



# **EDID Format To Enable Frame Sequential Stereo 3D Support**

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## 2 EDID Format To Enable Frame Sequential Stereo 3D Support

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# 1 Introduction

This document describes the EDID format required to enable page-flipped stereoscopic 3D support with AMD Radeon™ 5000 and 6000 series graphics cards. When an appropriate EDID is detected, the GPU driver will enable the Quad-Buffer API used for page-flipped or frame sequential 3D systems.

## 2 EDID Format To Enable Frame Sequential Stereo 3D Support

In the EDID 1.x specification, under **Detailed Timing** ▶ **Stereo Viewing Support**, you can specify the type of 3D supported by the display device. The monitor vendor must fill in Byte 17 to indicate that the display is capable of supporting Stereo 3D, and also the format expected by the device. Bear in mind that AMD's Quad-Buffer API is only applicable to frame sequential (also known as field sequential) stereo.

Byte #	# of Bytes	Value or Bit Definitions	Detailed Timing Definitions
		Value	Video Image Size & Border Definitions
12	1	00h → FFh	Horizontal Addressable Video Image Size in mm --- contains lower 8 bits
13	1	00h → FFh	Vertical Addressable Video Image Size in mm --- contains lower 8 bits
14	1	{HI}h, {VI}h where 0h ≤ HI ≤ Fh and 0h ≤ VI ≤ Fh	Horizontal Addressable Video Image Size in mm --- stored in Upper Nibble : contains upper 4 bits Vertical Addressable Video Image Size in mm --- stored in Lower Nibble : contains upper 4 bits
15	1	00h → FFh	Right Horizontal Border or Left Horizontal Border in pixels --- refer to Section 3.12 – Right Border is equal to Left Border
16	1	00h → FFh	Top Vertical Border or Bottom Vertical Border in Lines --- refer to Section 3.12 – Top Border is equal to Bottom Border
		7 6 5 4 3 2 1 0	<b>Signal Interface Type:</b>
		0	Non-Interlaced (1 frame = 1 field)
		1	Interlaced (1 frame = 2 fields)
		6 5	<b>Stereo Viewing Support:</b>
		0 0	x Normal Display – No Stereo. The value of bit 0 is "don't care"
		0 1	0 Field sequential stereo, right image when stereo sync signal = 1
		1 0	0 Field sequential stereo, left image when stereo sync signal = 1
		0 1	1 2-way interleaved stereo, right image on even lines
		1 0	1 2-way interleaved stereo, left image on even lines
		1 1	0 4-way interleaved stereo
		1 1	1 Side-by-Side interleaved stereo

For example, if the display device is expecting the frame/field sequential format, Byte 17 will be filled in as follows:

Table 2–1 Byte 17 value if the right image is expected when the stereo sync signal=1

–	0	1	–	–	–	0
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Table 2-2 Byte 17 value if the left image is expected when the stereo sync signal=1

-	1	0	-	-	-	0
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