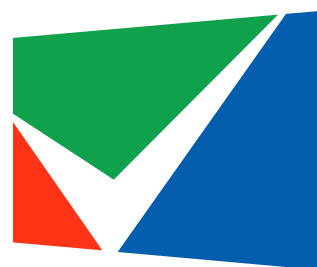# Agenda

- Welcome, VESA Update - VESA/VTM
- MyDP Technology – Analogix
- MyDP, eDP Test & Measurement – Agilent
- Lunch
- HBR2 Measurements – Tektronix
- Link Layer Testing – Unigraf/SYMH
- Understanding Multi-Stream – VTM & Allion Labs

The Demo showcase will be open during breaks,
Lunch and following the presentations
Presentations will be available for download after the Workshop at:
http://www.vesa.org/displayport-developer (no membership required)
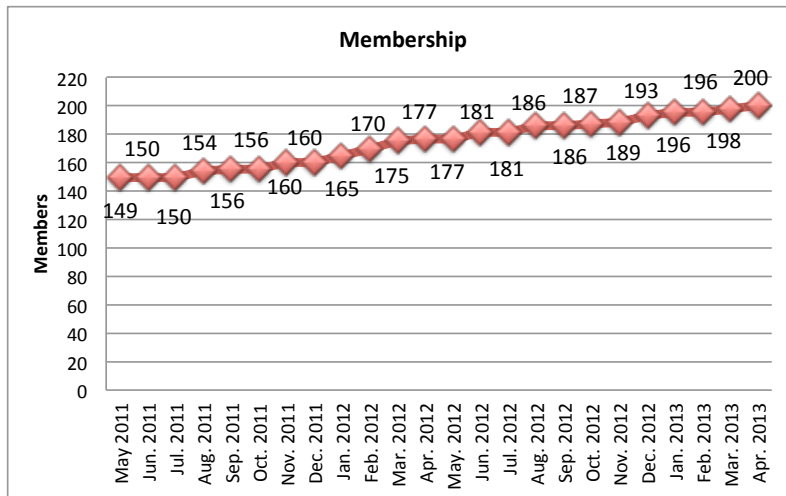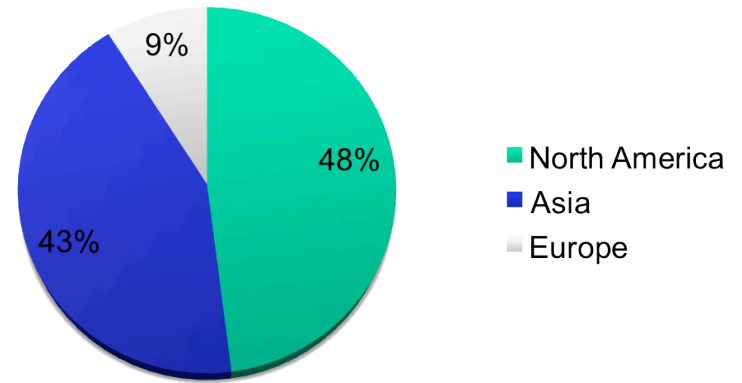
Asia Workshops 2013

VESA Vision

- VESA's vision is continual growth in technical standards development and evolution into an international trade association, with a worldwide membership driving standards initiatives, product implementations, and market implementation.

About VESA

Membership by Region

- North America
- Asia
- Europe

48%
43%
9%

- Global industry alliance with more than 200 member companies

Membership

149 150 150 154 156 156 160 160 165 170 175 177 177 181 181 186 186 187 189 193 196 196 198 200

Members

May 2011, Jun. 2011, Jul. 2011, Aug. 2011, Sep. 2011, Oct. 2011, Nov. 2011, Dec. 2011, Jan. 2012, Feb. 2012, Mar. 2012, Apr. 2012, May. 2012, Jun. 2012, Jul. 2012, Aug. 2012, Sep. 2012, Oct. 2012, Nov. 2012, Dec. 2012, Jan. 2013, Feb. 2013, Mar. 2013, Apr. 2013

Mission to develop, promote and support ecosystem of vendors and certified interoperable products for the electronics industry

Facilitate DisplayPort standards development, publication and compliance testing, as well as promotion and marketing

Benefits of Membership

- Be an integral member of an organization that establishes the future direction of the display industry and influences important industry trends.

