

# **Monitor Timing Standard**

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# **VESA and Industry Standards and Guidelines** for Computer Display Monitor Timing (DMT)

Version 1.0, Rev. 12

**November 17, 2008** 

This document includes all current VESA Monitor Timing Standards & Guidelines. 'Guidelines' are subjected to the same VESA review and approval process as 'Standards', but are designated as 'Guidelines' to ease concerns on the part of some VESA members that VESA is 'endorsing' these timing standards. 'Guidelines' designations are typically used for lower resolutions or lower refresh rates that are in common industry use in lower-performance systems. For reference, this document also includes a number of <u>industry standard</u> timings (defacto standards) for the computer industry.

This document is the primary means of distribution for all VESA Monitor Timing Standards and Guidelines. The standards and guidelines covered by this document are outlined on the following page.

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#### **Intellectual Property**

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# **Support**

If you have a product that incorporates any of the standards in this document, you should ask the company that manufactured your product for assistance. If you are a display or controller manufacturer, VESA can assist you with any clarifications you may require. All comments or reported errors should be submitted in writing to VESA using one of the following methods:

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# **Revision History**

Version 1.0 Revision 0.0	Sept. 12, 1994	Initial Release of the Standard
Version 1.0 Revision 0.1	Oct. 10, 1994	Fixed sync polarity of 1024x768 @ 60 & 70 Hz. Removed page numbers so new timings could be added.
Version 1.0 Revision 0.2	Nov. 4, 1994	Added notes & comments to clarify timing of interlaced modes.
Version 1.0 Revision 0.3	Feb. 16, 1995	Fixed miscellaneous typos
Version 1.0 Revision 0.4	May 4, 1995	Added EDID IDs for DDC, fixed 1024x768 interlace vertical times.
Version 1.0 Revision 0.5	June 14, 1995	Added BIOS mode #s, fixed miscellaneous typos
Version 1.0 Revision 0.6	April 10, 1996	Added new modes from VDMTPROP V1.0, R0.6 passed in March 1996 (85 Hz stds, 1152x864@75, 1280x960@60).
Version 1.0 Revision 0.6a	Sept. 8, 1996	Reformatted to Word 6 for electronic distribution
Version 1.0 Revision 0.7	Dec. 18, 1996	Added new modes from VDMTREV V1.0, R0.8 passed in Dec. 1996 (1280x1024@60, 1600x1200@60, 65, 70, 75, 85)
Version 1.0 Revision 0.8	July 22, 1998	Added 1792x1344, 1856X1392 & 1920x1440 all @60, 75 Hz. Corrected EDID code for 1600x1200@85 Hz.
Version 1.0 Revision 0.9	Aug. 21, 2003	Added 848x480@60 Hz, CVT 1280x768 timings, 1360x768@60 Hz, CVT 1400x1050 timings, & CVT 1920x1200 timings based on US & Japan workgroup requests.
Version 1.0 Revision 10	July 14, 2004	Added CVT 1.30MA (1440x900) & CVT 1.76MA (1680x1050) formats.
Version 1.0 Revision 11	May 1, 2007	Added several DMT CVT Reduced Blanking Timings, 1280x800@60/75/85 Hz timings, 2560x1600@60/75/85 Hz and DMT IDs.
Version 1.0 Revision 12	Nov. 17, 2008	Added timing definitions for 1280x720 @ 60Hz, 1366x768 @ 60 Hz (Normal & Reduced Blanking), 1600x900 @ 60 Hz (Reduced Blanking), 1920x1080 @ 60 Hz and 2048x1152 @ 60 Hz (Reduced Blanking). Updated Tables 1-1 and 2-1.

# 1. DMT Standards and Guidelines Summary

Table 1-1 contains a summary of display monitor timings (DMT) that are defined in this standard. All DMTs listed in Table 1-1 are non-interlaced video timing modes - unless otherwise specified using the symbol "(Int.)". The symbol "(Int.)" means that this DMT is interlaced. All DMTs listed in Table 1-1 include normal video blanking - unless otherwise specified using the symbol "(RB)". The symbol "(RB)" means that this DMT includes Reduced Blanking. Complete timing specifications for these DMTs are defined in Section 4.

Table 1-1: Summary of Display Monitor Timings – Standards and Guidelines

Pixel Format	Refresh Rate	Horizontal Frequency	Pixel Frequency	Standard Type	Original Document	Date
640 x 350	85 Hz	37.9 kHz	31.500 MHz	VESA Standard	VDMTPROP	3/1/96
640 x 400	85 Hz	37.9 kHz	31.500 MHz	VESA Standard	VDMTPROP	3/1/96
720 x 400	85 Hz	37.9 kHz	35.500 MHz	VESA Standard	VDMTPROP	3/1/96
640 x 480	60 Hz	31.5 kHz	25.175 MHz	Industry Standard	n/a	n/a
	72 Hz	37.9 kHz	31.500 MHz	VESA Standard	VS901101	12/2/92
	75 Hz	37.5 kHz	31.500 MHz	VESA Standard	VDMT75HZ	10/4/93
	85 Hz	43.3 kHz	36.000 MHz	VESA Standard	VDMTPROP	3/1/96
800 x 600	56 Hz	35.2 kHz	36.000 MHz	VESA Guidelines	VG900601	8/6/90
	60 Hz	37.9 kHz	40.000 MHz	VESA Guidelines	VG900602	8/6/90
	72 Hz	48.1 kHz	50.000 MHz	VESA Standard	VS900603A	8/6/90
	75 Hz	46.9 kHz	49.500 MHz	VESA Standard	VDMT75HZ	10/4/93
	85 Hz	53.7 kHz	56.250 MHz	VESA Standard	VDMTPROP	3/1/96
	120 Hz (RB)	76.3 kHz	73.250 MHz	CVT Red. Blanking	n/a	5/1/07
848 x 480	60 Hz	31.0 kHz	33.750 MHz	VESA Standard	AddDMT	3/4/03
1024 x 768	43 Hz (Int.)	35.5 kHz	44.900 MHz	Industry Standard	n/a	n/a
	60 Hz	48.4 kHz	65.000 MHz	VESA Guidelines	VG901101A	9/10/91
	70 Hz	56.5 kHz	75.000 MHz	VESA Standard	VS910801-2	8/9/91
	75 Hz	60.0 kHz	78.750 MHz	VESA Standard	VDMT75HZ	10/4/93
	85 Hz	68.7 kHz	94.500 MHz	VESA Standard	VDMTPROP	3/1/96
	120 Hz (RB)	97.6 kHz	115.500 MHz	CVT Red. Blanking	n/a	5/1/07
1152 x 864	75 Hz	67.5 kHz	108.000 MHz	VESA Standard	VDMTPROP	3/1/96
1280 x 720	60 Hz	45.0 kHz	74.250 MHz	CEA Standard	CEA-861	TBD
1280 x 768	60 Hz(RB)	47.4 kHz	68.250 MHz	CVT Red. Blanking	AddDMT	3/4/03
	60 Hz	47.8 kHz	79.500 MHz	CVT	AddDMT	3/4/03
	75 Hz	60.3 kHz	102.250 MHz	CVT	AddDMT	3/4/03
	85 Hz	68.6 kHz	117.500 MHz	CVT	AddDMT	3/4/03
	120 Hz (RB)	97.4 kHz	140.250 MHz	CVT Red. Blanking	n/a	5/1/07
1280 x 800	60 Hz(RB)	49.3 kHz	71.000 MHz	CVT Red. Blanking	CVT1.02MA-R	5/1/07
	60 Hz	49.7 kHz	83.500 MHz	CVT	CVT 1.02MA	5/1/07
	75 Hz	62.8 kHz	106.500 MHz	CVT	CVT 1.02MA	5/1/07
	85 Hz	71.6 kHz	122.500 MHz	CVT	CVT 1.02MA	5/1/07
	120 Hz (RB)	101.6 kHz	146.250 MHz	CVT Red. Blanking	n/a	5/1/07
1280 x 960	60 Hz	60.0 kHz	108.000 MHz	VESA Standard	VDMTPROP	3/1/96
	85 Hz	85.9 kHz	148.500 MHz	VESA Standard	VDMTPROP	3/1/96
	120 Hz (RB)	121.9 kHz	175.500 MHz	CVT Red. Blanking	n/a	5/1/07

Pixel Format	Refresh Rate	Horizontal Frequency	Pixel Frequency	Standard Type	Original Document	Date
1280 x 1024	60 Hz	64.0 kHz	108.000 MHz	VESA Standard	VDMTREV	12/18/96
	75 Hz	80.0 kHz	135.000 MHz	VESA Standard	VDMT75HZ	10/4/93
	85 Hz	91.1 kHz	157.500 MHz	VESA Standard	VDMTPROP	3/1/96
	120 Hz (RB)	130.0 kHz	187.250 MHz	CVT Red. Blanking	n/a	5/1/07
1360 x 768	60 Hz	47.7 kHz	85.500 MHz	VESA Standard	AddDMT	3/4/03
	120 Hz (RB)	97.5 kHz	148.250 MHz	CVT Red. Blanking	n/a	5/1/07
1366 x 768	60 Hz	47.7 kHz	85.500 MHz	VESA Standard	DMT Update	11/30/07
1366 x 768	60 Hz (RB)	48.0 kHz	72.000 MHz	VESA Standard	VDMTREV	11/17/08
1400 x 1050	60 Hz(RB)	64.7 kHz	101.000 MHz	CVT Red. Blanking	AddDMT	5/13/03
	60 Hz	65.3 kHz	121.750 MHz	CVT	AddDMT	3/4/03
	75 Hz	82.3 kHz	156.000 MHz	CVT	AddDMT	3/4/03
	85 Hz	93.9 kHz	179.500 MHz	CVT	AddDMT	3/4/03
	120 Hz (RB)	133.3 kHz	208.000 MHz	CVT Red. Blanking	n/a	5/1/07
1440 x 900	60 Hz(RB)	55.5 kHz	88.750 MHz	CVT Red. Blanking	CVT1.30MA-R	7/14/04
	60 Hz	55.9 kHz	106.500 MHz	CVT	CVT 1.30MA	7/14/04
	75 Hz	70.6 kHz	136.750 MHz	CVT	CVT 1.30MA	7/14/04
	85 Hz	80.4 kHz	157.000 MHz	CVT	CVT 1.30MA	7/14/04
	120 Hz (RB)	114.2 kHz	182.750 MHz	CVT Red. Blanking	n/a	5/1/07
1600 x 900	60 Hz (RB)	60.0 kHz	108.000 MHz	VESA Standard	VDMTREV	11/17/08
1600 x 1200	60 Hz	75.0 kHz	162.000 MHz	VESA Standard	VDMTREV	12/18/96
	65 Hz	81.3 kHz	175.500 MHz	VESA Standard	VDMTREV	12/18/96
	70 Hz	87.5 kHz	189.000 MHz	VESA Standard	VDMTREV	12/18/96
	75 Hz	93.8 kHz	202.500 MHz	VESA Standard	VDMTREV	12/18/96
	85 Hz	106.3 kHz	229.500 MHz	VESA Standard	VDMTREV	12/18/96
	120 Hz (RB)	152.4 kHz	268.250 MHz	CVT Red. Blanking	n/a	5/1/07
1680 x 1050	60 Hz(RB)	64.7 kHz	119.000 MHz	CVT Red. Blanking	CVT1.76MA-R	7/14/04
	60 Hz	65.3 kHz	146.250 MHz	CVT	CVT 1.76MA	7/14/04
	75 Hz	82.3 kHz	187.000 MHz	CVT	CVT 1.76MA	7/14/04
	85 Hz	93.9 kHz	214.750 MHz	CVT	CVT 1.76MA	7/14/04
	120 Hz (RB)	133.4 kHz	245.500 MHz	CVT Red. Blanking	n/a	5/1/07
1792 x 1344	60 Hz	83.6 kHz	204.750 MHz	VESA Standard	VDMTREV	9/17/98
	75 Hz	106.3 kHz	261.000 MHz	VESA Standard	VDMTREV	9/17/98
	120 Hz (RB)	170.7 kHz	333.250 MHz	CVT Red. Blanking	n/a	5/1/07
1856 x 1392	60 Hz	86.3 kHz	218.250 MHz	VESA Standard	VDMTREV	9/17/98
	75 Hz	112.5 kHz	288.000 MHz	VESA Standard	VDMTREV	9/17/98
	120 Hz (RB)	176.8 kHz	356.500 MHz	CVT Red. Blanking	n/a	5/1/07
1920 x 1080	60 Hz	67.5 kHz	148.500 MHz	CEA Standard	CEA-861	TBD
1920 x 1200	60 Hz(RB)	74.0 kHz	154.000 MHz	CVT Red. Blanking	AddDMT	3/4/03
	60 Hz	74.6 kHz	193.250 MHz	CVT	AddDMT	3/4/03
	75 Hz	94.0 kHz	245.250 MHz	CVT	AddDMT	3/4/03
	85 Hz	107.2 kHz	281.250 MHz	CVT	AddDMT	3/4/03
	120 Hz (RB)	152.4 kHz	317.000 MHz	CVT Red. Blanking	n/a	5/1/07
1920 x 1440	60 Hz	90.0 kHz	234.000 MHz	VESA Standard	VDMTREV	9/17/98
	75 Hz	112.5 kHz	297.000 MHz	VESA Standard	VDMTREV	9/17/98
	120 Hz (RB)	182.9 kHz	380.500 MHz	CVT Red. Blanking	n/a	5/1/07

Pixel Format	Refresh Rate	Horizontal Frequency	Pixel Frequency	Standard Type	Original Document	Date
2048 x 1152	60 Hz (RB)	70.992 kHz	156.750 MHz	CVT Red. Blanking	VDMTREV	11/17/08
2560 x 1600	60 Hz (RB)	98.7 kHz	268.500 MHz	CVT Red. Blanking	CVT4.10MA-R	5/1/07
	60 Hz	99.5 kHz	348.500 MHz	CVT	CVT 4.10MA	5/1/07
	75 Hz	125.4 kHz	443.250 MHz	CVT	CVT 4.10MA	5/1/07
	85 Hz	142.9 kHz	505.250 MHz	CVT	CVT 4.10MA	5/1/07
	120 Hz (RB)	203.2 kHz	552.750 MHz	CVT Red. Blanking	n/a	5/1/07

# 2. DMT Standard Codes & IDs Summary

Table 2-1 includes a list of Display Monitor Timing Identification (DMT ID) codes, Standard (STD) Timing 2 byte codes and Coordinated Video Timing (CVT) 3 byte codes. A display may use these codes to indicate support for the associated DMT. Refer to the latest version of VESA's Enhanced Extended Display Identification (E-EDID) Standard for an explanation of how to derive the STD 2 byte codes and the CVT 3 byte codes. The letters "n/a" (not applicable) indicates that a STD 2 byte code and/or a CVT 3 byte code (DMT is not CVT compliant) cannot be created.

Table 2-1: Summary of DMT ID, STD 2 Byte & CVT 3 Byte Codes

Pixel		DMT ID	STD	CVT
Format	Refresh Rate	Codes	2 Byte Codes	3 Byte Codes
640 x 350	85 Hz	01h	n/a	n/a
640 x 400	85 Hz	02h	(31, 19)h	n/a
720 x 400	85 Hz	03h	n/a	n/a
640 x 480	60 Hz	04h	(31, 40)h	n/a
	72 Hz	05h	(31, 4C)h	n/a
	75 Hz	06h	(31, 4F)h	n/a
	85 Hz	07h	(31, 59)h	n/a
800 x 600	56 Hz	08h	n/a	n/a
	60 Hz	09h	(45, 40)h	n/a
	72 Hz	0Ah	(45, 4C)h	n/a
	75 Hz	0Bh	(45, 4F)h	n/a
	85 Hz	0Ch	(45, 59)h	n/a
	120 Hz (RB)	0Dh	n/a	n/a
848 x 480	60 Hz	0Eh	n/a	n/a
1024 x 768	43 Hz (Int.)	0Fh	n/a	n/a
	60 Hz	10h	(61, 40)h	n/a
	70 Hz	11h	(61, 4A)h	n/a
	75 Hz	12h	(61, 4F)h	n/a
	85 Hz	13h	(61, 59)h	n/a
	120 Hz (RB)	14h	n/a	n/a
1152 x 864	75 Hz	15h	(71, 4F)h	n/a
1280 x 720	60 Hz	55h	(81, C0)h	n/a
1280 x 768	60 Hz(RB)	16h	n/a	(7F, 1C, 21)h
	60 Hz	17h	n/a	(7F, 1C, 28)h
	75 Hz	18h	n/a	(7F, 1C, 44)h
	85 Hz	19h	n/a	(7F, 1C, 62)h
	120 Hz (RB)	1Ah	n/a	n/a

Pixel		DMT ID	STD	CVT
Format	Refresh Rate	Codes	2 Byte Codes	3 Byte Codes
1280 x 800	60 Hz (RB)	1Bh	n/a	(8F, 18, 21)h
	60 Hz	1Ch	(81, 00)h	(8F, 18, 28)h
	75 Hz	1Dh	(81, 0F)h	(8F, 18, 44)h
	85 Hz	1Eh	(81, 19)h	(8F, 18, 62)h
	120 Hz (RB)	1Fh	n/a	n/a
	, ,			
1280 x 960	60 Hz	20h	(81, 40)h	n/a
	85 Hz	21h	(81, 59)h	n/a
	120 Hz (RB)	22h	n/a	n/a
1280 x 1024	60 Hz	23h	(81, 80)h	n/a
	75 Hz	24h	(81, 8F)h	n/a
	85 Hz	25h	(81, 99)h	n/a
	120 Hz (RB)	26h	n/a	n/a
1360 x 768	60 Hz	27h	n/a	n/a
	120 Hz (RB)	28h	n/a	n/a
1366 x 768	60 Hz	51h	n/a	n/a
1366 x 768	60 Hz(RB)	56h	n/a	n/a
1400 1070	(0.11 (DD)	201	,	(0.0. 20. 21)1
1400 x 1050	60 Hz(RB)	29h	n/a	(0C, 20, 21)h
	60 Hz	2Ah	(90, 40)h	(0C, 20, 28)h
	75 Hz	2Bh	(90, 4F)h	(0C, 20, 44)h
	85 Hz	2Ch	(90, 59)h	(0C, 20, 62)h
	120 Hz (RB)	2Dh	n/a	n/a
1440 x 900	60 Hz(RB)	2Eh	n/a	(C1, 18, 21)h
1440 X 900	60 Hz(KB)	2Fh		` ' ' '
	75 Hz	30h	(95, 00)h	(C1, 18, 28)h
			(95, 0F)h	(C1, 18, 44)h
	85 Hz 120 Hz (RB)	31h 32h	(95, 19)h	(C1, 18, 68)h
	120 П2 (КВ)	3211	n/a	n/a
1600 x 900	60 Hz (RB)	53h	(A9, C0)h	n/a
1000 X 700	00 Hz (RD)	5511	(117, CO)11	11/ α
1600 x 1200	60 Hz	33h	(A9, 40)h	n/a
1000 N 1200	65 Hz	34h	(A9, 45)h	n/a
	70 Hz	35h	(A9, 4A)h	n/a
	75 Hz	36h	(A9, 4F)h	n/a
	85 Hz	37h	(A9, 59)h	n/a
	120 Hz (RB)	38h	n/a	n/a
	120 112 (103)	2011	11/4	11/ 11
1680 x 1050	60 Hz(RB)	39h	n/a	(0C, 28, 21)h
	60 Hz	3Ah	(B3, 00)h	(0C, 28, 28)h
	75 Hz	3Bh	(B3, 0F)h	(0C, 28, 44)h
	85 Hz	3Ch	(B3, 19)h	(0C, 28, 68)h
	120 Hz (RB)	3Dh	n/a	n/a
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Pixel		DMT ID	STD	CVT
Format	Refresh Rate	Codes	2 Byte Codes	3 Byte Codes
1792 x 1344	60 Hz	3Eh	(C1, 40)h	n/a
	75 Hz	3Fh	(C1, 4F)h	n/a
	120 Hz (RB)	40h	n/a	n/a
1856 x 1392	60 Hz	41h	(C9, 40)h	n/a
	75 Hz	42h	(C9, 4F)h	n/a
	120 Hz (RB)	43h	n/a	n/a
1920 x 1080	60 Hz	52h	(D1, C0)h	n/a
1920 x 1200	60 Hz(RB)	44h	n/a	(57, 28, 21)h
	60 Hz	45h	(D1, 00)h	(57, 28, 28)h
	75 Hz	46h	(D1, 0F)h	(57, 28, 44)h
	85 Hz	47h	(D1, 19)h	(57, 28, 62)h
	120 Hz (RB)	48h	n/a	n/a
1920 x 1440	60 Hz	49h	(D1, 40)h	n/a
	75 Hz	4Ah	(D1, 4F)h	n/a
	120 Hz (RB)	4Bh	n/a	n/a
2048 x 1152	60 Hz (RB)	54h	(E1, C0)h	n/a
2560 x 1600	60 Hz (RB)	4Ch	n/a	(1F, 38, 21)h
	60 Hz	4Dh	n/a	(1F, 38, 28)h
	75 Hz	4Eh	n/a	(1F, 38, 44)h
	85 Hz	4Fh	n/a	(1F, 38, 62)h
	120 Hz (RB)	50h	n/a	n/a

