

### **VESA DisplayPort Marketing Guidelines**

- DisplayPort Logo Use -

- Promotion of Optional DisplayPort Features -

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## **Purpose of the Marketing Guidelines**

- ✓ To promote marketing usage conventions for DisplayPort-enabled products, including:
  - Use of the DisplayPort Logos
    - Guidelines provided herein are consistent with the VESA Logo agreements
  - Recommendations for the identification of optional DisplayPort features
    - Consistency across brands is important to assist consumer product selection and avoid confusion
    - Product usage examples are provided







### **Scope of the Marketing Guidelines**

- ✓ This document provides guidelines for the following:
  - All DisplayPort Logos
    - DisplayPort Logo
    - Dual-Mode DisplayPort Logo
    - DisplayPort Active Cable Logo
  - For a DisplayPort device, how to promote and identify the support for optional DisplayPort features including:
    - Those found in the DisplayPort 1.2a Standard, such as HBR2 and Multi-Stream
    - Dual-Mode DisplayPort
    - MyDP







## Naming Conventions for Optional DisplayPort Features

DisplayPort Specification Feature	Name Convention(s) for Product Marketing Use	
Dual-Mode	Dual-Mode DisplayPort (Applies to upstream devices or adaptors) (Use of the Dual-Mode DisplayPort logo is optional)	
HBR2	HBR2 (option: High Bit Rate 2)	
MST	Multi-Stream	
HDCP	HDCP or HDCP Content Protection	
Audio Only	Audio Only	
Deep Color (must support 30 bits per color and 10 bits per component or greater)	Deep Color	
DisplayPort 3D	DisplayPort 3D	
High bit rate audio (IEC-61937 bit rates exceeding 6.144Mbps)	High Bit Rate Audio	
GTC (Global Time Code)	Accurate A/V Sync	
Mobility DisplayPort	MyDP (Applies to upstream devices) MyDP Enhanced (Applies to Sink devices)	

Please refer to the notes on the following slide regarding the use of the above naming conventions.







## Naming Conventions for Optional DisplayPort Features (Continued)

Notes regarding the use of the naming conventions on the previous slide:

- Any Optional DisplayPort Features claimed to be supported by a device must be validated during compliance testing.
- If an Optional DisplayPort Feature can be enabled through a device upgrade path, then such feature should be followed by the word "Ready". For an example a product might be labeled "Multi-Steam Ready" if it can be updated to support Multi-Stream through a future firmware update.







# The DisplayPort Logos

The VESA DisplayPort Trademarks include the following Logos:

(These are for reference only and are not to be used for reproduction)

DisplayPort Logo

Dual-Mode DisplayPort Logo DisplayPort Active Cable Logo







- ✓ VESA Policy regarding the use of these DisplayPort logos:
  - Logo use is governed by the VESA DisplayPort Trademark License Agreement
  - DisplayPort Logo use is limited to VESA member companies, and their resellers
  - DisplayPort Logo use on products is limited to compliance tested DisplayPort products only, unless a waiver is received by VESA







## Use of the (Standard) DisplayPort Logo

#### **DisplayPort Logo**

(for reference only, do not reproduce)



- ✓ The DisplayPort logo is commonly used for the following:
  - To identify a DisplayPort receptacle (port identification), or cable, for the convenience of the product user
  - To identify a product as having DisplayPort capability
    - Logo on product, or on product collateral including instruction manual and advertising, to denote DisplayPort capability (must pass compliance testing to be used on a product or product collateral)
  - To indicate that a device has been tested to be DisplayPort compliant
- ✓ The DisplayPort logo cannot be used for the following:
  - The DisplayPort Logo cannot be combined with other information to identify DisplayPort specification revision or optional features
  - As an exception to this rule, the "Dual-Mode DisplayPort Logo" or "DisplayPort Active Cable Logo" can be used to identify those product capabilities as discussed on the following pages

Capability of a DisplayPort device will be identified through means presented in this guideline







## Information regarding the use of "DisplayPort 1.2" to Identify Device Capabilities

- ✓ There is already a trend within the PC industry to label new DisplayPort devices as "DisplayPort 1.2" to imply the support of new optional features such as HBR2 and Multi-Stream. VESA's promotion of the DisplayPort 1.2 specification, along with the extended capabilities, contributed to creating this "DisplayPort 1.2" brand that suppliers are now promoting.
- ✓ DisplayPort devices that are identified as "DisplayPort 1.2" must at minimum support either HBR2 or Multi-Stream. This will ensure that the DisplayPort 1.2 "brand" will deliver enhanced features or performance, consistent with user expectations.
- ✓ Whether a product is labeled as "DisplayPort" or "DisplayPort 1.2" the supported optional features as listed on 5 also need to be identified; labeling as "DisplayPort 1.2" has no official meaning in terms of features supported.