- Maintain competitive edge by gaining knowledge of new technology standards initiatives as they are originated.

- Network with industry experts from more than 200 leading PC and consumer electronics companies, participate in state-of-the-art technical discussions.

- Decrease manufacturing costs, increase reliability and productivity, and access global markets through participation in standards development efforts and members-only interoperability PlugTests and workshops.

- Expand promotional opportunities by linking to VESA's web site (www.vesa.org) and being featured in VESA literature, press events/releases & trade show demonstrations.

New Standards/Specifications 2012/2013

- DP 1.2a
- MyDP v1
- PHY CTS 1.2a And PHY CTS 1.2b
- DP Link CTS 1.2 Core Addendum 1
- Link CTS 1.2 Ext. Set 2
- Link CTS Core 1.2 v1.1
- DP Interop CTS v1
- DP Dual Mode Cable Adaptor CTS v1
- DP Certified Logo Requirements Test Specification v1
- DP Dual Mode Standard v1

VESA

New Standards/Specifications 2012/2013 Continued

- eDP 1.4
- DP Dual Mode Std v1_1
- Dual-Mode CTS 1.1
- DisplayID v1.3
- DMT r1 v13
- CVT v1.2
- Link CTS 1.2 Ext. 1 r1.1
- MyDP CTS v1

18 New Standards, Specs and Revsions in 18 Months!

Standards Currently Under Development

- DP 1.2b

- DP 1.3

- eDP 1.4 CTG Proposal

- MyDP v1.1

- MPAC v1

- DSC v1

- VHSD Proposal

DisplayPort and VESA stay ahead of the Technology Curve

Quick Facts

- New Display Stream Compression (DSC) Task Group
    - Chartered to develop and maintain an open industry set of standards for display stream compression technology that may be used by interfaces developed by VESA and other industry or standards developing organizations.
- New Multi-Projector Automatic Calibration (MPAC) Task Group
    - Chartered to create a standard data format for projection calibration systems to communicate with devices in a multi-display system.

Liaison Update

- CEA
    - Ongoing work on EDID and Timings
    - Joint PlugTest under discussion
- ISO/IEC
    - Work on display stream compression coding system
- MIPI
    - Liaison on compression standardization
- Wi-FI Alliance
    - Formed a joint working group to develop compliance testing
- Thunderbolt
    - Building a relationship. VTM attends Thunderbolt Plugfests and events. DP testing part of certification.

Successful Transition to New DisplayPort Logo Policy

Implemented May 1, 2012

- VESA's DisplayPort standard is in a critical stage in its evolution toward achieving wide-spread adoption

- Increasingly important that DisplayPort fulfill the brand's promise in interoperability and that it "just works"

- Changes are aimed at providing assurance to the global consumer base that products marked with the DisplayPort, DisplayPort ++ and Active Cable logos will perform as advertised and promised by the member organization

Requirements of the New Logo Policy

- VESA Membership* required for use of all DisplayPort trademarks
  - Membership helps to support VESA technical developments and promotional infrastructure
  - Assures OEM is using latest standard
  - Encourages PlugTest participation
- The product must be certified (ATC or self-test)
- Must have a signed Trademark License Agreement on file with VESA

Over 300 DP products certified in 2012
Over 800 total products certified to date

* An authorized reseller of a VESA member may use the trademarks

Requirements for Certification

All Devices

- PHY CTS 1.2b

- Link CTS 1.2 Core rev. 1.1

- Interop CTS 1.0

- EDID CTS 1.1

- *For Multi-Stream*: Multi-Stream Interop Test 1.0*

- *For Dual-Mode Adapter*: Dual-Mode CTS 1.1

- Self-test, ATC, third-party test OK

  - *Resellers can submit a reseller report*

*Multi-Stream interop Test only at ATCs – self-test coming soon

* An authorized reseller of a VESA member may use the trademarks

Look for the Logo – Cable Issues

- A wide selection of DP cables are in the marketplace at a variety of price points