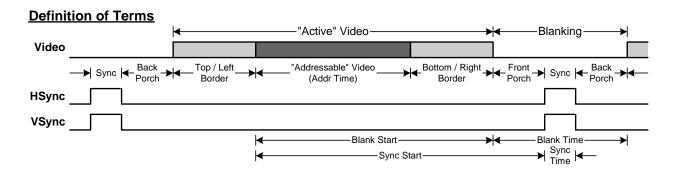
#### **Notes** for Table 2-1:

- 1. The CVT 3 Byte Codes listed in Table 2-1 are unique and are assigned to one video timing mode that was generated using the CVT Formulas. A source may decode the CVT 3 Byte Code and determine the number of vertical lines, the aspect ratio, the number of horizontal pixels (calculated), the preferred vertical refresh rate, a single supported refresh rate and the blanking style. For example, a source can decode the CVT 3 Byte Code, (7F, 1C, 44)h, with the following results: the number of vertical lines is 768, the aspect ratio is 15:9 AR, the number of horizontal pixels (calculated) is 1280, the preferred vertical refresh rate is 75 Hz, the supported vertical refresh rate is 75 Hz and the blanking style is standard (CRT style). Refer to VESA E-EDID Standard (Rel. A, Rev. 2) for an explanation on how to derive a CVT 3 Byte Code from video timing mode parameters.
- 2. A display (receiver) manufacturer may use the CVT 3 Byte Code to indicate support for a fixed pixel format and one or more vertical refresh rates.
- 3. For example, a display may contain a CVT 3 Byte Code which indicates support for 1280 x 768 and support for 50 Hz, 60 Hz, 75 Hz & 85 Hz vertical refresh rates with 60 Hz being the preferred vertical refresh rate. In this case the CVT 3 Byte code would be (7F, 1C, 3E)h. When the source decodes the CVT 3 Byte code, (7F, 1C, 3E)h, it knows that the display supports 1280 x 768, along with 50 Hz, 60 Hz, 75 Hz & 85 Hz vertical refresh rates with 60 Hz being the preferred vertical refresh rate. The source should output 1280 x 768 at 60 Hz (standard CRT style blanking). The source also knows that the 60 Hz (reduced blanking) is not supported in the display. Refer to VESA E-EDID Standard (Rel. A, Rev. 2) for an explanation on how to derive a CVT 3 Byte Code from the video timing mode parameters.

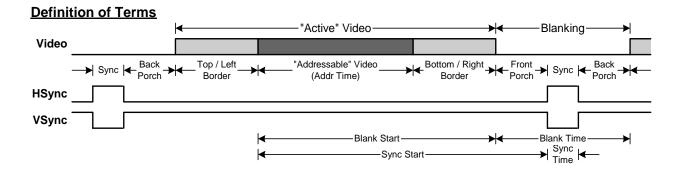
# 3. DMT Video Timing Parameter Definitions:

Section 3 includes a list of drawings that define the video timing parameters for all DMTs defined in this standard. There are four drawings based on the possible combinations of positive and negative horizontal and vertical syncs.

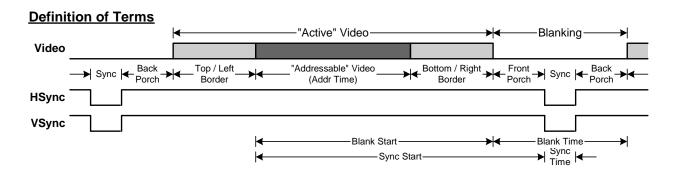
## 3.1 DMT Video Timing Parameter Definitions - Positive H & Positive V Syncs:



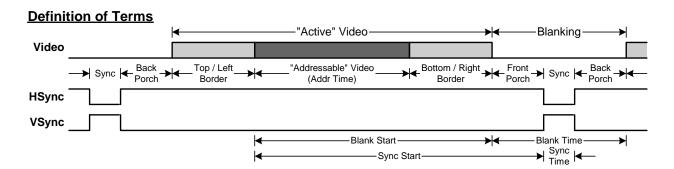
# 3.2 DMT Video Timing Parameter Definitions - Positive H & Negative V Syncs:



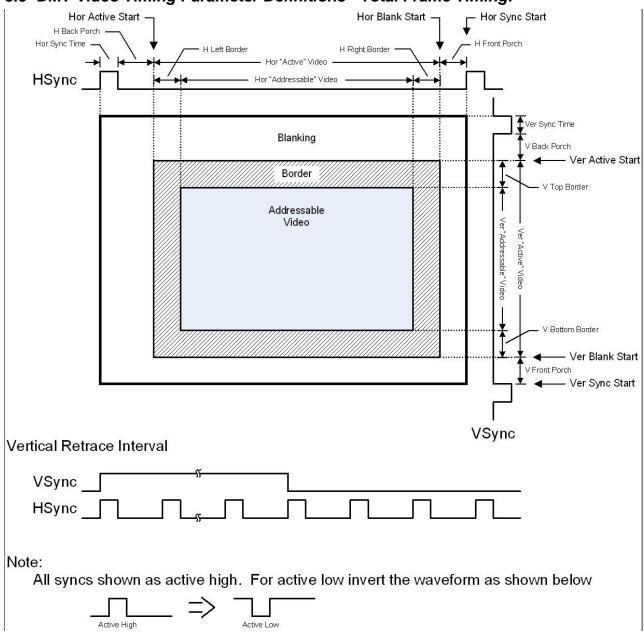
#### 3.3 DMT Video Timing Parameter Definitions - Negative H & Negative V Syncs:



# 3.4 DMT Video Timing Parameter Definitions - Negative H & Positive V Syncs:



# 3.5 DMT Video Timing Parameter Definitions - Total Frame Timing:



# 4. DMT Timing Specifications Section 4 includes a list of detailed timing parameters for all DMTs defined in this standard.

Adopted: 3/1/96

Resolution: 640 x 350 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 01h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                    = 640 \times 350 \otimes 85Hz;
Hor Pixels
                    = 640:
                                      // Pixels
Ver Pixels
                                      // Lines
                     = 350:
                     = 37.861;
                                      // kHz
Hor Frequency
                                                       26.4 usec
                                                                    / line
Ver Frequency
                     = 85.080;
                                      // Hz
                                                        11.8 msec
                                                                    / frame
Pixel Clock
                     = 31.500;
                                      // MHz
                                                       31.7 nsec
                                                                       \pm 0.5\%
                                                  =
Character Width
                     = 8:
                                      // Pixels
                                                      254.0 nsec
Scan Type
                                                         // H Phase =
                                                                          3.8 %
                     = NONINTERLACED;
Hor Sync Polarity
                     = POSITIVE: // HBlank = 23.1% of HTotal
                                                     21.3% of VTotal
Ver Sync Polarity
                     = NEGATIVE; // VBlank =
Hor Total Time
                     = 26.413;
                                                         104 \text{ chars} =
                                                                         832 Pixels
                                      // (usec)
Hor Addr Time
                                                         80 \text{ chars} =
                                                                         640 Pixels
                     = 20.317;
                                      // (usec)
                                                  =
Hor Blank Start
                     = 20.317;
                                      // (usec)
                                                  =
                                                         80 \text{ chars} =
                                                                         640 Pixels
Hor Blank Time
                     = 6.095;
                                      // (usec)
                                                         24 \text{ chars} =
                                                                         192 Pixels
                                                  =
Hor Sync Start
                     = 21.333;
                                      // (usec)
                                                         84 \text{ chars} =
                                                                         672 Pixels
                                                  =
// H Right Border
                     = 0.000;
                                      // (usec)
                                                           \mathbf{0} chars =
                                                                            0 Pixels
                                                  =
// H Front Porch
                     = 1.016:
                                      // (usec)
                                                           4
                                                             chars =
                                                                           32 Pixels
                                                  =
Hor Sync Time
                     = 2.032;
                                      // (usec)
                                                           8 \text{ chars} =
                                                                           64 Pixels
                                                  =
// H Back Porch
                     = 3.048;
                                                                           96 Pixels
                                      // (usec)
                                                  =
                                                         12 chars =
// H Left Border
                     = 0.000;
                                      // (usec)
                                                           \mathbf{0} chars =
                                                                            0 Pixels
Ver Total Time
                                                                      HT - (1.06xHA)
                     = 11.754:
                                      // (msec)
                                                        445 lines
Ver Addr Time
                     = 9.244:
                                      // (msec)
                                                        350 lines
                                                                            = 4.88
Ver Blank Start
                     = 9.244;
                                                        350 lines
                                      // (msec)
Ver Blank Time
                     = 2.509;
                                      // (msec)
                                                         95 lines
                                                  =
Ver Sync Start
                     = 10.090;
                                      // (msec)
                                                        382 lines
// V Bottom Border = 0.000:
                                      // (msec)
                                                          0 lines
// V Front Porch
                     = 0.845:
                                      // (msec)
                                                         32 lines
                                                  =
Ver Svnc Time
                     = 0.079:
                                      // (msec)
                                                           3 lines
// V Back Porch
                     = 1.585;
                                      // (msec)
                                                  =
                                                         60 lines
// V Top Border
                     = 0.000;
                                                           0 lines
                                      // (msec)
```

Adopted: 3/1/96

Resolution: 640 x 400 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 02h; STD 2 Byte Code: (31, 19)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                    = 640 \times 400 \otimes 85Hz;
Hor Pixels
                    = 640:
                                      // Pixels
Ver Pixels
                    = 400:
                                      // Lines
Hor Frequency
                    = 37.861:
                                      // kHz
                                                       26.4 usec
                                                                    / line
Ver Frequency
                    = 85.080;
                                      // Hz
                                                       11.8 msec
                                                                    / frame
Pixel Clock
                    = 31.500;
                                      // MHz
                                                       31.7 nsec
                                                                      \pm 0.5\%
                                                  =
Character Width
                    = 8:
                                      // Pixels
                                                      254.0 nsec
Scan Type
                    = NONINTERLACED;
                                                        // H Phase =
                                                                         3.8 %
Hor Sync Polarity
                    = NEGATIVE: // HBlank = 23.1% of HTotal
Ver Sync Polarity
                    = POSITIVE; // VBlank = 10.1% of VTotal
Hor Total Time
                    = 26.413:
                                      // (usec)
                                                        104 \text{ chars} =
                                                                         832 Pixels
Hor Addr Time
                    = 20.317:
                                      // (usec)
                                                         80 \text{ chars} =
                                                                         640 Pixels
                                                  =
                                                         80 \text{ chars} =
Hor Blank Start
                    = 20.317:
                                      // (usec)
                                                                         640 Pixels
                                                 =
Hor Blank Time
                                                                         192 Pixels
                    = 6.095:
                                      // (usec)
                                                         24 chars =
                                                  =
                                                                         672 Pixels
Hor Sync Start
                                                         84 \text{ chars} =
                    = 21.333;
                                      // (usec)
// H Right Border
                    = 0.000:
                                      // (usec)
                                                  =
                                                          0
                                                             chars =
                                                                           0 Pixels
// H Front Porch
                                                             chars =
                                                                          32 Pixels
                    = 1.016;
                                      // (usec)
                                                          4
                                                  =
Hor Sync Time
                                                                          64 Pixels
                    = 2.032;
                                      // (usec)
                                                  =
                                                          8 \text{ chars} =
// H Back Porch
                    = 3.048:
                                                         12 \text{ chars} =
                                                                          96 Pixels
                                      // (usec)
                                                  =
// H Left Border
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                    = 0.000;
                                      // (usec)
                                                  =
Ver Total Time
                    = 11.754;
                                      // (msec)
                                                        445 lines
                                                                      HT - (1.06xHA)
                                                  =
Ver Addr Time
                    = 10.565:
                                      // (msec)
                                                        400 lines
                                                                           = 4.88
                                                 =
Ver Blank Start
                    = 10.565:
                                                        400 lines
                                      // (msec)
                                                 =
Ver Blank Time
                    = 1.189:
                                      // (msec)
                                                         45 lines
Ver Sync Start
                    = 10.591;
                                      // (msec)
                                                 =
                                                        401 lines
// V Bottom Border = 0.000;
                                                          0 lines
                                      // (msec)
                                                 =
// V Front Porch
                    = 0.026;
                                      // (msec)
                                                 =
                                                          1 lines
Ver Sync Time
                    = 0.079;
                                      // (msec)
                                                          3 lines
// V Back Porch
                    = 1.083;
                                      // (msec)
                                                         41 lines
                                                 =
// V Top Border
                    = 0.000:
                                      // (msec)
                                                          0 lines
                                                 =
```

Adopted: 3/1/96

Resolution: 720 x 400 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 03h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

## **Detailed Timing Parameters**

```
Timing Name
                    = 720 \times 400 @ 85Hz;
Hor Pixels
                    = 720:
                                      // Pixels
Ver Pixels
                    = 400:
                                      // Lines
                    = 37.927:
                                      // kHz
Hor Frequency
                                                       26.4 usec
                                                                    / line
Ver Frequency
                    = 85.039;
                                      // Hz
                                                       11.8 msec
                                                                   / frame
Pixel Clock
                    = 35.500;
                                      // MHz
                                                       28.2 nsec
                                                                      \pm 0.5\%
Character Width
                    = 9:
                                      // Pixels
                                                      253.5 nsec
Scan Type
                    = NONINTERLACED;
                                                        // H Phase =
                                                                         3.8 %
Hor Sync Polarity
                    = NEGATIVE: // HBlank = 23.1% of HTotal
Ver Sync Polarity
                    = POSITIVE; // VBlank =
                                                     10.3% of VTotal
Hor Total Time
                                                                         936 Pixels
                    = 26.366;
                                      // (usec)
                                                        104 \text{ chars} =
Hor Addr Time
                    = 20.282;
                                      // (usec)
                                                         80 \text{ chars} =
                                                                         720 Pixels
Hor Blank Start
                    = 20.282:
                                                         80 \text{ chars} =
                                      // (usec)
                                                                         720 Pixels
                                                  =
                                                         24 chars =
Hor Blank Time
                    = 6.085:
                                      // (usec)
                                                                         216 Pixels
                                                  =
Hor Svnc Start
                    = 21.296:
                                      // (usec)
                                                         84 \text{ chars} =
                                                                         756 Pixels
// H Right Border
                                                          \mathbf{0} chars =
                    = 0.000:
                                      // (usec)
                                                                           0 Pixels
// H Front Porch
                    = 1.014:
                                      // (usec)
                                                          4
                                                            chars =
                                                                          36 Pixels
                                                  =
Hor Svnc Time
                    = 2.028:
                                      // (usec)
                                                          8 \text{ chars} =
                                                                          72 Pixels
                                                  =
// H Back Porch
                    = 3.042;
                                      // (usec)
                                                         12 chars =
                                                                         108 Pixels
// H Left Border
                                                                           0 Pixels
                    = 0.000;
                                      // (usec)
                                                          \mathbf{0} chars =
Ver Total Time
                    = 11.759:
                                      // (msec)
                                                        446 lines
                                                                      HT - (1.06xHA)
Ver Addr Time
                    = 10.546;
                                      // (msec)
                                                        400 lines
                                                                           = 4.87
Ver Blank Start
                    = 10.546;
                                      // (msec)
                                                        400 lines
                                                 =
Ver Blank Time
                                                         46 lines
                    = 1.213:
                                      // (msec)
Ver Sync Start
                                                        401 lines
                    = 10.573;
                                      // (msec)
                                                 =
// V Bottom Border = 0.000;
                                      // (msec)
                                                          0 lines
                                                 =
// V Front Porch
                                                          1 lines
                    = 0.026;
                                      // (msec)
                                                 =
Ver Sync Time
                    = 0.079;
                                                          3 lines
                                      // (msec)
                                                  =
// V Back Porch
                    = 1.107;
                                      // (msec)
                                                         42 lines
// V Top Border
                    = 0.000;
                                      // (msec)
                                                          0 lines
                                                  =
```

Adopted: n/a \*\* For Reference Only - Not a VESA Standard \*\*

Resolution: 640 x 480 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 04h; STD 2 Byte Code: (31, 40)h; CVT 3 Byte Code: n/a BIOS Modes: 11h, 12h, 101h, 110h, 111h, & 112h (1, 4, 8, 15, 16, & 24 bpp)

