



# DisplayPort Interoperability Testing

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# Interoperability CTS

Test for normal operation with a variety of devices in the market today



# Getting Certified - Interoperability

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**All Devices must pass Interoperability Tests**

**To test, you need these documents:**

**Specs:**

**Interop CTS v 1.0**

**Supporting Docs:**

**Standard Devices for Interop Testing**

**Interop Compliance Test Report**



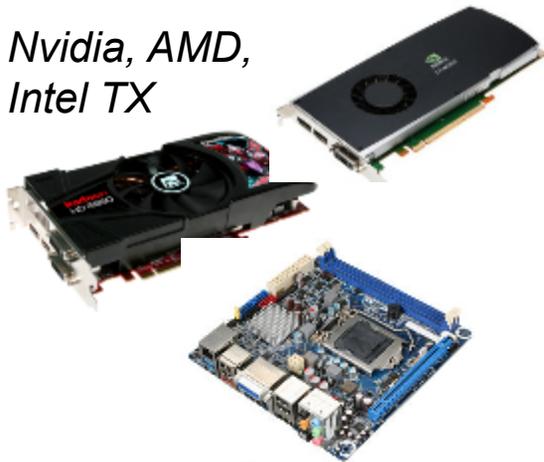
***All Docs in DP Logo Requirements folder in WorkZone***

# Interoperability - Devices

## Standard Devices are mainstream silicon

List updated 3-6 months, shipping products

*Nvidia, AMD,  
Intel TX*



Your  
Device



*Parade,  
Mstar,  
Realtek,  
ST Micro RX*



*2m, 15m &  
active cables*



*Dual Mode  
Adapters*



*Windows,  
Mac O/S*



**“Golden” devices in “Standard Devices for Interoperability Testing”**

# Interoperability - Procedure

Test DUT with each Standard Device i.e. Sink DUT with Src1, Src2... Mark Pass, Fail, Warn, Skip or Info					
Test	Std 1	Std 2	Std 3	Std 4	Notes
3.1.1 Display in POST (Video)					
3.1.2 OS Splash Screen (Video)					
3.1.3 Desktop (Video/Audio)					
3.1.4 User-accessible resolutions (list below)					
1.					
2.					
3.					
3.1.5 System Reset					
3.2.1 Resume from Monitor Sleep					
Suspend					
Resume					
Video/Audio					
3.2.2 Resume from System Sleep					
Suspend					
Resume					
Video/Audio					
3.2.3 DUT Power off (Sink DUT) (Video/Audio)					
3.3.1 Disconnect - Reconnect					
Trial 1 Video/Audio					
Trial 2 Video/Audio					
Trial 3 Video/Audio					
Trial 4 Video/Audio					
Trial 5 Video/Audio					
3.3.2 Disconnect/Reconnect during Monitor Sleep (Video/Audio)					
3.3.3 Disconnect/Reconnect during System Sleep					

All tests are done “from the keyboard”:

Display in POST  
Suspend/Resume  
Hot Plug  
Power On/Off

Check for correct video and audio

Some tests done multiple times, all tests done with multiple “golden devices”, typically 3 or more

# See the Demo

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*Source PHY  
Sink PHY  
AUX Control*



*Reference Source  
Reference Sink  
AUX Channel Monitor  
EDID test*



GRANITE RIVER LABS

*DisplayPort over  
Thunderbolt interface*



**Agilent Technologies**

*Source PHY*



*Reference Source  
Reference Sink  
AUX Channel Monitor  
EDID test*



Video Electronics Standards Association

*Interoperability:  
Sources  
Sinks  
Dongles*

