



# DP1 series

Display Port Connectors



***New Product Information July 08***



JAE Europe has announced the DP1, an external connector for the DisplayPort digital video and audio interface that supports high bandwidth services, such as high definition video, on PCs and home entertainment systems. DisplayPort is a next generation standard defined by the Video Electronics Standards Association (VESA) that can be used externally to connect PCs or consumer electronics equipment and display monitors. The standard also supports internal connections, for example between laptops and their screens.

The DisplayPort specification paves the way for high bandwidth applications by offering a maximum 10.8 Gbit/s transmission rate that can support monitors up to 2560 x 1600 (WQXGA) resolution over a single three metre cable. It supports 1080p resolution, increasing popular among larger format flat screen TVs, over a length of up to 15 metres.

JAE's DP1 is a shielded 20-pin connector featuring a 0.5mm pitch. The surface mount receptacle has four metal solder pins, providing a robust fitting, together with a plastic snap-in pin that enables simple, accurate positioning during equipment assembly. JAE also offers cable assemblies in standard and latching formats.

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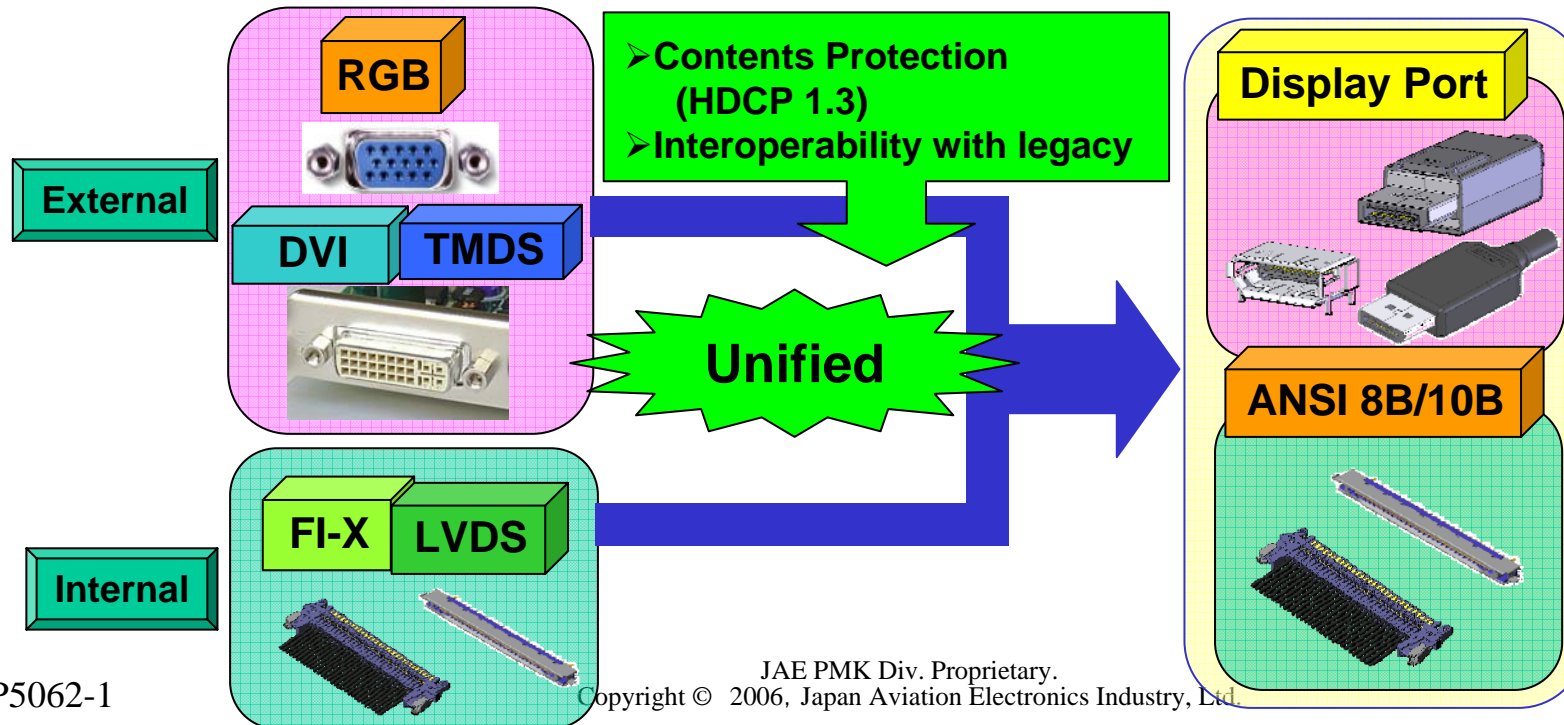
# What is Display Port ?