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                    = 640 \times 480 @ 60Hz:
Hor Pixels
                    = 640:
                                      // Pixels
Ver Pixels
                     = 480:
                                      // Lines
Hor Frequency
                     = 31.469:
                                      // kHz
                                                       31.8 usec
                                                                    / line
Ver Frequency
                     = 59.940;
                                                       16.7 msec
                                                                   / frame
                                      // Hz
                                                  =
Pixel Clock
                     = 25.175:
                                      // MHz
                                                       39.7 nsec
                                                                      \pm 0.5\%
Character Width
                     = 8:
                                      // Pixels
                                                      317.8 nsec
Scan Type
                     = NONINTERLACED:
                                                        // H Phase =
                                                                          2.0 %
Hor Sync Polarity
                     = NEGATIVE: // HBlank = 18.0% of HTotal
Ver Sync Polarity
                     = NEGATIVE: // VBlank =
                                                      5.5% of VTotal
Hor Total Time
                                                                         800 Pixels
                     = 31.778:
                                      // (usec)
                                                        100 \text{ chars} =
Hor Addr Time
                     = 25.422;
                                                                         640 Pixels
                                      // (usec)
                                                         80 \text{ chars} =
                                                  =
                     = 25.740;
Hor Blank Start
                                      // (usec)
                                                         81 \text{ chars} =
                                                                         648 Pixels
Hor Blank Time
                     = 5.720:
                                      // (usec)
                                                  =
                                                         18 \text{ chars} =
                                                                         144 Pixels
Hor Svnc Start
                     = 26.058:
                                      // (usec)
                                                  =
                                                         82 \text{ chars} =
                                                                         656 Pixels
// H Right Border
                     = 0.318:
                                                          1 chars =
                                                                           8 Pixels
                                      // (usec)
// H Front Porch
                                                                           8 Pixels
                     = 0.318;
                                      // (usec)
                                                  =
                                                          1 \text{ chars} =
Hor Sync Time
                     = 3.813;
                                      // (usec)
                                                         12 chars =
                                                                          96 Pixels
                                                  =
// H Back Porch
                     = 1.589;
                                      // (usec)
                                                          5 \text{ chars} =
                                                                          40 Pixels
                                                  =
// H Left Border
                     = 0.318:
                                      // (usec)
                                                          1 \text{ chars} =
                                                                           8 Pixels
                                                  =
Ver Total Time
                     = 16.683;
                                                        525 lines
                                                                      HT - (1.06xHA)
                                      // (msec)
Ver Addr Time
                     = 15.253;
                                      // (msec)
                                                        480 lines
                                                                           = 4.83
                                                  =
Ver Blank Start
                     = 15.507:
                                      // (msec)
                                                  =
                                                        488 lines
Ver Blank Time
                     = 0.922;
                                      // (msec)
                                                  =
                                                         29 lines
Ver Sync Start
                     = 15.571;
                                      // (msec)
                                                  =
                                                        490 lines
// V Bottom Border = 0.254;
                                      // (msec)
                                                  =
                                                          8 lines
// V Front Porch
                     = 0.064;
                                      // (msec)
                                                          2 lines
                                                  =
Ver Sync Time
                     = 0.064;
                                      // (msec)
                                                          2 lines
                                                  =
// V Back Porch
                     = 0.794;
                                                         25 lines
                                      // (msec)
                                                  =
// V Top Border
                     = 0.254;
                                      // (msec)
                                                          8 lines
```

Adopted: 11/11/90 (VESA #901101)

Resolution: 640 x 480 at 72 Hz (non-interlaced)

EDID ID: DMT ID: 05h; STD 2 Byte Code: (31, 4C)h; CVT 3 Byte Code: n/a BIOS Modes: 11h, 12h, 101h, 110h, 111h, & 112h (1, 4, 8, 15, 16, & 24 bpp)

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
= 640 \times 480 @ 72Hz;
Timing Name
Hor Pixels
                    = 640:
                                      // Pixels
Ver Pixels
                     = 480:
                                      // Lines
Hor Frequency
                     = 37.861:
                                      // kHz
                                                       26.4 usec
                                                                    / line
Ver Frequency
                     = 72.809;
                                                       13.7 msec
                                                                   / frame
                                      // Hz
                                                  =
Pixel Clock
                     = 31.500:
                                      // MHz
                                                       31.7 nsec
                                                                      \pm 0.5\%
                                                  =
Character Width
                     = 8:
                                      // Pixels
                                                      254.0 nsec
Scan Type
                     = NONINTERLACED:
                                                        // H Phase =
                                                                         6.3 %
Hor Sync Polarity
                     = NEGATIVE: // HBlank = 21.2% of HTotal
Ver Sync Polarity
                     = NEGATIVE: // VBlank =
                                                      4.6% of VTotal
Hor Total Time
                                                        104 \text{ chars} =
                     = 26.413:
                                      // (usec)
                                                                        832 Pixels
Hor Addr Time
                                                         80 \text{ chars} =
                                                                        640 Pixels
                     = 20.317:
                                      // (usec)
                                                 =
                                                                        648 Pixels
Hor Blank Start
                     = 20.571:
                                      // (usec)
                                                         81 \text{ chars} =
Hor Blank Time
                     = 5.587;
                                      // (usec)
                                                  =
                                                         22 \text{ chars} =
                                                                        176 Pixels
Hor Svnc Start
                     = 21.079:
                                      // (usec)
                                                  =
                                                         83 \text{ chars} =
                                                                        664 Pixels
// H Right Border
                     = 0.254:
                                                          1 chars =
                                                                           8 Pixels
                                      // (usec)
// H Front Porch
                     = 0.508;
                                      // (usec)
                                                 =
                                                          2 \text{ chars} =
                                                                          16 Pixels
Hor Sync Time
                                                          5
                     = 1.270;
                                      // (usec)
                                                             chars =
                                                                          40 Pixels
                                                  =
// H Back Porch
                     = 3.810;
                                      // (usec)
                                                         15 chars =
                                                                         120 Pixels
                                                 =
// H Left Border
                     = 0.254:
                                      // (usec)
                                                          1 \text{ chars} =
                                                                           8 Pixels
                                                  =
Ver Total Time
                     = 13.735;
                                      // (msec)
                                                        520 lines
                                                                      HT - (1.06xHA)
Ver Addr Time
                     = 12.678;
                                      // (msec)
                                                        480 lines
                                                                           = 4.88
                                                 =
Ver Blank Start
                     = 12.889:
                                                        488 lines
                                      // (msec)
                                                 =
Ver Blank Time
                     = 0.634;
                                      // (msec)
                                                         24 lines
                                                 =
Ver Sync Start
                     = 12.916;
                                      // (msec)
                                                 =
                                                        489 lines
// V Bottom Border = 0.211;
                                      // (msec)
                                                 =
                                                          8 lines
// V Front Porch
                     = 0.026;
                                      // (msec)
                                                          1 lines
                                                 =
Ver Sync Time
                     = 0.079;
                                      // (msec)
                                                          3 lines
                                                 =
// V Back Porch
                     = 0.528;
                                                         20 lines
                                      // (msec)
                                                 =
// V Top Border
                     = 0.211;
                                      // (msec)
                                                          8 lines
```

Adopted: 10/4/93

Resolution: 640 x 480 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 06h; STD 2 Byte Code: (31, 4F)h; CVT 3 Byte Code: n/a BIOS Modes: 11h, 12h, 101h, 110h, 111h, & 112h (1, 4, 8, 15, 16, & 24 bpp)

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
= 640 \times 480 @ 75Hz;
Timing Name
Hor Pixels
                    = 640:
                                      // Pixels
Ver Pixels
                     = 480:
                                      // Lines
                     = 37.500:
Hor Frequency
                                      // kHz
                                                       26.7 usec
                                                                    / line
Ver Frequency
                     = 75.000;
                                                       13.3 msec
                                                                   / frame
                                      // Hz
                                                  =
Pixel Clock
                     = 31.500:
                                      // MHz
                                                       31.7 nsec
                                                                      \pm 0.5\%
                                                  =
Character Width
                     = 8:
                                      // Pixels
                                                      254.0 nsec
Scan Type
                     = NONINTERLACED:
                                                        // H Phase =
                                                                         6.2 %
Hor Sync Polarity
                     = NEGATIVE: // HBlank = 23.8% of HTotal
Ver Sync Polarity
                     = NEGATIVE: // VBlank =
                                                      4.0% of VTotal
Hor Total Time
                                                        105 \text{ chars} =
                                                                         840 Pixels
                     = 26.667:
                                      // (usec)
Hor Addr Time
                                                                         640 Pixels
                     = 20.317:
                                      // (usec)
                                                         80 \text{ chars} =
                                                 =
Hor Blank Start
                     = 20.317:
                                      // (usec)
                                                         80 \text{ chars} =
                                                                         640 Pixels
Hor Blank Time
                     = 6.349:
                                      // (usec)
                                                  =
                                                         25 \text{ chars} =
                                                                         200 Pixels
Hor Svnc Start
                     = 20.825:
                                      // (usec)
                                                  =
                                                         82 chars =
                                                                         656 Pixels
// H Right Border
                     = 0.000:
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                      // (usec)
// H Front Porch
                     = 0.508;
                                      // (usec)
                                                 =
                                                          \mathbf{2} chars =
                                                                          16 Pixels
Hor Sync Time
                     = 2.032;
                                      // (usec)
                                                          8
                                                             chars =
                                                                          64 Pixels
                                                  =
// H Back Porch
                     = 3.810;
                                      // (usec)
                                                         15 chars =
                                                                         120 Pixels
                                                 =
// H Left Border
                     = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
Ver Total Time
                     = 13.333;
                                                        500 lines
                                                                      HT - (1.06xHA)
                                      // (msec)
Ver Addr Time
                     = 12.800;
                                      // (msec)
                                                        480 lines
                                                                           = 5.13
                                                 =
Ver Blank Start
                     = 12.800;
                                                        480 lines
                                      // (msec)
                                                 =
Ver Blank Time
                     = 0.533;
                                      // (msec)
                                                 =
                                                         20 lines
Ver Sync Start
                     = 12.827;
                                      // (msec)
                                                 =
                                                        481 lines
// V Bottom Border = 0.000;
                                      // (msec)
                                                 =
                                                          0 lines
// V Front Porch
                     = 0.027;
                                      // (msec)
                                                 =
                                                          1 lines
Ver Sync Time
                     = 0.080;
                                      // (msec)
                                                          3 lines
                                                 =
// V Back Porch
                     = 0.427;
                                                         16 lines
                                      // (msec)
                                                 =
// V Top Border
                     = 0.000;
                                      // (msec)
                                                          0 lines
```

Adopted: 3/1/96

Resolution: 640 x 480 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 07h; STD 2 Byte Code: (31, 59)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                    = 640 \times 480 @ 85Hz;
Hor Pixels
                    = 640:
                                      // Pixels
                                      // Lines
Ver Pixels
                    = 480:
                    = 43.269;
                                      // kHz
Hor Frequency
                                                       23.1 usec
                                                                    / line
Ver Frequency
                    = 85.008;
                                      // Hz
                                                  =
                                                       11.8 msec
                                                                   / frame
Pixel Clock
                    = 36.000;
                                      // MHz
                                                       27.8 nsec
                                                                      \pm 0.5\%
                                                  =
Character Width
                                                      222.2 nsec
                    = 8;
                                      // Pixels
Scan Type
                                                        // H Phase =
                    = NONINTERLACED;
                                                                          1.4 %
Hor Sync Polarity
                    = NEGATIVE; // HBlank = 23.1% of HTotal
Ver Sync Polarity
                                                      5.7% of VTotal
                    = NEGATIVE; // VBlank =
Hor Total Time
                    = 23.111;
                                                        104 \text{ chars} =
                                                                         832 Pixels
                                      // (usec)
Hor Addr Time
                    = 17.778;
                                                                         640 Pixels
                                      // (usec)
                                                  =
                                                         80 \text{ chars} =
Hor Blank Start
                    = 17.778;
                                      // (usec)
                                                  =
                                                         80 \text{ chars} =
                                                                         640 Pixels
Hor Blank Time
                    = 5.333;
                                      // (usec)
                                                         24 \text{ chars} =
                                                                         192 Pixels
                                                  =
Hor Sync Start
                    = 19.333;
                                      // (usec)
                                                         87 \text{ chars} =
                                                                         696 Pixels
                                                  =
// H Right Border
                    = 0.000;
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
// H Front Porch
                    = 1.556;
                                      // (usec)
                                                          7
                                                             chars =
                                                                          56 Pixels
                                                  =
                                                                          56 Pixels
Hor Sync Time
                    = 1.556;
                                      // (usec)
                                                          7
                                                             chars =
                                                  =
// H Back Porch
                    = 2.222:
                                                                          80 Pixels
                                      // (usec)
                                                  =
                                                         10 chars =
// H Left Border
                    = 0.000;
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
Ver Total Time
                                                                      HT - (1.06xHA)
                    = 11.764;
                                      // (msec)
                                                        509 lines
Ver Addr Time
                    = 11.093:
                                                        480 lines
                                      // (msec)
                                                                           = 4.27
Ver Blank Start
                                                        480 lines
                    = 11.093;
                                      // (msec)
Ver Blank Time
                    = 0.670;
                                      // (msec)
                                                         29 lines
                                                 =
Ver Sync Start
                    = 11.116:
                                      // (msec)
                                                        481 lines
// V Bottom Border = 0.000:
                                      // (msec)
                                                          0 lines
// V Front Porch
                    = 0.023:
                                      // (msec)
                                                          1 lines
                                                 =
Ver Svnc Time
                    = 0.069:
                                      // (msec)
                                                          3 lines
// V Back Porch
                    = 0.578;
                                      // (msec)
                                                  =
                                                         25 lines
// V Top Border
                                                          0 lines
                    = 0.000;
                                      // (msec)
```

Adopted: 8/7/90 (VESA #900601)

Resolution: 800 x 600 at 56 Hz (non-interlaced)

EDID ID: DMT ID: 08h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a BIOS Modes: 102h, 103h, 113h, 114h, & 115h (4, 8, 15, 16, & 24 bpp)

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
= 800 \times 600 \otimes 56Hz;
Timing Name
Hor Pixels
                    = 800:
                                      // Pixels
Ver Pixels
                     = 600;
                                      // Lines
                     = 35.156;
Hor Frequency
                                      // kHz
                                                       28.4 usec
                                                                    / line
Ver Frequency
                     = 56.250;
                                                       17.8 msec
                                                                   / frame
                                      // Hz
                                                  =
Pixel Clock
                     = 36.000:
                                      // MHz
                                                       27.8 nsec
                                                                      \pm 0.5\%
                                                  =
Character Width
                     = 8:
                                      // Pixels
                                                      222.2 nsec
Scan Type
                     = NONINTERLACED:
                                                        // H Phase =
                                                                          5.1 %
Hor Sync Polarity
                     = POSITIVE:
                                      // HBlank = 21.9% of HTotal
Ver Sync Polarity
                     = POSITIVE:
                                      // VBlank =
                                                      4.0% of VTotal
Hor Total Time
                     = 28.444:
                                                        128 chars =
                                      // (usec)
                                                                        1024 Pixels
Hor Addr Time
                     = 22.222:
                                                                         800 Pixels
                                      // (usec)
                                                        100 \text{ chars} =
                                                  =
                     = 22.222:
Hor Blank Start
                                      // (usec)
                                                        100 \text{ chars} =
                                                                         800 Pixels
Hor Blank Time
                     = 6.222:
                                      // (usec)
                                                         28 \text{ chars} =
                                                                         224 Pixels
Hor Svnc Start
                     = 22.889:
                                      // (usec)
                                                        103 \text{ chars} =
                                                                         824 Pixels
// H Right Border
                     = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
// H Front Porch
                                      // (usec)
                                                          3 \text{ chars} =
                                                                          24 Pixels
                     = 0.667;
                                                  =
Hor Sync Time
                                                          9
                                                                          72 Pixels
                     = 2.000;
                                      // (usec)
                                                             chars =
                                                  =
// H Back Porch
                     = 3.556;
                                      // (usec)
                                                         16 chars =
                                                                         128 Pixels
                                                  =
// H Left Border
                     = 0.000;
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
Ver Total Time
                     = 17.778;
                                      // (msec)
                                                        625 lines
                                                                      HT - (1.06xHA)
                                                                           =4.89
Ver Addr Time
                     = 17.067;
                                      // (msec)
                                                        600 lines
                                                  =
Ver Blank Start
                     = 17.067:
                                                        600 lines
                                      // (msec)
Ver Blank Time
                     = 0.711;
                                      // (msec)
                                                         25 lines
                                                  =
Ver Sync Start
                     = 17.095;
                                      // (msec)
                                                  =
                                                        601 lines
// V Bottom Border = 0.000;
                                      // (msec)
                                                  =
                                                          0 lines
// V Front Porch
                     = 0.028;
                                      // (msec)
                                                  =
                                                          1 lines
Ver Sync Time
                     = 0.057;
                                      // (msec)
                                                          2 lines
                                                  =
// V Back Porch
                     = 0.626;
                                                         22 lines
                                      // (msec)
                                                  =
// V Top Border
                     = 0.000:
                                      // (msec)
                                                          0 lines
```

Adopted: 8/7/90 (VESA #900602)

Resolution: 800 x 600 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 09h; STD 2 Byte Code: (45, 40)h; CVT 3 Byte Code: n/a

BIOS Modes: 102h, 103h, 113h, 114h, & 115h (4, 8, 15, 16, & 24 bpp)

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                    = 800 \times 600 @ 60Hz:
Hor Pixels
                    = 800:
                                      // Pixels
Ver Pixels
                     = 600;
                                      // Lines
                     = 37.879;
Hor Frequency
                                      // kHz
                                                       26.4 usec
                                                                    / line
Ver Frequency
                     = 60.317;
                                                        16.6 msec
                                                                    / frame
                                      // Hz
                                                  =
Pixel Clock
                     = 40.000:
                                      // MHz
                                                        25.0 nsec
                                                                       \pm 0.5\%
Character Width
                     = 8:
                                      // Pixels
                                                      200.0 nsec
Scan Type
                     = NONINTERLACED:
                                                        // H Phase =
                                                                          2.3 %
Hor Sync Polarity
                     = POSITIVE:
                                      // HBlank = 24.2% of HTotal
Ver Sync Polarity
                     = POSITIVE:
                                      // VBlank =
                                                       4.5% of VTotal
Hor Total Time
                     = 26.400:
                                                        132 \text{ chars} =
                                      // (usec)
                                                                        1056 Pixels
Hor Addr Time
                     = 20.000:
                                                                         800 Pixels
                                      // (usec)
                                                        100 \text{ chars} =
                                                  =
Hor Blank Start
                     = 20.000:
                                      // (usec)
                                                        100 \text{ chars} =
                                                                         800 Pixels
Hor Blank Time
                     = 6.400:
                                      // (usec)
                                                  =
                                                         32 \text{ chars} =
                                                                         256 Pixels
Hor Svnc Start
                     = 21.000:
                                      // (usec)
                                                        105 \text{ chars} =
                                                                         840 Pixels
// H Right Border
                     = 0.000:
                                                           \mathbf{0} chars =
                                                                           0 Pixels
                                      // (usec)
// H Front Porch
                     = 1.000;
                                                                          40 Pixels
                                      // (usec)
                                                  =
                                                           5 \text{ chars} =
Hor Sync Time
                                                                          128 Pixels
                     = 3.200;
                                      // (usec)
                                                         16 chars =
                                                  =
// H Back Porch
                     = 2.200;
                                      // (usec)
                                                         11 chars =
                                                                          88 Pixels
                                                  =
// H Left Border
                     = 0.000:
                                      // (usec)
                                                           \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
Ver Total Time
                     = 16.579;
                                      // (msec)
                                                        628 lines
                                                                      HT - (1.06xHA)
Ver Addr Time
                     = 15.840;
                                      // (msec)
                                                        600 lines
                                                                           = 5.2
                                                  =
Ver Blank Start
                     = 15.840;
                                      // (msec)
                                                        600 lines
Ver Blank Time
                     = 0.739;
                                      // (msec)
                                                         28 lines
                                                  =
Ver Sync Start
                     = 15.866;
                                      // (msec)
                                                  =
                                                        601 lines
// V Bottom Border = 0.000;
                                      // (msec)
                                                  =
                                                           0 lines
// V Front Porch
                     = 0.026;
                                      // (msec)
                                                  =
                                                           1 lines
Ver Sync Time
                     = 0.106;
                                      // (msec)
                                                           4 lines
                                                  =
// V Back Porch
                     = 0.607;
                                                         23 lines
                                      // (msec)
                                                  =
// V Top Border
                     = 0.000;
                                      // (msec)
                                                           0 lines
```

