time.

Step 4: Disconnect computer #1 and connect an I2C programmer to the same port. Attempt to write the characters “FFFF” over the entire EDID address range.

Step 5: Disconnect the I2C programmer, reconnect computer #1 to the same port, and repeat step 3.

Step 6: Reboot the TOE and repeat step 3.

Step 7: Turn off the TOE and repeat step 3.

Step 8: Restart the TOE and repeat step 3.

Step 9: Disconnect computer #1 and repeat steps 2 to 8 with computer #2 on the same port.

Step 10: Repeat steps 2 to 9 for a total of 20 EDID file captures.

Step 11: Collect all 20 captured EDID files, compare them bit-by-bit, and verify that they are identical.

2.2.1.2 Peripheral Device Connection (FDP_PDC_EXT)

FDP_PDC_EXT.1 Peripheral Device Connection

Isolation Document

There are no Isolation Document EAs for this component.

TSS

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

Guidance

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

Test

Test 1-VI: The evaluator shall verify that the TOE ports do not reject authorized devices and devices with authorized protocols as per the Peripheral Device Connections appendix in MOD_VI_V1.0.

Repeat this test for each of the selected protocols in FDP_PDC_EXT.3.1/VI:

Step 1: Connect the authorized device with an authorized protocol directly to a computer. Display any image on the device. Disconnect the device from the computer.

Step 2: Configure the TOE and the Operational Environment in accordance with the operational guidance.

Step 3: Ensure the TOE is powered off.

Step 4: Connect the authorized device with an authorized protocol to the TOE peripheral interface.

Step 5: Power on the TOE and verify the TOE user indication described in the operational user guidance is not present.

Step 6: Ensure the connected computer is selected and verify that the device displays the same image as in step 1.

Step 7: Disconnect the authorized device, then reconnect it to the TOE peripheral interface.

Step 8: Verify the TOE user indication described in the operational user guidance is not present.

Step 9: Verify that the device displays the same image as in step 1 and 6.

2.2.2 TOE Access (FTA)

2.2.2.1 Continuous Indications (FTA_CIN_EXT.1)

Isolation Document

There are no Isolation Document EAs for this component.

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

Additional testing for this component is performed in test 1-VI of FDP_APC_EXT.1 in section 2.2.1.1 above.

2.3 TOE SFR Evaluation Activities

2.3.1 User Data Protection (FDP)

2.3.1.1 Peripheral Device Connection (FDP_PDC_EXT)

FDP_PDC_EXT.2/VI Authorized Devices (Video Output)

Isolation Document

There are no Isolation Document EAs for this component.

TSS

TSS evaluation activities for this SFR are performed under FDP_PDC_EXT.1 above.

Guidance

Guidance evaluation activities for this SFR are performed under FDP_PDC_EXT.1 above.

Test

Testing of this component is performed through evaluation of FDP_PDC_EXT.1 as specified in section 2.2.1.2 above.

FDP_PDC_EXT.3/VI Authorized Connection Protocols (Video Output)

Isolation Document

There are no Isolation Document EAs for this component.

TSS

TSS evaluation activities for this SFR are performed under FDP_PDC_EXT.1 above.

Guidance

Guidance evaluation activities for this SFR are performed under FDP_PDC_EXT.1 above.

Test

Testing of this component is performed through evaluation of FDP_APC_EXT.1 as specified in section 2.2.1.1 above.

2.3.1.2 Unidirectional Data Flow (FDP_UDF_EXT)

FDP_UDF_EXT.1/VI Unidirectional Data Flow (Video Output)

Isolation Document

There are no Isolation Document EAs for this component.

TSS

There are no TSS EAs for this component.

Guidance

There are no guidance EAs for this component.

Test

This component is evaluated through evaluation of FDP_APC_EXT.1 as specified in section 2.2.1.1 above.

3 Evaluation Activities for Optional Requirements

The PP-Module does not define any optional requirements.

4 Evaluation Activities for Selection-Based Requirements

4.1 User Data Protection (FDP)

4.1.1 Connected Displays Supported (FDP_CDS_EXT)

FDP_CDS_EXT.1 Connected Displays Supported

Isolation Document

There are no Isolation Document EAs for this component.

TSS

The evaluator shall examine the TSS and verify that it describes how many connected displays may be supported at a time.

Guidance

The evaluator shall examine the operational user guidance and verify that it describes how many displays are supported by the TOE.

Test

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

4.1.2 Internal Protocol Conversion (FDP_IPC_EXT)

FDP_IPC_EXT.1 Internal Protocol Conversion

Isolation Document

There are no Isolation Document EAs for this component.

TSS

The evaluator shall examine the TSS and verify that it describes how data DisplayPort data is converted.

Guidance

There are no guidance EAs for this component.

Test

Testing for this SFR is covered under FDP_APC_EXT.1 Test 3-VI.