## Existing Display Interface in PC

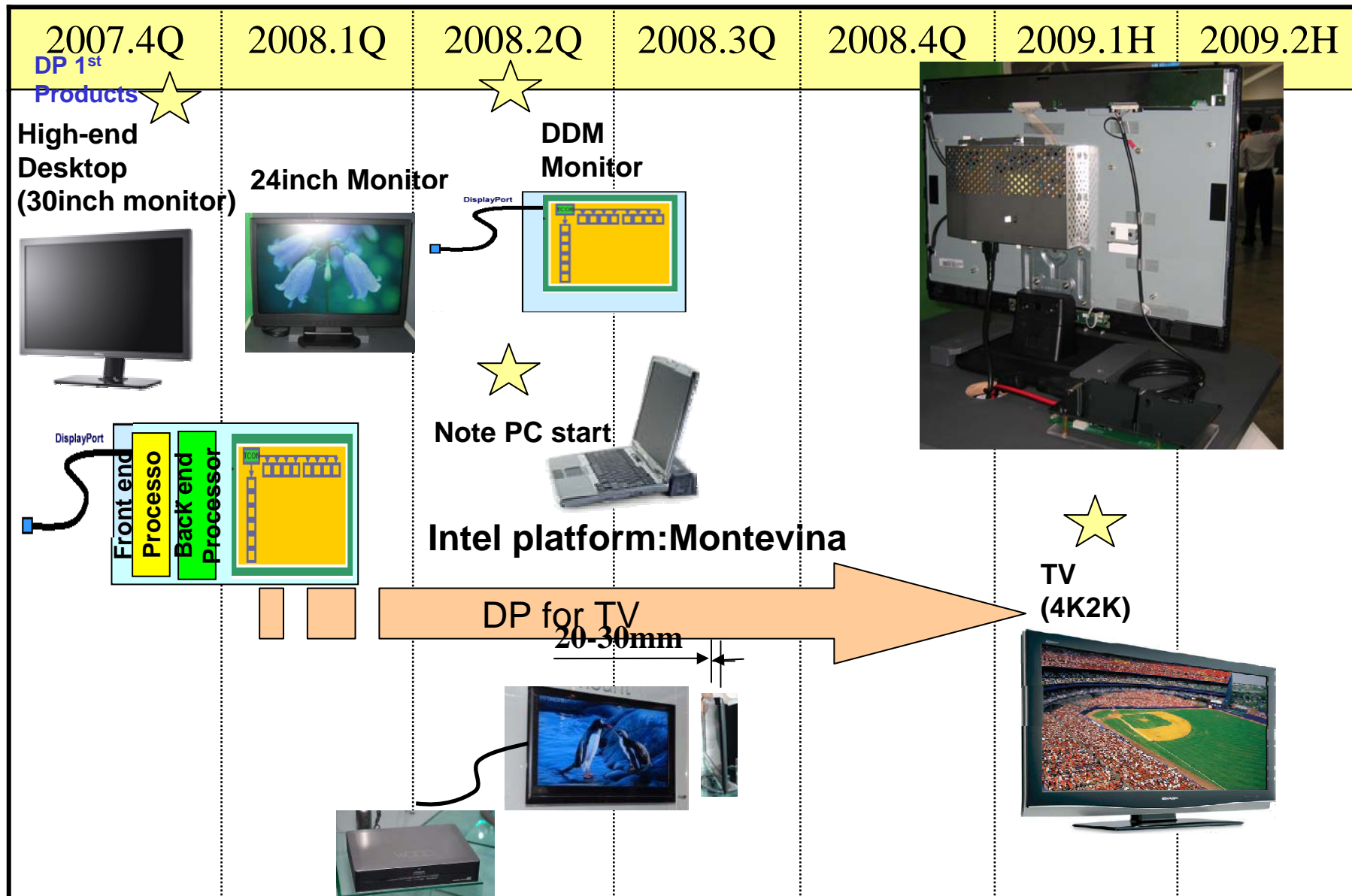
### VESA(DP Member)

Dell, HP, Apple, Samsung, LPL,  
Intel, AMD, nVIDIA,  
ST Micro (Genesis)  
JAE, Tyco, Molex, Foxconn