Adopted: 9/10/91 (VESA #900603A)

Resolution: 800 x 600 at 72 Hz (non-interlaced)

EDID ID: DMT ID: 0Ah; STD 2 Byte Code: (45, 4C)h; CVT 3 Byte Code: n/a

BIOS Modes: 102h, 103h, 113h, 114h, & 115h (4, 8, 15, 16, & 24 bpp)

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
= 800 \times 600 @ 72Hz;
Timing Name
Hor Pixels
                    = 800:
                                      // Pixels
Ver Pixels
                     = 600;
                                      // Lines
                     = 48.077;
Hor Frequency
                                      // kHz
                                                       20.8 usec
                                                                    / line
Ver Frequency
                     = 72.188;
                                                       13.9 msec
                                                                    / frame
                                      // Hz
                                                  =
Pixel Clock
                     = 50.000;
                                      // MHz
                                                        20.0 nsec
                                                                       \pm 0.5\%
                                                  =
Character Width
                     = 8:
                                      // Pixels
                                                      160.0 nsec
Scan Type
                     = NONINTERLACED:
                                                        // H Phase =
                                                                          0.4 %
Hor Sync Polarity
                     = POSITIVE:
                                      // HBlank = 23.1% of HTotal
Ver Sync Polarity
                     = POSITIVE:
                                      // VBlank =
                                                      9.9% of VTotal
Hor Total Time
                     = 20.800:
                                                        130 \text{ chars} =
                                                                        1040 Pixels
                                      // (usec)
Hor Addr Time
                     = 16.000:
                                                                         800 Pixels
                                      // (usec)
                                                        100 \text{ chars} =
                                                  =
Hor Blank Start
                     = 16.000:
                                      // (usec)
                                                        100 \text{ chars} =
                                                                         800 Pixels
Hor Blank Time
                     = 4.800:
                                      // (usec)
                                                         30 \text{ chars} =
                                                                         240 Pixels
Hor Svnc Start
                     = 17.120:
                                      // (usec)
                                                        107 \text{ chars} =
                                                                         856 Pixels
// H Right Border
                     = 0.000:
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                      // (usec)
// H Front Porch
                     = 1.120;
                                      // (usec)
                                                  =
                                                          7 	ext{ chars} =
                                                                          56 Pixels
Hor Sync Time
                     = 2.400;
                                      // (usec)
                                                         15
                                                             chars =
                                                                         120 Pixels
                                                  =
// H Back Porch
                     = 1.280;
                                      // (usec)
                                                          8 chars =
                                                                          64 Pixels
                                                  =
// H Left Border
                     = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
Ver Total Time
                     = 13.853;
                                                        666 lines
                                                                      HT - (1.06xHA)
                                      // (msec)
Ver Addr Time
                     = 12.480;
                                      // (msec)
                                                        600 lines
                                                                           = 3.84
                                                  =
Ver Blank Start
                     = 12.480:
                                                        600 lines
                                      // (msec)
Ver Blank Time
                     = 1.373;
                                      // (msec)
                                                  =
                                                         66 lines
Ver Sync Start
                     = 13.250;
                                      // (msec)
                                                  =
                                                        637 lines
// V Bottom Border = 0.000;
                                      // (msec)
                                                  =
                                                          0 lines
// V Front Porch
                     = 0.770;
                                      // (msec)
                                                  =
                                                         37 lines
Ver Sync Time
                     = 0.125;
                                      // (msec)
                                                          6 lines
                                                  =
// V Back Porch
                     = 0.478;
                                                         23 lines
                                      // (msec)
                                                  =
// V Top Border
                     = 0.000;
                                      // (msec)
                                                          0 lines
```

Adopted: 10/4/93

Resolution: 800 x 600 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 0Bh; STD 2 Byte Code: (45, 4F)h; CVT 3 Byte Code: n/a

BIOS Modes: 102h, 103h, 113h, 114h, & 115h (4, 8, 15, 16, & 24 bpp)

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
= 800 \times 600 @ 75Hz;
Timing Name
Hor Pixels
                    = 800:
                                      // Pixels
Ver Pixels
                     = 600:
                                      // Lines
Hor Frequency
                     = 46.875:
                                      // kHz
                                                       21.3 usec
                                                                    / line
Ver Frequency
                     = 75.000;
                                                       13.3 msec
                                                                   / frame
                                      // Hz
                                                  =
Pixel Clock
                     = 49.500;
                                      // MHz
                                                       20.2 nsec
                                                                      \pm 0.5\%
                                                  =
Character Width
                     = 8:
                                      // Pixels
                                                      161.6 nsec
Scan Type
                     = NONINTERLACED:
                                                        // H Phase =
                                                                         6.8 %
Hor Sync Polarity
                     = POSITIVE:
                                      // HBlank = 24.2% of HTotal
Ver Sync Polarity
                     = POSITIVE:
                                      // VBlank =
                                                      4.0% of VTotal
Hor Total Time
                     = 21.333:
                                                        132 \text{ chars} =
                                      // (usec)
                                                                        1056 Pixels
Hor Addr Time
                                                                         800 Pixels
                     = 16.162:
                                      // (usec)
                                                        100 \text{ chars} =
                                                  =
Hor Blank Start
                     = 16.162:
                                      // (usec)
                                                        100 \text{ chars} =
                                                                         800 Pixels
Hor Blank Time
                     = 5.172:
                                      // (usec)
                                                  =
                                                         32 \text{ chars} =
                                                                         256 Pixels
Hor Svnc Start
                     = 16.485:
                                      // (usec)
                                                        102 chars =
                                                                         816 Pixels
// H Right Border
                     = 0.000:
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                      // (usec)
// H Front Porch
                     = 0.323;
                                      // (usec)
                                                  =
                                                          2 	ext{ chars} =
                                                                          16 Pixels
Hor Sync Time
                     = 1.616;
                                      // (usec)
                                                         10 chars =
                                                                          80 Pixels
                                                  =
// H Back Porch
                     = 3.232;
                                      // (usec)
                                                         20 chars =
                                                                         160 Pixels
                                                  =
// H Left Border
                     = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
Ver Total Time
                     = 13.333;
                                                        625 lines
                                                                      HT - (1.06xHA)
                                      // (msec)
Ver Addr Time
                     = 12.800;
                                      // (msec)
                                                        600 lines
                                                                           = 4.2
                                                 =
Ver Blank Start
                     = 12.800;
                                      // (msec)
                                                 =
                                                        600 lines
Ver Blank Time
                     = 0.533;
                                      // (msec)
                                                         25 lines
                                                  =
Ver Sync Start
                     = 12.821;
                                      // (msec)
                                                 =
                                                        601 lines
// V Bottom Border = 0.000;
                                                          0 lines
                                      // (msec)
                                                 =
// V Front Porch
                     = 0.021;
                                      // (msec)
                                                  =
                                                          1 lines
Ver Sync Time
                     = 0.064;
                                      // (msec)
                                                          3 lines
                                                 =
// V Back Porch
                     = 0.448;
                                                         21 lines
                                      // (msec)
                                                 =
// V Top Border
                     = 0.000;
                                      // (msec)
                                                          0 lines
```

Adopted: 3/1/96

Resolution: 800 x 600 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 0Ch; STD 2 Byte Code: (45, 59)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
= 800 \times 600 \otimes 85Hz;
Timing Name
Hor Pixels
                    = 800:
                                      // Pixels
Ver Pixels
                     = 600;
                                      // Lines
Hor Frequency
                     = 53.674:
                                      // kHz
                                                       18.6 usec
                                                                    / line
Ver Frequency
                     = 85.061;
                                                       11.8 msec
                                                                   / frame
                                      // Hz
                                                  =
Pixel Clock
                     = 56.250;
                                      // MHz
                                                       17.8 nsec
                                                                      \pm 0.5\%
                                                  =
Character Width
                     = 8:
                                      // Pixels
                                                      142.2 nsec
Scan Type
                     = NONINTERLACED:
                                                        // H Phase =
                                                                         5.7 %
Hor Sync Polarity
                     = POSITIVE:
                                      // HBlank = 23.7% of HTotal
Ver Sync Polarity
                     = POSITIVE:
                                      // VBlank =
                                                      4.9% of VTotal
Hor Total Time
                                                        131 chars =
                     = 18.631:
                                      // (usec)
                                                                        1048 Pixels
Hor Addr Time
                     = 14.222:
                                      // (usec)
                                                        100 \text{ chars} =
                                                                         800 Pixels
                                                  =
Hor Blank Start
                     = 14.222:
                                      // (usec)
                                                        100 \text{ chars} =
                                                                         800 Pixels
Hor Blank Time
                     = 4.409:
                                      // (usec)
                                                  =
                                                         31 \text{ chars} =
                                                                         248 Pixels
Hor Svnc Start
                     = 14.791:
                                      // (usec)
                                                        104 \text{ chars} =
                                                                         832 Pixels
// H Right Border
                     = 0.000:
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                      // (usec)
// H Front Porch
                     = 0.569;
                                      // (usec)
                                                  =
                                                          4 chars =
                                                                          32 Pixels
Hor Sync Time
                     = 1.138;
                                      // (usec)
                                                          8 chars =
                                                                          64 Pixels
                                                  =
// H Back Porch
                     = 2.702;
                                      // (usec)
                                                         19 chars =
                                                                         152 Pixels
                                                  =
// H Left Border
                     = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
Ver Total Time
                     = 11.756;
                                                        631 lines
                                                                      HT - (1.06xHA)
                                      // (msec)
Ver Addr Time
                     = 11.179;
                                      // (msec)
                                                        600 lines
                                                                           = 3.56
                                                 =
Ver Blank Start
                     = 11.179:
                                      // (msec)
                                                 =
                                                        600 lines
Ver Blank Time
                     = 0.578;
                                      // (msec)
                                                         31 lines
                                                  =
Ver Sync Start
                     = 11.197;
                                      // (msec)
                                                 =
                                                        601 lines
// V Bottom Border = 0.000;
                                      // (msec)
                                                 =
                                                          0 lines
// V Front Porch
                     = 0.019;
                                      // (msec)
                                                          1 lines
                                                  =
Ver Sync Time
                     = 0.056;
                                      // (msec)
                                                          3 lines
                                                 =
// V Back Porch
                                                         27 lines
                     = 0.503;
                                      // (msec)
                                                  =
// V Top Border
                     = 0.000;
                                      // (msec)
                                                          0 lines
```

Adopted: 5/1/07

Resolution: 800 x 600 at 120 Hz (non-interlaced) REDUCED BLANKING EDID ID: DMT ID: 0Dh; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

#### **Detailed Timing Parameters**

```
Timing Name
                        800 x 600 @ 120Hz CVT (Reduced Blanking);
                     = 800:
Hor Pixels
                                        // Pixels
Ver Pixels
                                        // Lines
                     = 600;
Hor Frequency
                      = 76.302:
                                        // kHz
                                                          13.1 usec
                                                                       / line
Ver Frequency
                      = 119.972;
                                                           8.3 msec
                                                                      / frame
                                        // Hz
                                                    =
Pixel Clock
                      = 73.250:
                                        // MHz
                                                    =
                                                          13.7 nsec
                                                                         \pm 0.5\%
Character Width
                                        // Pixels
                                                    =
                                                        109.2 nsec
                      = 8;
Scan Type
                      = NONINTERLACED;
                                                           // H Phase =
                                                                            1.7 %
                                                       16.7% of HTotal
Hor Sync Polarity
                      = POSITIVE;
                                       // HBlank =
Ver Svnc Polarity
                      = NEGATIVE
                                       // VBlank
                                                         5.7% of VTotal
Hor Total Time
                      = 13.106:
                                        // (usec)
                                                          120 \text{ chars} =
                                                                            960 Pixels
Hor Addr Time
                      = 10.922:
                                                                            800 Pixels
                                        // (usec)
                                                          100 \text{ chars} =
Hor Blank Start
                     = 10.922:
                                        // (usec)
                                                          100 \text{ chars} =
                                                                            800 Pixels
Hor Blank Time
                      = 2.184;
                                        // (usec)
                                                           20 \text{ chars} =
                                                                            160 Pixels
Hor Sync Start
                      = 11.577;
                                        // (usec)
                                                    =
                                                          106 \text{ chars} =
                                                                            848 Pixels
// H Right Border
                      = 0.000:
                                        // (usec)
                                                    =
                                                            \mathbf{0} chars =
                                                                              0 Pixels
// H Front Porch
                                        // (usec)
                                                             6 \text{ chars} =
                                                                             48 Pixels
                      = 0.655;
                                                    =
Hor Sync Time
                      = 0.437:
                                        // (usec)
                                                               chars =
                                                                             32 Pixels
                                                    =
// H Back Porch
                      = 1.092:
                                                           10 \text{ chars} =
                                                                             80 Pixels
                                        // (usec)
                                                    =
// H Left Border
                      = 0.000:
                                        // (usec)
                                                    =
                                                             \mathbf{0} chars =
                                                                              0 Pixels
Ver Total Time
                      = 8.335:
                                        // (msec)
                                                          636 lines
                                                                         HT - (1.06xHA)
Ver Addr Time
                      = 7.863;
                                        // (msec)
                                                          600 lines
                                                                              = 1.53
                                                    =
Ver Blank Start
                      = 7.863:
                                        // (msec)
                                                    =
                                                          600 lines
Ver Blank Time
                      = 0.472;
                                        // (msec)
                                                           36 lines
                                                    =
Ver Sync Start
                      = 7.903;
                                        // (msec)
                                                          603 lines
// V Bottom Border
                     = 0.000:
                                        // (msec)
                                                    =
                                                             0 lines
// V Front Porch
                      = 0.039;
                                        // (msec)
                                                    =
                                                            3 lines
Ver Sync Time
                      = 0.052;
                                                             4 lines
                                        // (msec)
// V Back Porch
                      = 0.380;
                                        // (msec)
                                                           29 lines
                                                    =
// V Top Border
                                                             0 lines
                      = 0.000:
                                        // (msec)
```

Adopted: 8/21/03

Resolution: 848 x 480 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 0Eh; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                    = 848 \times 480 @ 60Hz;
Hor Pixels
                    = 848;
                                      // Pixels
Ver Pixels
                                      // Lines
                    = 480;
                    = 31.020;
Hor Frequency
                                      // kHz
                                                 =
                                                       32.2 usec
                                                                    / line
Ver Frequency
                    = 60.000;
                                                       16.7 msec
                                      // Hz
                                                                   / frame
Pixel Clock
                     = 33.750:
                                      // MHz
                                                       29.6 nsec
                                                                      \pm 0.5\%
Character Width
                    = 8;
                                      // Pixels
                                                      237.0 nsec
                                                        // H Phase =
                                                                         4.4 %
Scan Type
                    = NONINTERLACED;
Hor Sync Polarity
                     = POSITIVE:
                                      // HBlank = 22.1% of HTotal
                                      // VBlank =
Ver Sync Polarity
                    = POSITIVE;
                                                      7.2% of VTotal
Hor Total Time
                     = 32.237;
                                      // (usec)
                                                        136 chars =
                                                                       1088 Pixels
Hor Addr Time
                    = 25.126;
                                                        106 \text{ chars} =
                                                                         848 Pixels
                                      // (usec)
Hor Blank Start
                    = 25.126;
                                      // (usec)
                                                        106 \text{ chars} =
                                                                         848 Pixels
                                                 =
Hor Blank Time
                    = 7.111:
                                      // (usec)
                                                 =
                                                         30 \text{ chars} =
                                                                         240 Pixels
Hor Sync Start
                     = 25.600;
                                      // (usec)
                                                        108 \text{ chars} =
                                                                         864 Pixels
// H Right Border
                                                          0 chars =
                    = 0.000:
                                      // (usec)
                                                                           0 Pixels
                                                 =
// H Front Porch
                    = 0.474;
                                      // (usec)
                                                 =
                                                          2 \text{ chars} =
                                                                          16 Pixels
Hor Sync Time
                    = 3.319;
                                      // (usec)
                                                         14 chars =
                                                                         112 Pixels
// H Back Porch
                    = 3.319:
                                      // (usec)
                                                         14 chars =
                                                                         112 Pixels
                                                 =
// H Left Border
                    = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                 =
Ver Total Time
                                                        517 lines
                                                                      HT - (1.06xHA)
                    = 16.667:
                                      // (msec)
                                                 =
Ver Addr Time
                    = 15.474;
                                      // (msec)
                                                        480 lines
                                                                           = 5.6
                                                 =
                                                        480 lines
Ver Blank Start
                    = 15.474;
                                      // (msec)
Ver Blank Time
                                                         37 lines
                    = 1.193:
                                      // (msec)
                                                 =
Ver Sync Start
                                                        486 lines
                    = 15.667;
                                      // (msec)
                                                 =
// V Bottom Border = 0.000;
                                                          0 lines
                                      // (msec)
                                                 =
// V Front Porch
                    = 0.193:
                                      // (msec)
                                                 =
                                                          6 lines
Ver Sync Time
                    = 0.258;
                                                          8 lines
                                      // (msec)
                                                 =
// V Back Porch
                    = 0.741;
                                      // (msec)
                                                 =
                                                         23 lines
// V Top Border
                    = 0.000;
                                      // (msec)
                                                          0 lines
```

Adopted: n/a \*\* For Reference Only - Not a VESA Standard \*\*

Resolution: 1024 x 768 at 43 Hz (interlaced)

EDID ID: DMT ID: 0Fh; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a BIOS Modes: 104h, 105h, 116h, 117h, & 118h (4, 8, 15, 16, & 24 bpp)