4.1.3 Sub-Protocol Rules (FDP_SPR_EXT)

FDP_SPR_EXT.1/DP Sub-Protocol Rules (DisplayPort Protocol)

Isolation Document

There are no Isolation Document EAs for this component.

TSS

The evaluator shall examine the TSS and verify that it describes that the various sub-protocols are allowed or blocked by the TOE as described by the SFR.

Guidance

There are no guidance EAs for this component.

Test

Testing for this SFR is covered under FDP_APC_EXT.1 Test 3-VI and Test 4-VI.

FDP_SPR_EXT.1/DVI-D Sub-Protocol Rules (DVI-D Protocol)

Isolation Document

There are no Isolation Document EAs for this component.

TSS

The evaluator shall examine the TSS and verify that it describes that the various sub-protocols are allowed or blocked by the TOE as described by the SFR.

Guidance

There are no guidance EAs for this component.

Test

Testing for this SFR is covered under FDP_APC_EXT.1 Test 3-VI and Test 4-VI.

FDP_SPR_EXT.1/DVI-I Sub-Protocol Rules (DVI-I Protocol)

Isolation Document

There are no Isolation Document EAs for this component.

TSS

The evaluator shall examine the TSS and verify that it describes that the various sub-protocols are allowed or blocked by the TOE as described by the SFR.

Guidance

There are no guidance EAs for this component.

Test

Testing for this SFR is covered under FDP_APC_EXT.1 Test 3-VI and Test 4-VI.

FDP_SPR_EXT.1/HDMI Sub-Protocol Rules (HDMI Protocol)

Isolation Document

There are no Isolation Document EAs for this component.

TSS

The evaluator shall examine the TSS and verify that it describes that the various sub-protocols are allowed or blocked by the TOE as described by the SFR.

Guidance

There are no guidance EAs for this component.

Test

Testing for this SFR is covered under FDP_APC_EXT.1 Test 3-VI and Test 4-VI.

FDP_SPR_EXT.1/USB Sub-Protocol Rules (USB-C Protocol)

Isolation Document

There are no Isolation Document EAs for this component.

TSS

The evaluator shall examine the TSS and verify that it describes that the various sub-protocols are allowed or blocked by the TOE as described by the SFR.

Guidance

There are no guidance EAs for this component.

Test

Testing for this SFR is covered under FDP_APC_EXT.1 Test 3-VI and Test 4-VI.

[FDP_SPR_EXT.1/VGA Sub-Protocol Rules \(VGA Protocol\)](#)

Isolation Document

There are no Isolation Document EAs for this component.

TSS

The evaluator shall examine the TSS and verify that it describes that the various sub-protocols are allowed or blocked by the TOE as described by the SFR.

Guidance

There are no guidance EAs for this component.

Test

Testing for this SFR is covered under FDP_APC_EXT.1 Test 3-VI and Test 4-VI.

5 Evaluation Activities for SARs

To evaluate the SARs specified by CFG_PSD-VI_V1.0, CFG_PSD-KM-VI_V1.0, CFG_PSD-AO-VI_V1.0, CFG_PSD-KM-UA-VI, or CFG_PSD-AO-KM-UA-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.

7 References

Identifier	Title
[CC]	Common Criteria for Information Technology Security Evaluation – - Part 1: Introduction and General Model, CCMB-2017-04-001, Version 3.1 Revision 5, April 2017 - Part 2: Security Functional Components, CCMB-2017-04-002, Version 3.1 Revision 5, April 2017 - Part 3: Security Assurance Components, CCMB-2017-04-003, Version 3.1 Revision 5, April 2017
[CEM]	Common Methodology for Information Technology Security Evaluation, Evaluation Methodology, CCMB-2017-04-004, Version 3.1 Revision 5, April 2017
[PP_PSD_V4.0 or PSD PP]	Protection Profile for Peripheral Sharing Devices, Version 4.0, July 2019
[MOD_VI_V1.0]	PP-Module for Video/Display Devices, Version 1.0, July 2019
[CFG_PSD-VI_V1.0]	PP-Configuration for Peripheral Sharing Device and Video/Display Devices, Version 1.0, July 2019
[CFG_PSD-KM-VI_V1.0]	PP-Configuration for Peripheral Sharing Device, Keyboard/Mouse Devices, and Video/Display Devices, Version 1.0, July 2019
[CFG_PSD-AO-VI_V1.0]	PP-Configuration for Peripheral Sharing Device, Analog Audio Output Devices, and Video/Display Devices, Version 1.0, July 2019
[CFG_PSD-KM-UA-VI]	PP-Configuration for Peripheral Sharing Device, Keyboard/Mouse Devices, User Authentication Devices, and Video/Display Devices, Version 1.0, July 2019
[CFG_PSD-AO-KM-UA-VI]	PP-Configuration for Peripheral Sharing Device, Analog Audio Output Devices, Keyboard/Mouse Devices, User Authentication Devices, and Video/Display Devices, Version 1.0, July 2019