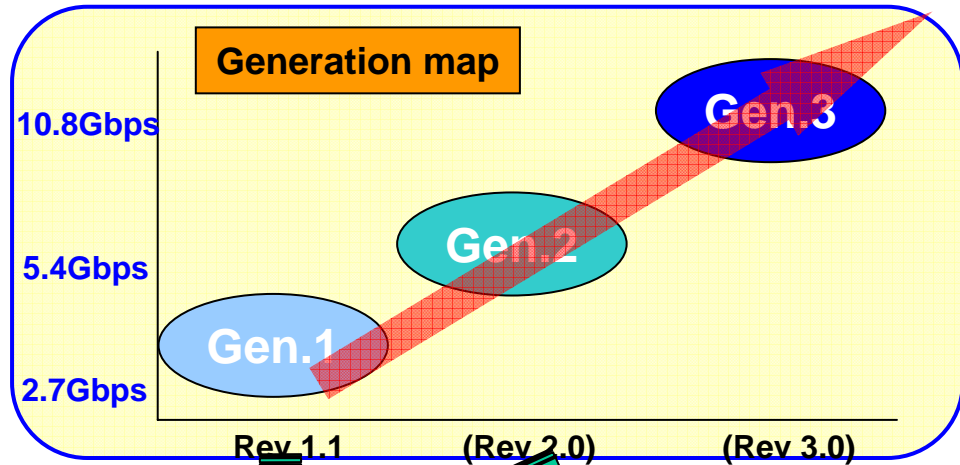
	Display Port	HDMI (Rev1.3)	DVI
Bit rate, per pair	1.6or2.7Gbps(Gen1 ) 5.4Gbps(Gen2)	Up to 3.4Gbit/sec	Max 1.65Gbit/sec
Clock	Embedded	Separate pair	Separate pair
Audio support	Full support	Full support	None
Channel Cording	ANSI8B/10B	TMDS	TMDS
AC Coupled	Yes	No	No
Content protection	HDCP optional	HDCP	HDCP optional
Controlling authority	VESA	HDMI LLC & promoter companies	DDWG(defunct )



# DP1 series Road Map



# Extensivity of DP (High speed, Multi function)



Rev 1.1      (Rev 2.0)      (Rev 3.0)

**AUX 1Mbps**  
Point to Point

**USB2.0 480Mbps**  
Daisy Chain, Tree



PC      Display

Data - 2.7 or 1.62 Gbps  
Data - 2.7 or 1.62 Gbps  
Data - 2.7 or 1.62 Gbps  
Data - 2.7 or 1.62 Gbps  
Aux - 1 Mbps  
Hot Plug Detect

- » Scalable: 1, 2, or 4 lanes, for up to 10.8Gbps bandwidth
  - » WQXGA, 30-bit color LCDs can be supported over one link
- » Secure: HDCP 1.3 Content Protection
- » AUX CH for 2-way communication
- » AC-Coupled Interface
- » Low Power
- » Low EMI

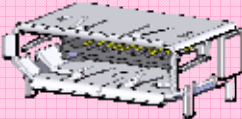
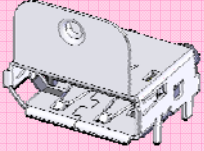
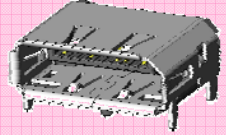
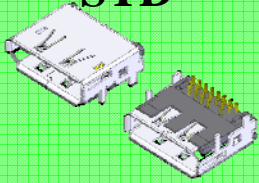
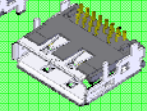
Lane Width	1.6 GHz	2.7GHz
4-Lane	1080p-30bit	WQXGA-30bit
2-Lane	1080i, SXGA	WUXGA
1-Lane	XGA, SDTV	SXGA, 1080i

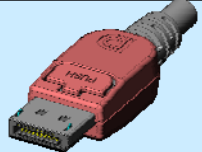
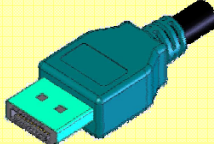
## Need of Compact Connector for 1-Lane ?

Lane Width	1.6 Gbps	2.7 Gbps	5.4 Gbps
4-Lane	1080p-30bit	WQXGA-30bit	4K2K-30bit
2-Lane	1080i, SXGA	WUXGA	WQXGA-30bit
1-Lane	XGA, SDTV	SXGA, 1080i	WUXGA

# JAE DP1 Series – External Display Port



Receptacle	Angle SMT			Angle T/H	
<b>Standard</b>	<b>STD</b> 	<b>With Flange</b> 	<b>Reverse</b> 	<b>STD</b> 	<b>Reverse</b> 
<b>Schedule</b>	Now on MP	Now on MP	Now on MP	ON HOLD	No Plan

Plug & Cable	With Latch	W/O Latch
		
<b>Schedule</b>	Now on MP	Now on MP
<b>Applic ation</b>	Desktop PC Monitor, Projector	Notebook PC



# JAE DP1 series Part Numbers



**Stock Available**

Partno	Description
DP1R020JQ1R400	Display Port Connector R/A Standard Type W/O Flange
DP1RD20JQ2R400	Display Port Connector R/A Reverse Type W/O Flange
DP1R020JQ3	Display Port Connector R/A Standard Type With Flange
DP1P020ST30200B	2 Metre Display Port Cable Assembly
DP1P020ST20200B	3 Metre Display Port Cable Assembly

# Competition



047272-0001 Receptacle without Latch  
0687830008 Cable Assembly 2M without latch  
0687830002 Cable Assembly 3M without latch



3VD51203-H7JJ4H Receptacle without Latch



Part of VESA committee but yet to launch a product

***New Product Information June 08***





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P5062-1

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