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                    = 1024 x 768 @ 43Hz (Interlaced);
Hor Pixels
                    = 1024:
                                      // Pixels
Ver Pixels
                     = 768:
                                       // Lines
Hor Frequency
                     = 35.522;
                                       // kHz
                                                         28.2 usec
                                                                      / line
                                                  =
Ver Frequency
                     = 86.957;
                                                         11.5 msec
                                                                        field
                                       // Hz.
                                                         22.3 nsec
                                                                        \pm 0.5\%
Pixel Clock
                     = 44.900:
                                       // MHz
                                                  =
Character Width
                     = 8;
                                       // Pixels
                                                        178.2 nsec
                                                  =
Scan Type
                     = INTERLACED;
Hor Sync Polarity
                     = POSITIVE:
                                       // HBlank =
                                                       19.0% of HTotal
Ver Sync Polarity
                     = POSITIVE;
                                      // VBlank =
                                                        5.9% of VTotal
Hor Total Time
                     = 28.151:
                                       // (usec)
                                                          158 chars =
                                                                          1264 Pixels
                                                  =
Hor Addr Time
                     = 22.806;
                                       // (usec)
                                                          128 \text{ chars} =
                                                                          1024 Pixels
                                                  =
Hor Blank Start
                     = 22.806;
                                       // (usec)
                                                          128 chars =
                                                                          1024 Pixels
                                                  =
Hor Blank Time
                     = 5.345;
                                       // (usec)
                                                  =
                                                           30 \text{ chars} =
                                                                           240 Pixels
Hor Sync Start
                     = 22.984;
                                      // (usec)
                                                          129 chars =
                                                                          1032 Pixels
                                                  =
// H Right Border
                     = 0.000;
                                       // (usec)
                                                  =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                                                                             8 Pixels
                     = 0.178;
                                       // (usec)
                                                            1 \text{ chars} =
                                                  =
Hor Svnc Time
                     = 3.920:
                                       // (usec)
                                                           22 chars =
                                                                           176 Pixels
                                                  =
// H Back Porch
                     = 1.247:
                                                            7 chars =
                                                                            56 Pixels
                                       // (usec)
                                                  =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                            \mathbf{0} chars =
                                                                             0 Pixels
                                                  =
                                                          817 lines (Per Frame)
Ver Total Time
                     = 23.000;
                                       // (msec)
                                                  =
Ver Addr Time
                     = 21.620:
                                       // (msec)
                                                  =
                                                          768 lines
                                                                     (Per Frame)
Ver Blank Start
                     = 21.620;
                                       // (msec)
                                                          768 lines
                                                                     (Per Frame)
                                                  =
Ver Blank Time
                     = 0.676;
                                       // (msec)
                                                           24 lines
                                                                     (Per Field)
                                                  =
Ver Sync Start
                     = 21.620;
                                                          768 lines
                                                                     (Per Frame)
                                      // (msec)
                                                  =
// V Bottom Border = 0.000:
                                                                     (Odd Field)
                                      // (msec)
                                                  =
                                                            0 lines
// V Front Porch
                                                            0 lines
                                                                     (Odd Field)
                     = 0.000;
                                       // (msec)
                                                  =
Ver Svnc Time
                     = 0.113:
                                       // (msec)
                                                  =
                                                            4 lines
                                                                     (Both Fields)
// V Back Porch
                     = 0.563;
                                       // (msec)
                                                  =
                                                           20 lines
                                                                     (Odd Field)
// V Top Border
                     = 0.000;
                                                            0 lines
                                                                     (Odd Field)
                                      // (msec)
```

Adopted: 9/10/91 (VESA #901101A)

Resolution: 1024 x 768 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 10h; STD 2 Byte Code: (61, 40)h; CVT 3 Byte Code: n/a

BIOS Modes: 104h, 105h, 116h, 117h, & 118h (4, 8, 15, 16, & 24 bpp)

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                    = 1024 \times 768 @ 60Hz:
Hor Pixels
                    = 1024:
                                     // Pixels
Ver Pixels
                    = 768;
                                     // Lines
Hor Frequency
                    = 48.363:
                                     // kHz
                                                      20.7 usec
                                                                  / line
Ver Frequency
                    = 60.004;
                                     // Hz
                                                =
                                                      16.7 msec
                                                                  / frame
                    = 65.000:
Pixel Clock
                                     // MHz
                                                      15.4 nsec
                                                                    \pm 0.5\%
                                                =
Character Width
                                     // Pixels
                    = 8;
                                                    123.1 nsec
                                                       // H Phase =
Scan Type
                    = NONINTERLACED;
                                                                       5.1 %
                    = NEGATIVE; // HBlank = 23.8% of HTotal
Hor Sync Polarity
Ver Sync Polarity
                    = NEGATIVE: // VBlank =
                                                     4.7% of VTotal
Hor Total Time
                    = 20.677:
                                                      168 chars =
                                     // (usec)
                                                                     1344 Pixels
Hor Addr Time
                                                                      1024 Pixels
                    = 15.754:
                                     // (usec)
                                                      128 chars =
                                                =
Hor Blank Start
                    = 15.754:
                                     // (usec)
                                                =
                                                       128 chars =
                                                                      1024 Pixels
Hor Blank Time
                    = 4.923;
                                     // (usec)
                                                       40 \text{ chars} =
                                                                       320 Pixels
Hor Sync Start
                    = 16.123;
                                     // (usec)
                                                =
                                                      131 chars =
                                                                      1048 Pixels
// H Right Border
                    = 0.000;
                                     // (usec)
                                                =
                                                         0 chars =
                                                                         0 Pixels
// H Front Porch
                    = 0.369;
                                     // (usec)
                                                         3
                                                           chars =
                                                                        24 Pixels
Hor Sync Time
                    = 2.092;
                                     // (usec)
                                                       17
                                                           chars =
                                                                       136 Pixels
                                                =
// H Back Porch
                    = 2.462:
                                                                       160 Pixels
                                     // (usec)
                                                =
                                                       20 chars =
// H Left Border
                                                                         0 Pixels
                    = 0.000;
                                     // (usec)
                                                =
                                                         \mathbf{0} chars =
Ver Total Time
                    = 16.666;
                                                      806 lines
                                                                    HT - (1.06xHA)
                                     // (msec)
                                                =
Ver Addr Time
                                                                         = 3.98
                    = 15.880;
                                     // (msec)
                                                =
                                                      768 lines
Ver Blank Start
                    = 15.880;
                                     // (msec)
                                                =
                                                      768 lines
Ver Blank Time
                    = 0.786;
                                     // (msec)
                                                       38 lines
                                                =
Ver Svnc Start
                    = 15.942:
                                                      771 lines
                                     // (msec)
// V Bottom Border = 0.000;
                                                         0 lines
                                     // (msec)
// V Front Porch
                    = 0.062:
                                     // (msec)
                                                         3 lines
Ver Svnc Time
                    = 0.124:
                                                         6 lines
                                     // (msec)
// V Back Porch
                    = 0.600:
                                     // (msec)
                                                        29 lines
                                                =
// V Top Border
                    = 0.000;
                                     // (msec)
                                                         0 lines
```

Adopted: 8/9/91 (VESA #910801-2)

Resolution: 1024 x 768 at 70 Hz (non-interlaced)

EDID ID: DMT ID: 11h; STD 2 Byte Code: (61, 4A)h; CVT 3 Byte Code: n/a

BIOS Modes: 104h, 105h, 116h, 117h, & 118h (4, 8, 15, 16, & 24 bpp)

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                    = 1024 \times 768 @ 70Hz:
Hor Pixels
                    = 1024:
                                      // Pixels
Ver Pixels
                    = 768:
                                      // Lines
Hor Frequency
                    = 56.476;
                                      // kHz
                                                       17.7 usec
                                                                    / line
Ver Frequency
                    = 70.069;
                                                       14.3 msec
                                                                   / frame
                                      // Hz
                                                  =
Pixel Clock
                    = 75.000:
                                      // MHz
                                                       13.3 nsec
                                                                      \pm 0.5\%
                                                  =
Character Width
                    = 8:
                                      // Pixels
                                                      106.7 nsec
Scan Type
                    = NONINTERLACED:
                                                        // H Phase =
                                                                         4.5 %
Hor Sync Polarity
                    = NEGATIVE: // HBlank = 22.9% of HTotal
Ver Sync Polarity
                    = NEGATIVE: // VBlank =
                                                      4.7% of VTotal
Hor Total Time
                    = 17.707:
                                                        166 chars =
                                      // (usec)
                                                                       1328 Pixels
Hor Addr Time
                                                                       1024 Pixels
                    = 13.653:
                                      // (usec)
                                                        128 \text{ chars} =
                                                 =
Hor Blank Start
                    = 13.653:
                                      // (usec)
                                                        128 \text{ chars} =
                                                                       1024 Pixels
Hor Blank Time
                    = 4.053:
                                      // (usec)
                                                         38 \text{ chars} =
                                                                        304 Pixels
Hor Svnc Start
                    = 13.973:
                                      // (usec)
                                                        131 \text{ chars} =
                                                                        1048 Pixels
// H Right Border
                                                          \mathbf{0} chars =
                    = 0.000:
                                      // (usec)
                                                                           0 Pixels
// H Front Porch
                                                          3 \text{ chars} =
                    = 0.320;
                                      // (usec)
                                                  =
                                                                          24 Pixels
Hor Sync Time
                                                                         136 Pixels
                    = 1.813;
                                      // (usec)
                                                         17
                                                             chars =
                                                  =
// H Back Porch
                    = 1.920;
                                      // (usec)
                                                         18 chars =
                                                                         144 Pixels
                                                  =
// H Left Border
                    = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
Ver Total Time
                    = 14.272;
                                                        806 lines
                                                                      HT - (1.06xHA)
                                      // (msec)
Ver Addr Time
                    = 13.599;
                                      // (msec)
                                                        768 lines
                                                                           = 3.23
                                                 =
Ver Blank Start
                    = 13.599;
                                                        768 lines
                                      // (msec)
Ver Blank Time
                    = 0.673;
                                      // (msec)
                                                         38 lines
                                                 =
Ver Sync Start
                    = 13.652;
                                      // (msec)
                                                 =
                                                        771 lines
// V Bottom Border = 0.000;
                                      // (msec)
                                                 =
                                                          0 lines
// V Front Porch
                    = 0.053;
                                      // (msec)
                                                 =
                                                          3 lines
Ver Sync Time
                    = 0.106;
                                      // (msec)
                                                          6 lines
                                                 =
// V Back Porch
                    = 0.513;
                                                         29 lines
                                      // (msec)
                                                 =
// V Top Border
                    = 0.000;
                                      // (msec)
                                                          0 lines
```

Adopted: 10/4/93

Resolution: 1024 x 768 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 12h; STD 2 Byte Code: (61, 4F)h; CVT 3 Byte Code: n/a

BIOS Modes: 104h, 105h, 116h, 117h, & 118h (4, 8, 15, 16, & 24 bpp)

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                    = 1024 \times 768 @ 75Hz:
Hor Pixels
                    = 1024:
                                      // Pixels
Ver Pixels
                     = 768:
                                      // Lines
Hor Frequency
                     = 60.023:
                                      // kHz
                                                       16.7 usec
                                                                    / line
Ver Frequency
                     = 75.029;
                                                       13.3 msec
                                                                   / frame
                                      // Hz
                                                  =
Pixel Clock
                     = 78.750:
                                      // MHz
                                                       12.7 nsec
                                                                      \pm 0.5\%
                                                  =
Character Width
                     = 8:
                                      // Pixels
                                                      101.6 nsec
                                                 =
Scan Type
                     = NONINTERLACED;
                                                        // H Phase =
                                                                         6.1 %
Hor Sync Polarity
                     = POSITIVE:
                                      // HBlank = 22.0% of HTotal
Ver Sync Polarity
                     = POSITIVE:
                                      // VBlank =
                                                      4.0% of VTotal
Hor Total Time
                     = 16.660;
                                      // (usec)
                                                        164 \text{ chars} = 1312 \text{ Pixels}
Hor Addr Time
                     = 13.003;
                                      // (usec)
                                                        128 chars =
                                                                       1024 Pixels
                                                 =
                                                                        1024 Pixels
Hor Blank Start
                     = 13.003;
                                      // (usec)
                                                        128 chars =
                                                 =
Hor Blank Time
                    = 3.657;
                                      // (usec)
                                                         36 \text{ chars} =
                                                                         288 Pixels
Hor Sync Start
                     = 13.206;
                                      // (usec)
                                                  =
                                                        130 \text{ chars} =
                                                                        1040 Pixels
// H Right Border
                     = 0.000;
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                      // (usec)
                                                  =
// H Front Porch
                     = 0.203;
                                                                          16 Pixels
                                      // (usec)
                                                 =
                                                          2 \text{ chars} =
Hor Sync Time
                     = 1.219;
                                                         12 chars =
                                      // (usec)
                                                                          96 Pixels
                                                  =
// H Back Porch
                     = 2.235;
                                      // (usec)
                                                         22 chars =
                                                                         176 Pixels
                                                  =
// H Left Border
                     = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
Ver Total Time
                     = 13.328;
                                                        800 lines
                                                                      HT - (1.06xHA)
                                      // (msec)
                                                 =
Ver Addr Time
                     = 12.795;
                                      // (msec)
                                                        768 lines
                                                                           = 2.88
Ver Blank Start
                     = 12.795;
                                      // (msec)
                                                        768 lines
                                                 =
Ver Blank Time
                     = 0.533;
                                      // (msec)
                                                         32 lines
Ver Sync Start
                     = 12.812;
                                                        769 lines
                                      // (msec)
                                                 =
// V Bottom Border = 0.000:
                                      // (msec)
                                                          0 lines
                                                 =
// V Front Porch
                     = 0.017;
                                                          1 lines
                                      // (msec)
                                                 =
Ver Svnc Time
                     = 0.050:
                                      // (msec)
                                                          3 lines
                                                 =
// V Back Porch
                     = 0.466;
                                                         28 lines
                                      // (msec)
// V Top Border
                     = 0.000;
                                      // (msec)
                                                          0 lines
```

Adopted: 3/1/96

Resolution: 1024 x 768 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 13h; STD 2 Byte Code: (61, 59)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                    = 1024 \times 768 @ 85Hz;
Hor Pixels
                    = 1024:
                                     // Pixels
Ver Pixels
                                     // Lines
                    = 768:
                    = 68.677;
                                     // kHz
Hor Frequency
                                                      14.6 usec
                                                                   / line
Ver Frequency
                    = 84.997;
                                     // Hz
                                                      11.8 msec
                                                                  / frame
Pixel Clock
                    = 94.500;
                                     // MHz
                                                      10.6 nsec
                                                                     \pm 0.5\%
                                                 =
Character Width
                    = 8:
                                     // Pixels
                                                      84.7 nsec
Scan Type
                    = NONINTERLACED;
                                                       // H Phase =
                                                                        5.8 %
Hor Sync Polarity
                    = POSITIVE:
                                     // HBlank = 25.6% of HTotal
Ver Sync Polarity
                                     // VBlank =
                    = POSITIVE;
                                                     5.0% of VTotal
Hor Total Time
                                                                      1376 Pixels
                    = 14.561;
                                     // (usec)
                                                       172 chars =
Hor Addr Time
                    = 10.836;
                                     // (usec)
                                                       128 chars =
                                                                      1024 Pixels
Hor Blank Start
                                                       128 chars =
                    = 10.836:
                                     // (usec)
                                                                      1024 Pixels
                                                 =
Hor Blank Time
                    = 3.725:
                                                        44 chars =
                                                                       352 Pixels
                                     // (usec)
                                                 =
Hor Svnc Start
                    = 11.344:
                                     // (usec)
                                                       134 \text{ chars} =
                                                                      1072 Pixels
// H Right Border
                                                         \mathbf{0} chars =
                                                                          0 Pixels
                    = 0.000:
                                     // (usec)
                                                 =
// H Front Porch
                    = 0.508;
                                     // (usec)
                                                         6 \text{ chars} =
                                                                         48 Pixels
                                                 =
Hor Sync Time
                    = 1.016:
                                     // (usec)
                                                        12 chars =
                                                                         96 Pixels
                                                 =
// H Back Porch
                    = 2.201;
                                     // (usec)
                                                        26 chars =
                                                                       208 Pixels
// H Left Border
                                                                          0 Pixels
                    = 0.000;
                                     // (usec)
                                                         \mathbf{0} chars =
Ver Total Time
                    = 11.765:
                                     // (msec)
                                                       808 lines
                                                                     HT - (1.06xHA)
Ver Addr Time
                    = 11.183;
                                     // (msec)
                                                       768 lines
                                                                          = 3.07
Ver Blank Start
                    = 11.183;
                                     // (msec)
                                                       768 lines
                                                =
Ver Blank Time
                    = 0.582:
                                                        40 lines
                                     // (msec)
Ver Sync Start
                                                       769 lines
                    = 11.197;
                                     // (msec)
                                                =
// V Bottom Border = 0.000;
                                     // (msec)
                                                         0 lines
                                                 =
// V Front Porch
                                                         1 lines
                    = 0.015;
                                     // (msec)
                                                =
Ver Sync Time
                    = 0.044;
                                                         3 lines
                                     // (msec)
                                                 =
// V Back Porch
                    = 0.524;
                                     // (msec)
                                                        36 lines
                                                =
// V Top Border
                    = 0.000;
                                     // (msec)
                                                         0 lines
                                                 =
```

Adopted: 5/1/07

Resolution: 1024 x 768 at 120 Hz (non-interlaced) REDUCED BLANKING EDID ID: DMT ID: 14h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

#### **Detailed Timing Parameters**

```
1024 x 768 @ 120Hz CVT (Reduced Blanking);
Timing Name
Hor Pixels
                     = 1024;
                                       // Pixels
                                       // Lines
Ver Pixels
                     = 768;
Hor Frequency
                     = 97.551:
                                       // kHz
                                                         10.3 usec
                                                                      / line
Ver Frequency
                     = 119.989;
                                                          8.3 msec
                                       // Hz
                                                   =
                                                                      / frame
Pixel Clock
                     = 115.500:
                                       // MHz
                                                   =
                                                          8.7 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                   =
                                                         69.3 nsec
                     = 8;
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                            1.4 %
                                                      13.5% of HTotal
Hor Sync Polarity
                     = POSITIVE;
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                       // VBlank
                                                        5.5% of VTotal
Hor Total Time
                     = 10.251:
                                       // (usec)
                                                          148 chars =
                                                                          1184 Pixels
Hor Addr Time
                                                                          1024 Pixels
                     = 8.866;
                                       // (usec)
                                                          128 \text{ chars} =
                     = 8.866:
Hor Blank Start
                                       // (usec)
                                                          128 \text{ chars} =
                                                                          1024 Pixels
Hor Blank Time
                     = 1.385;
                                       // (usec)
                                                           20 \text{ chars} =
                                                                           160 Pixels
Hor Sync Start
                     = 9.281;
                                       // (usec)
                                                   =
                                                          134 \text{ chars} =
                                                                          1072 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                              0 Pixels
// H Front Porch
                     = 0.416;
                                       // (usec)
                                                            6 \text{ chars} =
                                                                             48 Pixels
                                                   =
Hor Sync Time
                     = 0.277:
                                       // (usec)
                                                               chars =
                                                                             32 Pixels
                                                   =
// H Back Porch
                                                           10 \text{ chars} =
                                                                             80 Pixels
                     = 0.693:
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                              0 Pixels
Ver Total Time
                     = 8.334:
                                       // (msec)
                                                          813 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 7.873;
                                       // (msec)
                                                          768 lines
                                                                              = 0.85
                                                   =
Ver Blank Start
                     = 7.873:
                                       // (msec)
                                                          768 lines
Ver Blank Time
                     = 0.461;
                                       // (msec)
                                                           45 lines
                                                   =
Ver Sync Start
                     = 7.904;
                                       // (msec)
                                                          771 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                   =
                                                            0 lines
// V Front Porch
                     = 0.031;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.041;
                                                            4 lines
                                       // (msec)
// V Back Porch
                     = 0.390;
                                       // (msec)
                                                           38 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 3/1/96