- Few (retail) cables are called out as certified, and improper use of logo is common

- Limited testing turned up an alarming number of non-compliant cables

Subject: New submission from Ask Display Port
Date: January 23, 2013 10:15:25 PM PST
To: bill@vesa.org, moderator@vesa.org

Name		Hi
DAN		I bought a Dell 2713hm monitor that i plugged
Email		in. When i take it out the computer starts fine.
▬▬▬▬▬▬		Any reason for this ?
Subject		Thx
Ask Display Port		

Message

Hi
I bought a Dell 2713hm monitor that i plugged to my Gigabyte gtx 660ti through a display port cable and since then i cant switch the computer on when the display port is in. When i take it out the computer starts fine.
Any reason for this ?
Thx
Dan

VESA

DP Cable Issues – Test Report

DP-DP 1m

Signal	Test
Lane 0 +	Open
Lane 0 -	OK
Lane 1 +	OK
Lane 1 -	OK
Lane 2 +	OK
Lane 2 -	Open
Lane 3 +	OK
Lane 3 -	OK

Signal	Test
AUX +	OK
AUX -	OK
CFG 1	OK
CFG 2	OK
HPD	OK
DP_PWR	Present
RET	OK

Help assure DisplayPort "just works", specify and use Certified Cables

New Marketing Documents

- DisplayPort Marketing Guideline
  - Promote marketing usage conventions for DisplayPort-enabled products
  - Covers DP 1.2 advanced feature naming
- DisplayPort, MyDP and eDP Messaging Guideline
  - Provides consistent language and unified messaging
  - Includes both a short and extended version, for each standard
  - Consistent messaging helps to build the brand and increase consumer acceptance and adoption

Marketing Promotion Guideline

- **Released by VESA Marketing TG (Task Group) in August 2012**
- **Defines naming conventions for advanced DP1.2a features**
  - **There is a single DP logo**
    - **1.1a Device with "base" features can obtain the logo as long as it passes logo compliance requirements**
  - **Manufacturers allowed/encouraged to advertise the advanced features as long as their devices pass the test**

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 Transport
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 Precision Audio
GTC (Global Time Code)	Accu-Sync
Mobility DisplayPort	MyDP (Applies to upstream devices) MyDP Enhanced (Applies to Sink devices)

Member and Non-member Newsletters

VESA

2012

Issue No. 12

Dear VESA Members:

It's hard to believe that CES is just over a month away. Please stop by the DisplayPort booth (see story below) and witness the latest in DisplayPort technology. Also, don't forget the VESA Annual Meeting via teleconference on Wednesday, December 5 from 4:00 p.m. to 5:00 p.m. (PT). Please call in. Other topics discussed in this issue include:

- Wire-Free Dream Closer with Renewed WiGig VESA Collaboration
- VESA Experiences Acceleration of MyDP Adoption in Mobile Devices
- DisplayPort, MyDP and eDP Messaging Developed for Member Company Use
- DisplayPort Booth at CES
- CES Cross-Promotion
- VESA Task Group Activity
- Welcome New VESA Members

We hope that you find our newsletters informative. Please feel free to provide feedback or suggestions to Bill Lempesis.

VESA

DisplayPort Vision

- The Vision: DP would be the only video port on a computer. Particularly on ultra-thin notebook designs.
- It's here today! No VGA, DVI or HDMI!

Microsoft Surface Pro

Dell XPS 13

Lenovo X1 Carbon

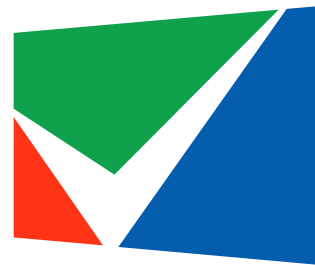Dell XPS 12 Convertible Touch

DisplayPort Rocks!

How DisplayPort multi-streaming delivers new levels of multi-monitor madness

Michael Brown
@brownieshq

Apr 19, 2013 3:30 AM

> I hope more display manufacturers adopt this standard, because DisplayPort *rocks*.

VESA

Thank You!