## **Promotion of HBR2 Support**

- **✓** Example Use for a Source Device (packaging, documentation, etc.)
  - "DisplayPort output includes HBR2 support"
  - "DisplayPort with HBR2 Support"
  - Supported maximum resolution can also be specified
- Example Use for a Hub or Sink Device (packaging, documentation, etc.)
  - "Supports 4K x 2K 60Hz resolution; requires DisplayPort video source with HBR2 and 4K x 2K 60Hz display support"
  - "DisplayPort inputs (and outputs) includes HBR2 support"
  - "DisplayPort with HBR2 Support"
  - "HBR2 enabled DisplayPort input"







## **Promotion of Multi-Stream Support**

- ✓ A Multi-Stream capable Source device needs to declare how many displays can be supported based on its GPU capability
  - Some customer confusion has resulted from recent VESA claims that "DisplayPort Multi-Stream can support up to four 1080p monitors" but this capability is only addressing the DisplayPort interface capabilities, and it assumes the use of HBR2.
  - Not related to the display interface capability, some GPU's can only support two or three displays, while others can support more.
- ✓ Source devices supporting Multi-Stream should state the number of displays supported, based on the GPU capability
- ✓ To reduce consumer confusion, VESA will change the description of Multi-Stream as the ability to support more that one display over a single DisplayPort connection







## **Promotion of Multi-Stream Support**

- Example Use for a Source or Upstream Device (packaging, documentation, etc.) that can support up to 3 displays
  - "DisplayPort output includes Multi-Stream support; up to 3 displays supported"
    - For such device with multiple video interfaces, it should be noted elsewhere that a maximum of 3 displays can be supported using any video interface or interface combination.
    - *Option statement*: "For multiple display support, a Multi-Stream DisplayPort Video Hub or Daisy-Chainable Monitor is required."
- **✓** Example Use for a Hub or Sink Device (packaging, documentation, etc.)
  - Hub device:
    - "Requires a Multi-Stream DisplayPort video source to support multiple displays"
  - Daisy-Chainable Monitor
    - "Requires a Multi-Stream DisplayPort video source to support the daisy chain function"







### Promotion of Multi-Stream + HBR2 Support

- Example Use for a Source or Upstream Device (packaging, documentation, etc.) that can support up to 3 displays
  - "DisplayPort output includes HBR2 and Multi-Stream; up to 3 displays supported"
    - For such device with multiple video interfaces, it should noted elsewhere that a maximum of 3 displays can be supported using any video interface or interface combination.
    - *Option statement*: "For multiple display support, a Multi-Stream DisplayPort Video Hub or Daisy-Chainable Monitor is required."
- **✓** Example Use for a Hub Device (packaging, documentation, etc.)
  - "Requires a Multi-Stream DisplayPort video source to support multiple displays. Supports HBR2."
- **✓** Example Use for a Sink Device (packaging, documentation, etc.)
  - "Daisy Chain operation requires a Source with Multi-Stream Support"
  - "Resolutions beyond 2560 x 1600 60Hz require Source with HBR2 Support"







## **Use of the Dual-Mode DisplayPort Logo**

#### **Dual-Mode DisplayPort Logo**

(for reference only, do not reproduce)



- ✓ A Dual-Mode DisplayPort device may use either the (standard) DisplayPort logo or the Dual-Mode DisplayPort logo.
  - Use of the Dual-Mode DisplayPort logo on a Dual-Mode device is Optional
  - It is acceptable and common practice to use the standard DisplayPort logo on a Dual-Mode DisplayPort device or cable adaptor
- ✓ The Dual-Mode DisplayPort logo can only used for the following:
  - To identify a Dual-Mode DisplayPort capable Source receptacle (for port-type identification), or a Dual-Mode DisplayPort cable adaptor plug (for plug-type identification)
  - To identify a product as having Dual-Mode DisplayPort capability
    - This includes use of the Dual-Mode DisplayPort logo on the product or product collateral including instruction manual and advertising
  - To indicate that a device has been tested to be Dual-Mode DisplayPort compliant
- ✓ This logo is often referred to as "DP++" in text form







## Use of the Dual-Mode DisplayPort Logo (cont.)

- ✓ The Dual-Mode DisplayPort logo cannot be used for the following:
  - The Dual-Mode DisplayPort Logo cannot be combined with other information to identify the Dual-Mode DisplayPort adaptor type number, specification revision, performance, or optional features
    - As an example, it is NOT acceptable to label product " Type 2"
  - When using either the "DP" or "DP++" logo, the Dual-Mode capability of a DisplayPort device will be identified through means discussed later in this guideline
  - Refer to the Dual-Mode DisplayPort Standard for more information regarding Type 1 and Type 2 Dual-Mode DisplayPort products