Resolution: 1152 x 864 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 15h; STD 2 Byte Code: (71, 4F)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                   = 1152 \times 864 @ 75Hz;
Hor Pixels
                   = 1152:
                                     // Pixels
Ver Pixels
                                     // Lines
                    = 864:
                    = 67.500;
                                     // kHz
Hor Frequency
                                                      14.8 usec
                                                                  / line
Ver Frequency
                    = 75.000;
                                     // Hz
                                                =
                                                      13.3 msec
                                                                  / frame
Pixel Clock
                    = 108.000;
                                     // MHz
                                                       9.3 nsec
                                                                    \pm 0.5\%
                                                =
Character Width
                                     // Pixels
                                                      74.1 nsec
                    = 8;
Scan Type
                                                       // H Phase =
                    = NONINTERLACED;
                                                                        6.0 %
Hor Sync Polarity
                    = POSITIVE:
                                     // HBlank =
                                                   28.0% of HTotal
Ver Sync Polarity
                    = POSITIVE;
                                     // VBlank =
                                                     4.0% of VTotal
Hor Total Time
                    = 14.815;
                                                      200 \text{ chars} =
                                                                      1600 Pixels
                                     // (usec)
Hor Addr Time
                                                                      1152 Pixels
                    = 10.667:
                                     // (usec)
                                                      144 chars =
Hor Blank Start
                    = 10.667;
                                     // (usec)
                                                =
                                                      144 chars =
                                                                      1152 Pixels
Hor Blank Time
                    = 4.148;
                                     // (usec)
                                                       56 chars =
                                                                       448 Pixels
                                                =
Hor Sync Start
                    = 11.259;
                                     // (usec)
                                                      152 chars =
                                                                      1216 Pixels
                                                =
// H Right Border
                                                         0
                                                                         0 Pixels
                    = 0.000;
                                     // (usec)
                                                           chars =
                                                =
// H Front Porch
                    = 0.593;
                                     // (usec)
                                                        8
                                                           chars =
                                                                        64 Pixels
                                                =
                                                                       128 Pixels
Hor Sync Time
                    = 1.185;
                                     // (usec)
                                                       16 chars =
                                                =
// H Back Porch
                    = 2.370;
                                                                       256 Pixels
                                     // (usec)
                                                =
                                                       32 chars =
// H Left Border
                    = 0.000;
                                     // (usec)
                                                         \mathbf{0} chars =
                                                                         0 Pixels
Ver Total Time
                                                                    HT - (1.06xHA)
                    = 13.333:
                                     // (msec)
                                                      900 lines
Ver Addr Time
                    = 12.800:
                                     // (msec)
                                                      864 lines
                                                                         = 3.51
Ver Blank Start
                    = 12.800;
                                                      864 lines
                                     // (msec)
Ver Blank Time
                    = 0.533;
                                     // (msec)
                                                       36 lines
                                                =
Ver Sync Start
                    = 12.815:
                                     // (msec)
                                                      865 lines
// V Bottom Border = 0.000:
                                     // (msec)
                                                         0 lines
// V Front Porch
                    = 0.015:
                                     // (msec)
                                                         1 lines
                                                =
Ver Svnc Time
                    = 0.044:
                                     // (msec)
                                                         3 lines
// V Back Porch
                    = 0.474;
                                     // (msec)
                                                =
                                                        32 lines
// V Top Border
                                                         0 lines
                    = 0.000;
                                     // (msec)
```

Adopted: 11/17/08

Resolution: 1280 x 720 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 55h; STD 2 Byte Code: 81h, C0h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

Per CEA-861 --- 720p (Code 4) Timing Definitions

# **Detailed Timing Parameters**

```
Timing Name
                    = 1280 x 720 @ 60Hz;
Hor Pixels
                    = 1280:
                                      // Pixels
Ver Pixels
                    = 720;
                                      // Lines
Hor Frequency
                     = 45.000:
                                      // KHz
                                                       22.2 usec
                                                                    / line
Ver Frequency
                                                        16.7 msec
                                                                    / frame
                    = 60.000;
                                      // Hz
                                                  =
Pixel Clock
                    = 74.250:
                                                        13.5 nsec
                                                                       \pm 0.5\%
                                      // MHz
                                                  =
Character Width
                    = 1;
                                      // Pixels
                                                  =
                                                        13.5 nsec
Scan Type
                                                         // H Phase =
                                                                          3.3 %
                     = NONINTERLACED;
Hor Sync Polarity
                                                     22.4% of HTotal
                    = POSITIVE:
                                      // HBlank =
Ver Sync Polarity
                                                       4.0% of VTotal
                     = POSITIVE:
                                      // VBlank
Hor Total Time
                     = 22.222:
                                      // (usec)
                                                       1650 chars =
                                                                        1650 Pixels
Hor Addr Time
                     = 17.239;
                                      // (usec)
                                                       1280 \text{ chars} =
                                                                        1280 Pixels
                                                  =
Hor Blank Start
                    = 17.239:
                                      // (usec)
                                                       1280 \text{ chars} =
                                                                        1280 Pixels
                                                  =
                                                        370 chars =
Hor Blank Time
                    = 4.983:
                                      // (usec)
                                                                         370 Pixels
Hor Sync Start
                     = 18.721;
                                      // (usec)
                                                       1390 \text{ chars} =
                                                                        1390 Pixels
                                                  =
// H Right Border
                    = 0.000:
                                      // (usec)
                                                           \mathbf{0} chars =
                                                                            0 Pixels
                                                  =
// H Front Porch
                     = 1.481;
                                      // (usec)
                                                        110 chars =
                                                                         110 Pixels
                                                  =
Hor Svnc Time
                     = 0.539:
                                      // (usec)
                                                         40 chars =
                                                                          40 Pixels
                                                  =
// H Back Porch
                    = 2.963;
                                                        220 chars =
                                                                         220 Pixels
                                      // (usec)
// H Left Border
                                                                            0 Pixels
                    = 0.000;
                                      // (usec)
                                                           \mathbf{0} chars =
                                                  =
Ver Total Time
                     = 16.667;
                                      // (msec)
                                                        750 lines
                                                                       HT - (1.06xHA)
                                                  =
Ver Addr Time
                     = 16.000;
                                      // (msec)
                                                        720 lines
                                                                            = 3.95
                                                  =
Ver Blank Start
                    = 16.000;
                                      // (msec)
                                                        720 lines
                                                  =
Ver Blank Time
                    = 0.667:
                                      // (msec)
                                                         30 lines
Ver Sync Start
                    = 16.111;
                                      // (msec)
                                                        725 lines
                                                  =
// V Bottom Border
                    = 0.000;
                                                           0 lines
                                      // (msec)
                                                  =
// V Front Porch
                     = 0.111:
                                      // (msec)
                                                  =
                                                           5 lines
Ver Sync Time
                     = 0.111;
                                      // (msec)
                                                           5 lines
                                                  =
// V Back Porch
                     = 0.444;
                                      // (msec)
                                                         20 lines
// V Top Border
                     = 0.000;
                                      // (msec)
                                                           0 lines
```

Adopted: 8/21/03

Resolution: 1280 x 768 at 60 Hz (non-interlaced) REDUCED BLANKING

EDID ID: DMT ID: 16h; STD 2 Byte Code: n/a; CVT 3 Byte Code: (7F, 1C, 21)h

Method: CVT Reduced Blanking

## **Detailed Timing Parameters**

```
1280 x 768 @ 60Hz CVT (Reduced Blanking);
Timing Name
Hor Pixels
                     = 1280;
                                       // Pixels
Ver Pixels
                     = 768;
                                       // Lines
Hor Frequency
                     = 47.396:
                                       // kHz
                                                         21.1 usec
                                                                      / line
Ver Frequency
                     = 59.995;
                                                         16.7 msec
                                       // Hz
                                                                     / frame
Pixel Clock
                     = 68.250;
                                       // MHz
                                                   =
                                                         14.7 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                       117.2 nsec
                     = 8;
                                                   =
                                                          // H Phase =
Scan Type
                     = NONINTERLACED;
                                                                           1.1 %
                                                      11.1% of HTotal
Hor Sync Polarity
                     = POSITIVE;
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                       // VBlank
                                                        2.8% of VTotal
                     = 21.099:
Hor Total Time
                                       // (usec)
                                                          180 chars =
                                                                          1440 Pixels
Hor Addr Time
                     = 18.755:
                                                                          1280 Pixels
                                       // (usec)
                                                          160 \text{ chars} =
Hor Blank Start
                     = 18.755:
                                       // (usec)
                                                          160 \text{ chars} =
                                                                          1280 Pixels
Hor Blank Time
                     = 2.344;
                                       // (usec)
                                                          20 \text{ chars} =
                                                                           160 Pixels
Hor Sync Start
                     = 19.458;
                                       // (usec)
                                                   =
                                                         166 chars =
                                                                          1328 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.703;
                                       // (usec)
                                                            6 \text{ chars} =
                                                                            48 Pixels
                                                   =
Hor Sync Time
                     = 0.469:
                                       // (usec)
                                                              chars =
                                                                            32 Pixels
// H Back Porch
                                                           10 \text{ chars} =
                                                                            80 Pixels
                     = 1.172:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                                             0 Pixels
Ver Total Time
                     = 16.668:
                                       // (msec)
                                                         790 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 16.204;
                                       // (msec)
                                                         768 lines
                                                                             = 1.22
                                                   =
Ver Blank Start
                     = 16.204:
                                       // (msec)
                                                         768 lines
Ver Blank Time
                     = 0.464;
                                       // (msec)
                                                          22 lines
                                                   =
Ver Sync Start
                     = 16.267;
                                       // (msec)
                                                         771 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                   =
                                                            0 lines
// V Front Porch
                     = 0.063;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.148;
                                                            7 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.253;
                                       // (msec)
                                                           12 lines
                                                   =
// V Top Border
                     = 0.000;
                                                            0 lines
                                       // (msec)
```

Adopted: 8/21/03

Resolution: 1280 x 768 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 17h; STD 2 Byte Code: n/a; CVT 3 Byte Code: (7F, 1C, 28)h

Method: CVT Compliant

## **Detailed Timing Parameters**

```
Timing Name
                     = 1280 \times 768 @ 60Hz;
Hor Pixels
                     = 1280;
                                       // Pixels
Ver Pixels
                                       // Lines
                     = 768;
Hor Frequency
                     = 47.776;
                                       // kHz
                                                         20.9 usec
                                                                      / line
Ver Frequency
                                                         16.7 msec
                     = 59.870;
                                       // Hz
                                                   =
                                                                      / frame
Pixel Clock
                     = 79.500;
                                       // MHz
                                                   =
                                                         12.6 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                        100.6 nsec
                     = 8;
                                                   =
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                            3.8 %
                                                       23.1% of HTotal
Hor Sync Polarity
                     = NEGATIVE // HBlank =
Ver Sync Polarity
                     = POSITIVE;
                                       // VBlank
                                                        3.8% of VTotal
                     = 20.931:
Hor Total Time
                                       // (usec)
                                                          208 \text{ chars} =
                                                                          1664 Pixels
Hor Addr Time
                     = 16.101:
                                                                          1280 Pixels
                                       // (usec)
                                                          160 \text{ chars} =
Hor Blank Start
                     = 16.101:
                                       // (usec)
                                                          160 \text{ chars} =
                                                                          1280 Pixels
Hor Blank Time
                     = 4.830;
                                       // (usec)
                                                           48 \text{ chars} =
                                                                           384 Pixels
Hor Sync Start
                     = 16.906;
                                       // (usec)
                                                   =
                                                          168 chars =
                                                                          1344 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                              0 Pixels
// H Front Porch
                     = 0.805;
                                       // (usec)
                                                            8 \text{ chars} =
                                                                            64 Pixels
                                                   =
Hor Sync Time
                     = 1.610:
                                       // (usec)
                                                           16 chars =
                                                                           128 Pixels
                                                   =
// H Back Porch
                                                           24 chars =
                                                                           192 Pixels
                     = 2.415:
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                              0 Pixels
Ver Total Time
                     = 16.703:
                                       // (msec)
                                                          798 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 16.075;
                                       // (msec)
                                                          768 lines
                                                                              = 3.86
                                                   =
Ver Blank Start
                     = 16.075;
                                       // (msec)
                                                   =
                                                          768 lines
Ver Blank Time
                     = 0.628;
                                       // (msec)
                                                           30 lines
                                                   =
Ver Sync Start
                     = 16.138;
                                       // (msec)
                                                          771 lines
// V Bottom Border
                                                            0 lines
                     = 0.000:
                                       // (msec)
                                                   =
// V Front Porch
                     = 0.063;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.147;
                                                            7 lines
                                       // (msec)
// V Back Porch
                     = 0.419;
                                       // (msec)
                                                           20 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 8/21/03

Resolution: 1280 x 768 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 18h; STD 2 Byte Code: n/a; CVT 3 Byte Code: (7F, 1C, 44)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
Timing Name
                     = 1280 \times 768 @ 75Hz;
Hor Pixels
                     = 1280;
                                       // Pixels
Ver Pixels
                                       // Lines
                     = 768;
Hor Frequency
                     = 60.289:
                                       // KHz
                                                         16.6 usec
                                                                      / line
Ver Frequency
                     = 74.893;
                                                         13.4 msec
                                       // Hz
                                                   =
                                                                      / frame
Pixel Clock
                     = 102.250:
                                       // MHz
                                                   =
                                                          9.8 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                         78.2 nsec
                     = 8;
                                                   =
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                            3.8 %
Hor Sync Polarity
                     = NEGATIVE // HBlank =
                                                       24.5% of HTotal
Ver Sync Polarity
                     = POSITIVE;
                                       // VBlank
                                                        4.6% of VTotal
                                                   =
Hor Total Time
                     = 16.587:
                                       // (usec)
                                                         212 \text{ chars} =
                                                                          1696 Pixels
Hor Addr Time
                     = 12.518;
                                                                          1280 Pixels
                                       // (usec)
                                                          160 \text{ chars} =
Hor Blank Start
                     = 12.518:
                                       // (usec)
                                                          160 \text{ chars} =
                                                                          1280 Pixels
Hor Blank Time
                     = 4.068;
                                       // (usec)
                                                           52 \text{ chars} =
                                                                           416 Pixels
Hor Sync Start
                     = 13.301;
                                       // (usec)
                                                   =
                                                          170 \text{ chars} =
                                                                          1360 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.782;
                                       // (usec)
                                                           10 chars =
                                                                            80 Pixels
                                                   =
Hor Sync Time
                     = 1.252:
                                       // (usec)
                                                           16 chars =
                                                                           128 Pixels
                                                   =
// H Back Porch
                     = 2.034;
                                       // (usec)
                                                                           208 Pixels
                                                           26 chars =
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 13.352:
                                       // (msec)
                                                         805 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 12.739;
                                       // (msec)
                                                         768 lines
                                                                             = 3.32
                                                   =
Ver Blank Start
                     = 12.739:
                                       // (msec)
                                                         768 lines
Ver Blank Time
                     = 0.614;
                                       // (msec)
                                                           37 lines
                                                   =
Ver Sync Start
                     = 12.788;
                                       // (msec)
                                                         771 lines
// V Bottom Border
                                                            0 lines
                     = 0.000:
                                       // (msec)
                                                   =
// V Front Porch
                     = 0.050;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.116;
                                                            7 lines
                                       // (msec)
// V Back Porch
                     = 0.448;
                                       // (msec)
                                                           27 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 8/21/03

Resolution: 1280 x 768 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 19h; STD 2 Byte Code: n/a; CVT 3 Byte Code: (7F, 1C, 62)h

Method: CVT Compliant

## **Detailed Timing Parameters**

```
Timing Name
                     = 1280 \times 768 @ 85Hz;
Hor Pixels
                     = 1280;
                                       // Pixels
Ver Pixels
                                       // Lines
                     = 768;
Hor Frequency
                     = 68.633:
                                       // kHz
                                                         14.6 usec
                                                                      / line
Ver Frequency
                                                         11.8 msec
                     = 84.837;
                                       // Hz
                                                   =
                                                                     / frame
Pixel Clock
                     = 117.500:
                                       // MHz
                                                   =
                                                          8.5 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                         68.1 nsec
                     = 8;
                                                   =
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                           4.0 %
Hor Sync Polarity
                     = NEGATIVE // HBlank =
                                                      25.2% of HTotal
Ver Sync Polarity
                     = POSITIVE;
                                       // VBlank
                                                        5.1% of VTotal
Hor Total Time
                     = 14.570;
                                       // (usec)
                                                         214 chars =
                                                                         1712 Pixels
Hor Addr Time
                     = 10.894:
                                                                         1280 Pixels
                                       // (usec)
                                                         160 \text{ chars} =
Hor Blank Start
                     = 10.894:
                                       // (usec)
                                                          160 \text{ chars} =
                                                                         1280 Pixels
Hor Blank Time
                     = 3.677;
                                       // (usec)
                                                          54 \text{ chars} =
                                                                           432 Pixels
Hor Sync Start
                     = 11.574;
                                       // (usec)
                                                   =
                                                         170 \text{ chars} =
                                                                         1360 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.681;
                                       // (usec)
                                                           10 chars =
                                                                            80 Pixels
                                                   =
Hor Sync Time
                     = 1.157:
                                       // (usec)
                                                           17
                                                              chars =
                                                                           136 Pixels
                                                   =
// H Back Porch
                                                                           216 Pixels
                     = 1.838:
                                       // (usec)
                                                          27
                                                               chars =
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 11.787:
                                       // (msec)
                                                         809 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 11.190;
                                       // (msec)
                                                         768 lines
                                                                             = 3.02
                                                   =
Ver Blank Start
                     = 11.190:
                                       // (msec)
                                                         768 lines
Ver Blank Time
                     = 0.597;
                                       // (msec)
                                                          41 lines
                                                   =
Ver Sync Start
                     = 11.234;
                                       // (msec)
                                                         771 lines
// V Bottom Border
                                                            0 lines
                     = 0.000:
                                       // (msec)
                                                   =
// V Front Porch
                     = 0.044;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.102;
                                                            7 lines
                                       // (msec)
// V Back Porch
                     = 0.452;
                                       // (msec)
                                                           31 lines
                                                   =
// V Top Border
                     = 0.000;
                                                            0 lines
                                       // (msec)
```

Adopted: 5/1/07

Resolution: 1280 x 768 at 120 Hz (non-interlaced) REDUCED BLANKING EDID ID: DMT ID: 1Ah; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

### **Detailed Timing Parameters**

```
1280 x 768 @ 120Hz CVT (Reduced Blanking);
Timing Name
Hor Pixels
                     = 1280;
                                       // Pixels
                                       // Lines
Ver Pixels
                     = 768;
Hor Frequency
                     = 97.396;
                                       // kHz
                                                         10.3 usec
                                                                      / line
Ver Frequency
                     = 119.798;
                                                          8.3 msec
                                       // Hz
                                                   =
                                                                      / frame
Pixel Clock
                     = 140.250:
                                       // MHz
                                                   =
                                                          7.1 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                         57.0 nsec
                     = 8;
                                                   =
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                            1.1 %
                                                      11.1% of HTotal
Hor Sync Polarity
                     = POSITIVE;
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                       // VBlank
                                                        5.5% of VTotal
Hor Total Time
                     = 10.267:
                                       // (usec)
                                                          180 chars =
                                                                          1440 Pixels
Hor Addr Time
                                                                          1280 Pixels
                     = 9.127:
                                       // (usec)
                                                          160 \text{ chars} =
                     = 9.127:
Hor Blank Start
                                       // (usec)
                                                          160 \text{ chars} =
                                                                          1280 Pixels
Hor Blank Time
                     = 1.141:
                                       // (usec)
                                                           20 \text{ chars} =
                                                                           160 Pixels
Hor Sync Start
                     = 9.469;
                                       // (usec)
                                                   =
                                                          166 chars =
                                                                          1328 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.342;
                                       // (usec)
                                                            6 \text{ chars} =
                                                                            48 Pixels
                                                   =
Hor Sync Time
                     = 0.228:
                                       // (usec)
                                                               chars =
                                                                            32 Pixels
                                                   =
// H Back Porch
                                                           10 \text{ chars} =
                                                                            80 Pixels
                     = 0.570:
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 8.347:
                                       // (msec)
                                                         813 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 7.885;
                                       // (msec)
                                                         768 lines
                                                                             = 0.59
                                                   =
Ver Blank Start
                     = 7.885:
                                       // (msec)
                                                         768 lines
Ver Blank Time
                     = 0.462;
                                       // (msec)
                                                           45 lines
                                                   =
Ver Sync Start
                     = 7.916;
                                       // (msec)
                                                         771 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                   =
                                                            0 lines
// V Front Porch
                     = 0.031;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.072;
                                                            7 lines
                                       // (msec)
// V Back Porch
                     = 0.359;
                                       // (msec)
                                                           35 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 5/1/07

Resolution: 1280 x 800 at 60 Hz (non-interlaced) REDUCED BLANKING

EDID ID: DMT ID: 1Bh; STD 2 Byte Code: n/a; CVT 3 Byte Code: (8F, 18, 21)h

Method: CVT Reduced Blanking

## **Detailed Timing Parameters**

```
Timing Name
                    = 1280 x 800 @ 60Hz CVT (Reduced Blanking);
Hor Pixels
                    = 1280:
                                      // Pixels
Ver Pixels
                                      // Lines
                    = 800;
                    = 49.306;
Hor Frequency
                                      // kHz
                                                        20.3 usec
                                                                    / line
                                                  =
Ver Frequency
                     = 59.910;
                                      // Hz
                                                        16.7 msec
                                                                    / frame
Pixel Clock
                    = 71.000;
                                      // MHz
                                                        14.1 nsec
                                                                       \pm 0.5\%
                                                  =
Character Width
                    = 8;
                                      // Pixels
                                                      112.7 nsec
Scan Type
                     = NONINTERLACED;
                                                         // H Phase =
                                                                          1.1 %
Hor Sync Polarity
                                      // HBlank = 11.1% of HTotal
                    = POSITIVE;
Ver Sync Polarity
                     = NEGATIVE: // VBlank =
                                                       2.8% of VTotal
Hor Total Time
                     = 20.282;
                                      // (usec)
                                                         180 chars =
                                                                        1440 Pixels
Hor Addr Time
                    = 18.028;
                                      // (usec)
                                                         160 \text{ chars} =
                                                                        1280 Pixels
Hor Blank Start
                    = 18.028;
                                      // (usec)
                                                         160 \text{ chars} =
                                                                        1280 Pixels
                                                  =
Hor Blank Time
                    = 2.254:
                                      // (usec)
                                                         20 \text{ chars} =
                                                                         160 Pixels
                                                  =
Hor Sync Start
                     = 18.704;
                                      // (usec)
                                                                        1328 Pixels
                                                         166 \text{ chars} =
// H Right Border
                     = 0.000:
                                      // (usec)
                                                           \mathbf{0} chars =
                                                                            0 Pixels
// H Front Porch
                    = 0.676;
                                      // (usec)
                                                           6 \text{ chars} =
                                                                           48 Pixels
                                                  =
                                                                           32 Pixels
Hor Svnc Time
                    = 0.451:
                                      // (usec)
                                                  =
                                                           4 chars =
// H Back Porch
                                                                           80 Pixels
                    = 1.127;
                                      // (usec)
                                                  =
                                                         10 chars =
// H Left Border
                     = 0.000;
                                      // (usec)
                                                           0
                                                             chars =
                                                                            0 Pixels
Ver Total Time
                     = 16.692:
                                      // (msec)
                                                        823 lines
                                                                       HT - (1.06xHA)
                                                  =
Ver Addr Time
                    = 16.225;
                                      // (msec)
                                                        800 lines
                                                                            = 1.17
                                                  =
Ver Blank Start
                    = 16.225;
                                      // (msec)
                                                        800 lines
                                                  =
Ver Blank Time
                    = 0.466;
                                      // (msec)
                                                  =
                                                         23 lines
Ver Sync Start
                    = 16.286;
                                      // (msec)
                                                        803 lines
                                                  =
// V Bottom Border
                    = 0.000:
                                                           0 lines
                                      // (msec)
                                                  =
// V Front Porch
                    = 0.061;
                                      // (msec)
                                                           3 lines
                                                  =
Ver Svnc Time
                    = 0.122:
                                      // (msec)
                                                  =
                                                           6 lines
// V Back Porch
                    = 0.284:
                                      // (msec)
                                                         14 lines
                                                  =
// V Top Border
                     = 0.000:
                                      // (msec)
                                                           0 lines
```

Adopted: 5/1/07

Resolution: 1280 x 800 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 1Ch; STD 2 Byte Code: (81, 00)h; CVT 3 Byte Code: (8F, 18, 28)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
= 1280 x 800 @ 60Hz;
Timing Name
Hor Pixels
                    = 1280:
                                       // Pixels
Ver Pixels
                     = 800;
                                       // Lines
                     = 49.702:
Hor Frequency
                                       // kHz
                                                        20.1 usec
                                                                     / line
                                                  =
Ver Frequency
                     = 59.810;
                                       // Hz
                                                        16.7 msec
                                                                     / frame
Pixel Clock
                     = 83.500;
                                       // MHz
                                                        12.0 nsec
                                                                       \pm 0.5\%
                                                  =
Character Width
                                       // Pixels
                     = 8;
                                                        95.8 nsec
Scan Type
                     = NONINTERLACED;
                                                         // H Phase =
                                                                          3.8 %
                     = NEGATIVE; // HBlank = 23.8% of HTotal
Hor Sync Polarity
Ver Sync Polarity
                                      // VBlank =
                                                       3.7% of VTotal
                     = POSITIVE:
Hor Total Time
                     = 20.120;
                                       // (usec)
                                                         210 \text{ chars} =
                                                                         1680 Pixels
Hor Addr Time
                     = 15.329;
                                       // (usec)
                                                         160 \text{ chars} =
                                                                         1280 Pixels
Hor Blank Start
                     = 15.329;
                                       // (usec)
                                                         160 \text{ chars} =
                                                                         1280 Pixels
                                                  =
Hor Blank Time
                     = 4.790;
                                       // (usec)
                                                          50 \text{ chars} =
                                                                          400 Pixels
                                                  =
Hor Sync Start
                     = 16.192;
                                       // (usec)
                                                         169
                                                             chars =
                                                                         1352 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                           \mathbf{0} chars =
                                                                            0 Pixels
                                                  =
// H Front Porch
                     = 0.862:
                                       // (usec)
                                                           9 	ext{ chars} =
                                                                           72 Pixels
                                                  =
                                                                          128 Pixels
Hor Svnc Time
                     = 1.533:
                                                          16 \text{ chars} =
                                       // (usec)
                                                  =
                                                                          200 Pixels
// H Back Porch
                     = 2.395;
                                       // (usec)
                                                  =
                                                          25
                                                             chars =
// H Left Border
                     = 0.000;
                                       // (usec)
                                                  =
                                                           0
                                                             chars =
                                                                            0 Pixels
Ver Total Time
                     = 16.720;
                                       // (msec)
                                                         831 lines
                                                                       HT - (1.06xHA)
                                                  =
Ver Addr Time
                     = 16.096;
                                       // (msec)
                                                         800 lines
                                                                            = 3.87
                                                  =
Ver Blank Start
                     = 16.096;
                                       // (msec)
                                                         800 lines
                                                  =
Ver Blank Time
                     = 0.624;
                                       // (msec)
                                                  =
                                                          31 lines
Ver Sync Start
                     = 16.156;
                                       // (msec)
                                                         803 lines
                                                  =
// V Bottom Border
                    = 0.000:
                                                           0 lines
                                       // (msec)
                                                  =
// V Front Porch
                     = 0.060;
                                       // (msec)
                                                           3 lines
                                                  =
Ver Svnc Time
                     = 0.121:
                                       // (msec)
                                                  =
                                                           6 lines
// V Back Porch
                                       // (msec)
                                                          22 lines
                     = 0.443:
                                                  =
// V Top Border
                     = 0.000;
                                       // (msec)
                                                           0 lines
```

Adopted: 5/1/07

Resolution: 1280 x 800 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 1Dh; STD 2 Byte Code: (81, 0F)h; CVT 3 Byte Code: (8F, 18, 44)h

Method: CVT Compliant

## **Detailed Timing Parameters**

```
= 1280 \times 800 @ 75Hz;
Timing Name
Hor Pixels
                    = 1280:
                                       // Pixels
Ver Pixels
                                       // Lines
                     = 800;
                     = 62.795:
Hor Frequency
                                       // kHz
                                                        15.9 usec
                                                                     / line
                                                  =
Ver Frequency
                     = 74.934;
                                       // Hz
                                                        13.3 msec
                                                                     / frame
Pixel Clock
                     = 106.500;
                                       // MHz
                                                         9.4 nsec
                                                                        \pm 0.5\%
                                                  =
Character Width
                     = 8;
                                       // Pixels
                                                  =
                                                        75.1 nsec
Scan Type
                     = NONINTERLACED;
                                                         // H Phase =
                                                                           3.8 %
                     = NEGATIVE; // HBlank = 24.5% of HTotal
Hor Sync Polarity
Ver Sync Polarity
                                      // VBlank =
                                                       4.5% of VTotal
                     = POSITIVE:
                     = 15.925;
Hor Total Time
                                       // (usec)
                                                         212 \text{ chars} =
                                                                         1696 Pixels
Hor Addr Time
                     = 12.019;
                                       // (usec)
                                                         160 \text{ chars} =
                                                                         1280 Pixels
                     = 12.019:
Hor Blank Start
                                       // (usec)
                                                         160 \text{ chars} =
                                                                         1280 Pixels
                                                  =
Hor Blank Time
                     = 3.906;
                                       // (usec)
                                                          52 \text{ chars} =
                                                                          416 Pixels
                                                  =
Hor Sync Start
                     = 12.770;
                                       // (usec)
                                                         170 \text{ chars} =
                                                                         1360 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                           \mathbf{0} chars =
                                                                            0 Pixels
// H Front Porch
                     = 0.751;
                                       // (usec)
                                                          10 \text{ chars} =
                                                                            80 Pixels
                                                  =
Hor Svnc Time
                     = 1.202:
                                                          16 chars =
                                       // (usec)
                                                  =
                                                                          128 Pixels
                                                                          208 Pixels
// H Back Porch
                     = 1.953;
                                       // (usec)
                                                  =
                                                          26 chars =
// H Left Border
                     = 0.000;
                                       // (usec)
                                                  =
                                                           0
                                                              chars =
                                                                            0 Pixels
Ver Total Time
                     = 13.345:
                                       // (msec)
                                                         838 lines
                                                                       HT - (1.06xHA)
                                                  =
Ver Addr Time
                     = 12.740;
                                       // (msec)
                                                         800 lines
                                                                            = 3.18
                                                  =
Ver Blank Start
                     = 12.740;
                                       // (msec)
                                                         800 lines
                                                  =
Ver Blank Time
                     = 0.605;
                                       // (msec)
                                                  =
                                                          38 lines
Ver Sync Start
                     = 12.788;
                                       // (msec)
                                                         803 lines
                                                  =
// V Bottom Border
                     = 0.000:
                                                           0 lines
                                       // (msec)
                                                  =
// V Front Porch
                     = 0.048;
                                       // (msec)
                                                           3 lines
                                                  =
Ver Svnc Time
                     = 0.096;
                                       // (msec)
                                                  =
                                                           6 lines
// V Back Porch
                     = 0.462:
                                       // (msec)
                                                          29 lines
                                                  =
// V Top Border
                     = 0.000:
                                       // (msec)
                                                           0 lines
```

Adopted: 5/1/07

Resolution: 1280 x 800 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 1Eh; STD 2 Byte Code: (81, 19)h; CVT 3 Byte Code: (8F, 18, 62)h

Method: CVT Compliant

## **Detailed Timing Parameters**

```
= 1280 \times 800 @ 85Hz;
Timing Name
Hor Pixels
                    = 1280:
                                       // Pixels
Ver Pixels
                     = 800;
                                       // Lines
Hor Frequency
                     = 71.554:
                                       // kHz
                                                        14.0 usec
                                                                     / line
                                                  =
Ver Frequency
                     = 84.880;
                                       // Hz
                                                        11.8 msec
                                                                     / frame
Pixel Clock
                     = 122.500;
                                       // MHz
                                                         8.2 nsec
                                                                       \pm 0.5\%
                                                  =
                                                        65.3 nsec
Character Width
                     = 8;
                                       // Pixels
                                                  =
Scan Type
                     = NONINTERLACED;
                                                         // H Phase =
                                                                          4.0 %
                     = NEGATIVE; // HBlank = 25.2% of HTotal
Hor Sync Polarity
Ver Sync Polarity
                                      // VBlank =
                                                       5.1% of VTotal
                     = POSITIVE:
Hor Total Time
                     = 13.976;
                                       // (usec)
                                                         214 chars =
                                                                         1712 Pixels
Hor Addr Time
                     = 10.449;
                                       // (usec)
                                                         160 \text{ chars} =
                                                                         1280 Pixels
Hor Blank Start
                     = 10.449:
                                       // (usec)
                                                         160 \text{ chars} =
                                                                         1280 Pixels
                                                  =
Hor Blank Time
                     = 3.527;
                                       // (usec)
                                                          54 chars =
                                                                          432 Pixels
                                                  =
Hor Sync Start
                     = 11.102:
                                       // (usec)
                                                         170 \text{ chars} =
                                                                         1360 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                           \mathbf{0} chars =
                                                                            0 Pixels
// H Front Porch
                     = 0.653:
                                       // (usec)
                                                          10 \text{ chars} =
                                                                           80 Pixels
                                                  =
Hor Svnc Time
                     = 1.110:
                                       // (usec)
                                                  =
                                                          17
                                                              chars =
                                                                          136 Pixels
// H Back Porch
                     = 1.763;
                                       // (usec)
                                                  =
                                                          27 chars =
                                                                          216 Pixels
// H Left Border
                     = 0.000;
                                       // (usec)
                                                  =
                                                           \mathbf{0} chars =
                                                                            0 Pixels
Ver Total Time
                     = 11.781:
                                       // (msec)
                                                         843 lines
                                                                       HT - (1.06xHA)
                                                  =
Ver Addr Time
                     = 11.180:
                                       // (msec)
                                                         800 lines
                                                                            = 2.9
                                                  =
Ver Blank Start
                     = 11.180;
                                       // (msec)
                                                         800 lines
                                                  =
Ver Blank Time
                     = 0.601;
                                       // (msec)
                                                  =
                                                          43 lines
Ver Sync Start
                     = 11.222;
                                       // (msec)
                                                         803 lines
                                                  =
// V Bottom Border
                    = 0.000:
                                                           0 lines
                                       // (msec)
                                                  =
// V Front Porch
                     = 0.042;
                                       // (msec)
                                                           3 lines
                                                  =
Ver Svnc Time
                     = 0.084:
                                       // (msec)
                                                  =
                                                           6 lines
// V Back Porch
                     = 0.475:
                                       // (msec)
                                                          34 lines
                                                  =
// V Top Border
                     = 0.000:
                                       // (msec)
                                                           0 lines
```

Adopted: 5/1/07

Resolution: 1280 x 800 at 120 Hz (non-interlaced) REDUCED BLANKING EDID ID: DMT ID: 1Fh; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

## **Detailed Timing Parameters**

```
1280 x 800 @ 120Hz CVT (Reduced Blanking);
Timing Name
Hor Pixels
                     = 1280;
                                       // Pixels
Ver Pixels
                                       // Lines
                     = 800;
Hor Frequency
                     = 101.563;
                                       // kHz
                                                          9.8 usec
                                                                      / line
Ver Frequency
                     = 119.909;
                                                          8.3 msec
                                       // Hz
                                                   =
                                                                     / frame
Pixel Clock
                     = 146.250:
                                       // MHz
                                                   =
                                                          6.8 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                         54.7 nsec
                     = 8;
                                                   =
                                                                           1.1 %
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                     11.1% of HTotal
Hor Sync Polarity
                     = POSITIVE;
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                       // VBlank
                                                        5.5% of VTotal
                     = 9.846;
Hor Total Time
                                       // (usec)
                                                         180 chars =
                                                                         1440 Pixels
Hor Addr Time
                     = 8.752:
                                                                         1280 Pixels
                                       // (usec)
                                                         160 \text{ chars} =
Hor Blank Start
                     = 8.752:
                                       // (usec)
                                                         160 \text{ chars} =
                                                                         1280 Pixels
Hor Blank Time
                     = 1.094:
                                       // (usec)
                                                          20 \text{ chars} =
                                                                           160 Pixels
Hor Sync Start
                     = 9.080;
                                       // (usec)
                                                   =
                                                         166 chars =
                                                                         1328 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.328;
                                       // (usec)
                                                            6 \text{ chars} =
                                                                            48 Pixels
                                                   =
Hor Sync Time
                     = 0.219:
                                       // (usec)
                                                              chars =
                                                                            32 Pixels
                                                   =
// H Back Porch
                                                                            80 Pixels
                     = 0.547:
                                       // (usec)
                                                          10 chars =
                                                   =
                                                           \mathbf{0} chars =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                                             0 Pixels
Ver Total Time
                     = 8.340:
                                       // (msec)
                                                         847 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 7.877;
                                       // (msec)
                                                         800 lines
                                                                             = 0.57
                                                   =
Ver Blank Start
                     = 7.877:
                                       // (msec)
                                                   =
                                                         800 lines
Ver Blank Time
                     = 0.463;
                                       // (msec)
                                                          47 lines
                                                   =
                                                         803 lines
Ver Sync Start
                     = 7.906;
                                       // (msec)
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                   =
                                                            0 lines
// V Front Porch
                     = 0.030;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.059;
                                                            6 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.374;
                                       // (msec)
                                                          38 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 3/1/96

Resolution: 1280 x 960 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 20h; STD 2 Byte Code: (81, 40)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

### **Detailed Timing Parameters**