## **Promotion of Dual-Mode Support** (Source or Upstream Device)

- Example Use for a Source or Upstream Device (packaging, documentation, etc.)
  - "Dual-Mode DisplayPort Output, supports Type 1 Adaptors"
  - "Dual-Mode DisplayPort Output, supports Type 1 and 2 Adaptors"
  - "Dual-Mode DisplayPort Output, supports Type 2 Adaptors"

#### Example variations:

- "Dual-Mode DisplayPort Output (supports Type 1 & 2 Adaptors)"
- "Dual-Mode DisplayPort (supports Type 1 & 2 Adaptors)"
- "Dual-Mode DisplayPort supports Type 1 & 2 Adaptors"

#### **✓** Note:

• It is acceptable to substitute the word "adaptor" with "adapter"







## Promotion of Dual-Mode Support (Cable Adaptor)

✓ Cable adaptors designed to work exclusively with Dual-Mode Sources should state this to avoid consumer confusion and frustration.

#### **✓** Examples:

- Dual-Mode DisplayPort to HDMI Adaptor
   For use with a Dual-Mode DisplayPort Source Device
- DisplayPort to HDMI Adaptor
   For use with a Dual-Mode DisplayPort Source Device
- DisplayPort to HDMI Adaptor, Type 2
   For use with a Dual-Mode DisplayPort Source Device

#### **✓** Note:

• It is acceptable to substitute the word "adaptor" with "adapter"







### **Active Protocol Converter Adaptors**

- ✓ Some cable adaptors work with any DisplayPort Source, and not just Dual-Mode Source devices
  - These are referred to as "Active Protocol Converter Adaptors" within the DisplayPort Standard and include the following devices types:
    - DP to VGA
    - DP to DVI or Dual-Link DVI
    - DP to HDMI
- **✓** Promotion and labeling recommendations, examples:
  - Active DisplayPort to VGA Adaptor
     For use with any DisplayPort Source Device
  - Active DisplayPort to HDMI Adaptor
     For use with any DisplayPort Source Device







### **Use of DisplayPort Active Cable Logo**

#### **DisplayPort Active Cable Logo**

(for reference only, do not reproduce)



- ✓ The DisplayPort Active Cable logo is specifically used to:
  - Identify a cable product as a DisplayPort Active Cable
    - The logo is used on the product, or on the product collateral including packaging, instruction manual and advertising, to denote DisplayPort Active Cable functionality.
    - A DisplayPort Active Cable may also use, or instead use, the standard DP logo; use the DisplayPort Active Cable Logo is optional. When the standard DP logo is used, a separate label should also be used to identify the product as an active cable to prevent user confusion.
  - To identify the signal direction through the cable as a convenience of the product user
    - The design of the DisplayPort Active Cable Logo includes an arrow to identify signal direction and thereby the Source and Sink ends of the cable; the logo is to be oriented on the connector such that the arrow on the logo is pointed towards the Sink end of the cable.
    - If the DisplayPort Active Cable Logo is NOT used, then the cable must be labeled to identify the Source (or Computer) and Sink (or Display) ends.
  - To indicate that the cable product has been tested to be compliant with DisplayPort Active Cable requirements
- ✓ The DisplayPort Active Cable Logo cannot be used with other types of DisplayPort products







### **Promotion of MyDP Support**

- "MyDP" is a product capability feature that may be identified on device collateral including packaging, documentation and advertising.
- ✓ MyDP capable devices will carry the standard "DP" logo
- ✓ There are three MyDP device categories:
  - "MyDP" Source Devices (which also applies to Docking Stations)
  - "MyDP" Cable Adaptors
  - Sink Devices with "MyDP Enhanced" feature







# DisplayPort Logo Use with MyDP Devices

DisplayPort Logo (to be used for MyDP devices)

(for reference only, do not reproduce)



- ✓ By intent of the VESA Mobility DisplayPort (MyDP) Standard, MyDP Source (or upstream) devices will use reduced pin count non-DisplayPort receptacles.
  - They will not use the standard DisplayPort or mini-DisplayPort connector, and instead may use the micro-USB connector, as one example
- ✓ VESA does not intend to create a special MyDP logo; MyDP devices will use the standard DisplayPort logo
  - A Source device (which includes docking stations) with a dual-use output receptacle (such as USB and MyDP) may use both connectivity logos (such as USB and DP) near the connector for port identification
  - A MyDP cable, which may include a USB connector on one end, may use the DP logo on the over-mold of one or both ends of the cable
  - A DisplayPort Sink that supports MyDP will also use the DP logo
  - Identification of MyDP sink support capability is discussed later in this guideline







## Qualification Requirements for a Source Device Supporting the MyDP Feature Set

- ✓ In order for a Source (or upstream device such as a docking station) to use the DP logo and claim support for MyDP, the device must pass the CTS tests for a MyDP Source
  - CTS documents for MyDP are currently under development
- ✓ MyDP Source devices can also support (and claim to support) other DisplayPort option, such as:
  - HDCP
  - Multi-Stream
  - 1080p 60Hz
    - (For MyDP which is defined to use only one main link lane, 1080p 60Hz is supported through the use of HBR2; in the case of MyDP, it is assumed that "1080p 60Hz" has more meaning to the consumer than does "HBR2" and is thus the preferred declaration)







### **Qualification Requirements for Cable Devices Supporting the MyDP Feature Set**

- ✓ In order for a MyDP cable adaptor to use the DP logo, it must pass the relevant MyDP CTS tests (under development).
- ✓ Example categories:
  - MyDP to DVI adaptor
  - MyDP to HDMI adaptor
  - MyDP to VGA adaptor
  - MyDP to DP active cable adaptor
  - MyDP to DP passive cable adaptor







## Sink Device Support of MyDP, and the "MyDP Enhanced" Designation

- ✓ A MyDP Source, using a MyDP cable, is designed to work with any new or existing DisplayPort Sink devices.
  - A MyDP cable may have either a mini-DP or standard DP plug on the Sink end.
- ✓ A DisplayPort Sink device can be promoted as "MyDP Enhanced" which provides additional support for MyDP Source (or docking station) devices
  - In order for a Sink device to claim the MyDP Enhanced feature, the Sink device must pass the CTS requirements for a MyDP Enhanced Sink
    - CTS documents for the MyDP Enhanced feature set are under development
  - Required capabilities for a "MyDP Enhanced" Sink device include:
    - 5V power producer capable (A standard DP 1.2 Sink only requires 3.3V)
    - HDCP (HDCP is currently an option for a standard DP 1.2 Sink)
    - Verification of single-ended AUX operation to ensure interoperability with a MyDP Source
  - If there are multiple DisplayPort inputs on a "MyDP Enhanced" Sink device, and not all inputs support the MyDP Enhanced feature set, then those inputs supporting the feature set can be labeled "MyDP Enhanced" in addition to the DP logo.







### **Promotion of MyDP Support**

- Example Use for a Source or Upstream Device (packaging, documentation, etc.)
  - "Includes MyDP output"
  - "MyDP enabled"
  - "MyDP enabled supports up to 1080p 60Hz video
  - "Mobility DisplayPort (MyDP) enabled"
- **✓** Example Use for a Sink Device (packaging, documentation, etc.)
  - "MyDP Enhanced
  - "MyDP Enhanced charges your MyDP portable device"
  - "MyDP Enhanced with 1080p 60Hz support"
  - "MyDP Enhanced (1080p 60Hz, Mobile Power)"
  - "Mobility DisplayPort (MyDP) Enhanced
    - Full HD (1080p 60Hz) support
    - Power and battery charging for your mobile device"







# Feature Promotion Examples When Supporting Multiple DisplayPort Options







#### For Source or Upstream Device with Multiple DisplayPort Features:

- Example for packaging, documentation, advertising, etc:
  - DisplayPort Output with the following features:
    - Dual-Mode operation supports Type 1 and Type 2 Adaptors
    - HBR2
    - Multi-Stream
    - HDCP Content Protection
    - High Precision Audio
    - Accu-Sync
- ✓ Alternate format for above example:
  - DisplayPort Output with HBR2, Multi-Stream, Dual-Mode Type 1 and 2, HDCP, High Precision Audio, and Accu-Sync
- Example for device that only supports Audio:
  - DisplayPort Output for audio content (supports Audio only)







## Sink Feature Promotion Examples When Supporting Multiple DisplayPort Options, and statement of Source requirements

- ✓ To assist the consumer in selecting compatible Source and Sink products, Sink products should state Source requirements for given Sink features
  - Example (packaging, documentation, etc.)

```
4K x 2K 60Hz Resolution Support (requires DisplayPort source with HBR2 and 4K x 2k 60Hz support capability)
```

• Alternative example format:

4K x 2K 60Hz Resolution Support

- For 4K x 2K 60Hz resolution, requires DisplayPort source with the following capability HBR2
  - 4K x 2K 60Hz output support
- ✓ Example 2 (packaging, documentation, etc.)
  - Daisy-Chain DisplayPort Output (requires DisplayPort source with Multi-Stream capability)
- ✓ Alternative example format:
  - Daisy-Chain DisplayPort Output
    - For Daisy-Chain output operation, requires a DisplayPort Source with Multi-Stream capability