```
Timing Name
                    = 1280 \times 960 @ 60Hz;
Hor Pixels
                    = 1280:
                                     // Pixels
Ver Pixels
                                     // Lines
                    = 960:
                    = 60.000;
                                     // kHz
Hor Frequency
                                                      16.7 usec
                                                                   / line
Ver Frequency
                    = 60.000;
                                     // Hz
                                                 =
                                                      16.7 msec
                                                                  / frame
Pixel Clock
                    = 108.000;
                                     // MHz
                                                       9.3 nsec
                                                                     \pm 0.5\%
                                                 =
Character Width
                                     // Pixels
                                                      74.1 nsec
                    = 8;
Scan Type
                                                       // H Phase =
                    = NONINTERLACED;
                                                                        6.0 %
Hor Sync Polarity
                    = POSITIVE:
                                     // HBlank =
                                                    28.9% of HTotal
Ver Sync Polarity
                    = POSITIVE;
                                     // VBlank =
                                                      4.0% of VTotal
                                                       225 chars =
Hor Total Time
                                                                      1800 Pixels
                    = 16.667;
                                     // (usec)
Hor Addr Time
                                                                       1280 Pixels
                    = 11.852;
                                     // (usec)
                                                       160 \text{ chars} =
Hor Blank Start
                    = 11.852;
                                     // (usec)
                                                 =
                                                       160 chars =
                                                                      1280 Pixels
Hor Blank Time
                    = 4.815;
                                     // (usec)
                                                        65 chars =
                                                                        520 Pixels
                                                 =
                                                                       1376 Pixels
Hor Sync Start
                    = 12.741;
                                     // (usec)
                                                       172 chars =
                                                 =
                                                         \mathbf{0} chars =
// H Right Border
                    = 0.000;
                                     // (usec)
                                                                          0 Pixels
                                                 =
// H Front Porch
                    = 0.889;
                                     // (usec)
                                                        12 \text{ chars} =
                                                                         96 Pixels
                                                 =
                                                                        112 Pixels
Hor Sync Time
                    = 1.037;
                                     // (usec)
                                                        14 chars =
                                                 =
// H Back Porch
                    = 2.889;
                                                        39 chars =
                                                                        312 Pixels
                                     // (usec)
                                                 =
// H Left Border
                    = 0.000;
                                     // (usec)
                                                         \mathbf{0} chars =
                                                                          0 Pixels
Ver Total Time
                                                                     HT - (1.06xHA)
                    = 16.667:
                                     // (msec)
                                                      1000 lines
Ver Addr Time
                    = 16.000:
                                     // (msec)
                                                       960 lines
                                                                          = 4.1
Ver Blank Start
                                                       960 lines
                    = 16.000;
                                     // (msec)
Ver Blank Time
                    = 0.667;
                                     // (msec)
                                                        40 lines
                                                 =
Ver Sync Start
                    = 16.017;
                                     // (msec)
                                                       961 lines
// V Bottom Border = 0.000:
                                     // (msec)
                                                         0 lines
// V Front Porch
                    = 0.017:
                                     // (msec)
                                                         1 lines
                                                 =
Ver Svnc Time
                    = 0.050:
                                     // (msec)
                                                         3 lines
// V Back Porch
                    = 0.600;
                                     // (msec)
                                                 =
                                                        36 lines
// V Top Border
                                                         0 lines
                    = 0.000;
                                     // (msec)
```

Adopted: 3/1/96

Resolution: 1280 x 960 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 21h; STD 2 Byte Code: (81, 59)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

### **Detailed Timing Parameters**

```
Timing Name
                   = 1280 \times 960 \otimes 85Hz;
Hor Pixels
                   = 1280:
                                     // Pixels
                                     // Lines
Ver Pixels
                    = 960:
                    = 85.938;
                                     // kHz
Hor Frequency
                                                      11.6 usec
                                                                  / line
Ver Frequency
                    = 85.002;
                                     // Hz
                                                =
                                                      11.8 msec
                                                                  / frame
Pixel Clock
                    = 148.500;
                                     // MHz
                                                       6.7 nsec
                                                                    \pm 0.5\%
                                                =
Character Width
                                     // Pixels
                                                      53.9 nsec
                    = 8;
Scan Type
                                                       // H Phase =
                    = NONINTERLACED;
                                                                       4.6 %
Hor Sync Polarity
                    = POSITIVE:
                                     // HBlank = 25.9% of HTotal
Ver Sync Polarity
                    = POSITIVE;
                                     // VBlank =
                                                     5.0% of VTotal
                                                      216 chars =
Hor Total Time
                    = 11.636;
                                                                     1728 Pixels
                                     // (usec)
Hor Addr Time
                                                                      1280 Pixels
                    = 8.620;
                                     // (usec)
                                                =
                                                      160 chars =
Hor Blank Start
                    = 8.620;
                                     // (usec)
                                                =
                                                      160 chars =
                                                                      1280 Pixels
Hor Blank Time
                    = 3.017;
                                     // (usec)
                                                       56 chars =
                                                                       448 Pixels
                                                =
                                                                      1344 Pixels
Hor Sync Start
                    = 9.051;
                                     // (usec)
                                                       168 chars =
                                                =
                                                                         0 Pixels
// H Right Border
                    = 0.000;
                                     // (usec)
                                                         0
                                                           chars =
                                                =
// H Front Porch
                    = 0.431:
                                     // (usec)
                                                        8
                                                           chars =
                                                                        64 Pixels
                                                =
                                                                       160 Pixels
Hor Sync Time
                    = 1.077;
                                     // (usec)
                                                       20 chars =
                                                =
// H Back Porch
                    = 1.508;
                                                                       224 Pixels
                                     // (usec)
                                                =
                                                       28 chars =
// H Left Border
                    = 0.000;
                                     // (usec)
                                                         \mathbf{0} chars =
                                                                         0 Pixels
Ver Total Time
                                                                    HT - (1.06xHA)
                    = 11.764;
                                     // (msec)
                                                     1011 lines
Ver Addr Time
                                                      960 lines
                    = 11.171:
                                     // (msec)
                                                                         = 2.5
Ver Blank Start
                    = 11.171;
                                     // (msec)
                                                      960 lines
Ver Blank Time
                    = 0.593;
                                     // (msec)
                                                       51 lines
                                                =
Ver Sync Start
                    = 11.183:
                                     // (msec)
                                                      961 lines
// V Bottom Border = 0.000:
                                     // (msec)
                                                         0 lines
// V Front Porch
                    = 0.012:
                                     // (msec)
                                                         1 lines
                                                =
Ver Svnc Time
                    = 0.035:
                                     // (msec)
                                                         3 lines
// V Back Porch
                    = 0.547;
                                     // (msec)
                                                =
                                                        47 lines
// V Top Border
                                                         0 lines
                    = 0.000;
                                     // (msec)
```

Adopted: 5/1/07

Resolution: 1280 x 960 at 120 Hz (non-interlaced) REDUCED BLANKING EDID ID: DMT ID: 22h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

### **Detailed Timing Parameters**

```
1280 x 960 @ 120Hz CVT (Reduced Blanking);
Timing Name
Hor Pixels
                     = 1280;
                                       // Pixels
Ver Pixels
                                       // Lines
                     = 960;
Hor Frequency
                     = 121.875:
                                       // kHz
                                                          8.2 usec
                                                                      / line
Ver Frequency
                     = 119.838;
                                                          8.3 msec
                                       // Hz
                                                   =
                                                                      / frame
Pixel Clock
                     = 175.500:
                                       // MHz
                                                   =
                                                          5.7 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                         45.6 nsec
                     = 8;
                                                   =
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                            1.1 %
                                                      11.1% of HTotal
Hor Sync Polarity
                     = POSITIVE;
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                       // VBlank
                                                        5.6% of VTotal
                     = 8.205:
Hor Total Time
                                       // (usec)
                                                          180 chars =
                                                                          1440 Pixels
Hor Addr Time
                     = 7.293:
                                                                          1280 Pixels
                                       // (usec)
                                                          160 \text{ chars} =
Hor Blank Start
                     = 7.293:
                                       // (usec)
                                                          160 \text{ chars} =
                                                                          1280 Pixels
Hor Blank Time
                     = 0.912;
                                       // (usec)
                                                           20 \text{ chars} =
                                                                           160 Pixels
Hor Sync Start
                     = 7.567;
                                       // (usec)
                                                   =
                                                          166 chars =
                                                                          1328 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.274;
                                       // (usec)
                                                            6 \text{ chars} =
                                                                            48 Pixels
                                                   =
Hor Sync Time
                     = 0.182:
                                       // (usec)
                                                               chars =
                                                                            32 Pixels
                                                   =
// H Back Porch
                                                           10 \text{ chars} =
                                                                            80 Pixels
                     = 0.456;
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 8.345:
                                       // (msec)
                                                        1017 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 7.877;
                                       // (msec)
                                                         960 lines
                                                                             = 0.47
Ver Blank Start
                     = 7.877:
                                       // (msec)
                                                         960 lines
Ver Blank Time
                     = 0.468;
                                       // (msec)
                                                           57 lines
                                                   =
                                                         963 lines
Ver Sync Start
                     = 7.902;
                                       // (msec)
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                   =
                                                            0 lines
// V Front Porch
                     = 0.025;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.033;
                                                            4 lines
                                       // (msec)
// V Back Porch
                     = 0.410;
                                       // (msec)
                                                           50 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 12/18/96

Resolution: 1280 x 1024 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 23h; STD 2 Byte Code: (81, 80)h; CVT 3 Byte Code: n/a

BIOS Modes: 106h, 107h, 119h, 11Ah, & 11Bh (4, 8, 15, 16, & 24 bpp)

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                    = 1280 x 1024 @ 60Hz:
Hor Pixels
                    = 1280:
                                     // Pixels
Ver Pixels
                    = 1024;
                                     // Lines
Hor Frequency
                    = 63.981:
                                     // kHz
                                                      15.6 usec
                                                                  / line
Ver Frequency
                    = 60.020;
                                     // Hz
                                                =
                                                      16.7 msec
                                                                  / frame
Pixel Clock
                    = 108.000:
                                     // MHz
                                                       9.3 nsec
                                                                    \pm 0.5\%
                                                =
Character Width
                    = 8;
                                     // Pixels
                                                      74.1 nsec
Scan Type
                    = NONINTERLACED;
                                                       // H Phase =
                                                                        5.9 %
Hor Sync Polarity
                    = POSITIVE:
                                     // HBlank = 24.2% of HTotal
Ver Sync Polarity
                    = POSITIVE:
                                     // VBlank =
                                                     3.9% of VTotal
Hor Total Time
                    = 15.630;
                                                       211 chars =
                                                                      1688 Pixels
                                     // (usec)
Hor Addr Time
                    = 11.852:
                                     // (usec)
                                                =
                                                       160 chars =
                                                                      1280 Pixels
Hor Blank Start
                    = 11.852;
                                     // (usec)
                                                       160 chars =
                                                                      1280 Pixels
Hor Blank Time
                    = 3.778;
                                     // (usec)
                                                       51 chars =
                                                                       408 Pixels
                                                =
Hor Sync Start
                    = 12.296;
                                                       166 chars =
                                                                      1328 Pixels
                                     // (usec)
// H Right Border
                    = 0.000;
                                                         \mathbf{0} chars =
                                                                         0 Pixels
                                     // (usec)
                                                =
// H Front Porch
                    = 0.444:
                                     // (usec)
                                                         6 \text{ chars} =
                                                                        48 Pixels
                                                =
                    = 1.037:
Hor Svnc Time
                                     // (usec)
                                                        14 chars =
                                                                       112 Pixels
                    = 2.296:
// H Back Porch
                                     // (usec)
                                                        31 \text{ chars} =
                                                                       248 Pixels
                                                =
// H Left Border
                    = 0.000;
                                     // (usec)
                                                         0 chars =
                                                                         0 Pixels
                    = 16.661;
Ver Total Time
                                     // (msec)
                                                     1066 lines
                                                                    HT - (1.06xHA)
Ver Addr Time
                    = 16.005;
                                     // (msec)
                                                     1024 lines
                                                                         = 3.07
                                                =
Ver Blank Start
                    = 16.005;
                                     // (msec)
                                                     1024 lines
                                                =
Ver Blank Time
                                                        42 lines
                    = 0.656;
                                     // (msec)
Ver Sync Start
                    = 16.020;
                                     // (msec)
                                                     1025 lines
// V Bottom Border = 0.000:
                                     // (msec)
                                                         0 lines
                                                =
// V Front Porch
                    = 0.016;
                                     // (msec)
                                                         1 lines
                                                =
Ver Sync Time
                    = 0.047;
                                     // (msec)
                                                         3 lines
                                                =
// V Back Porch
                    = 0.594;
                                     // (msec)
                                                        38 lines
                                                =
// V Top Border
                    = 0.000:
                                     // (msec)
                                                         0 lines
                                                =
```

Adopted: 10/4/93

Resolution: 1280 x 1024 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 24h; STD 2 Byte Code: (81, 8F)h; CVT 3 Byte Code: n/a

BIOS Modes: 106h, 107h, 119h, 11Ah, & 11Bh (4, 8, 15, 16, & 24 bpp)

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                    = 1280 \times 1024 @ 75Hz;
Hor Pixels
                    = 1280:
                                      // Pixels
Ver Pixels
                     = 1024;
                                      // Lines
Hor Frequency
                     = 79.976;
                                      // kHz
                                                       12.5 usec
                                                                    / line
Ver Frequency
                                                       13.3 msec
                                                                    / frame
                     = 75.025:
                                      // Hz
Pixel Clock
                     = 135.000;
                                      // MHz
                                                        7.4 nsec
                                                                      \pm 0.5\%
                                                  =
Character Width
                     = 8:
                                      // Pixels
                                                       59.3 nsec
                                                        // H Phase =
Scan Type
                                                                          6.9 %
                     = NONINTERLACED;
Hor Sync Polarity
                     = POSITIVE:
                                      // HBlank = 24.2% of HTotal
Ver Sync Polarity
                                      // VBlank =
                                                      3.9% of VTotal
                     = POSITIVE;
Hor Total Time
                     = 12.504:
                                      // (usec)
                                                        211 \text{ chars} =
                                                                        1688 Pixels
Hor Addr Time
                     = 9.481:
                                      // (usec)
                                                        160 \text{ chars} =
                                                                        1280 Pixels
Hor Blank Start
                     = 9.481;
                                      // (usec)
                                                        160 \text{ chars} =
                                                                        1280 Pixels
                                                  =
Hor Blank Time
                     = 3.022:
                                      // (usec)
                                                         51 chars =
                                                                         408 Pixels
                                                  =
Hor Svnc Start
                                                        162 chars =
                                                                        1296 Pixels
                     = 9.600;
                                      // (usec)
// H Right Border
                     = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
// H Front Porch
                     = 0.119;
                                      // (usec)
                                                          2 \text{ chars} =
                                                                          16 Pixels
                                                  =
Hor Sync Time
                     = 1.067:
                                                                         144 Pixels
                                      // (usec)
                                                  =
                                                         18 chars =
// H Back Porch
                                                                         248 Pixels
                     = 1.837;
                                      // (usec)
                                                         31 \text{ chars} =
// H Left Border
                     = 0.000;
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
Ver Total Time
                     = 13.329;
                                      // (msec)
                                                       1066 lines
                                                                      HT - (1.06xHA)
Ver Addr Time
                     = 12.804:
                                      // (msec)
                                                       1024 lines
                                                                           = 2.45
Ver Blank Start
                     = 12.804;
                                      // (msec)
                                                       1024 lines
                                                  =
Ver Blank Time
                     = 0.525:
                                      // (msec)
                                                         42 lines
                                                  =
Ver Sync Start
                     = 12.816;
                                                       1025 lines
                                      // (msec)
                                                  =
// V Bottom Border = 0.000;
                                      // (msec)
                                                          0 lines
                                                  =
// V Front Porch
                     = 0.013;
                                      // (msec)
                                                  =
                                                          1 lines
Ver Sync Time
                                                          3 lines
                     = 0.038;
                                      // (msec)
// V Back Porch
                     = 0.475;
                                      // (msec)
                                                         38 lines
// V Top Border
                                                          0 lines
                     = 0.000;
                                      // (msec)
                                                  =
```

Adopted: 3/1/96

Resolution: 1280 x 1024 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 25h; STD 2 Byte Code: (81, 99)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

### **Detailed Timing Parameters**

```
Timing Name
                   = 1280 \times 1024 \otimes 85Hz;
Hor Pixels
                   = 1280:
                                     // Pixels
Ver Pixels
                    = 1024:
                                     // Lines
                    = 91.146;
                                     // kHz
Hor Frequency
                                                      11.0 usec
                                                                  / line
Ver Frequency
                    = 85.024;
                                     // Hz
                                                =
                                                      11.8 msec
                                                                  / frame
Pixel Clock
                    = 157.500;
                                     // MHz
                                                       6.3 nsec
                                                                    \pm 0.5\%
                                                =
Character Width
                                     // Pixels
                                                      50.8 nsec
                    = 8;
Scan Type
                                                       // H Phase =
                    = NONINTERLACED;
                                                                       4.6 %
Hor Sync Polarity
                    = POSITIVE:
                                     // HBlank = 25.9% of HTotal
Ver Sync Polarity
                    = POSITIVE;
                                     // VBlank =
                                                     4.5% of VTotal
                                                      216 chars =
Hor Total Time
                    = 10.971;
                                                                     1728 Pixels
                                     // (usec)
Hor Addr Time
                                                                      1280 Pixels
                    = 8.127;
                                     // (usec)
                                                =
                                                      160 chars =
Hor Blank Start
                    = 8.127;
                                     // (usec)
                                                =
                                                      160 chars =
                                                                      1280 Pixels
Hor Blank Time
                    = 2.844;
                                     // (usec)
                                                       56 chars =
                                                                       448 Pixels
                                                =
                                                                      1344 Pixels
Hor Sync Start
                    = 8.533;
                                     // (usec)
                                                       168 chars =
                                                =
                                                                         0 Pixels
// H Right Border
                    = 0.000;
                                     // (usec)
                                                         0
                                                           chars =
                                                =
// H Front Porch
                    = 0.406:
                                     // (usec)
                                                        8
                                                           chars =
                                                                        64 Pixels
                                                =
                                                                       160 Pixels
Hor Sync Time
                    = 1.016;
                                     // (usec)
                                                       20 chars =
                                                =
// H Back Porch
                    = 1.422;
                                                                       224 Pixels
                                     // (usec)
                                                =
                                                       28 chars =
// H Left Border
                    = 0.000;
                                     // (usec)
                                                         \mathbf{0} chars =
                                                                         0 Pixels
Ver Total Time
                                                     1072 lines
                                                                    HT - (1.06xHA)
                    = 11.761;
                                     // (msec)
                    = 11.235:
Ver Addr Time
                                     // (msec)
                                                     1024 lines
                                                                         = 2.36
Ver Blank Start
                                                     1024 lines
                    = 11.235;
                                     // (msec)
Ver Blank Time
                    = 0.527;
                                     // (msec)
                                                       48 lines
                                                =
Ver Sync Start
                    = 11.246:
                                     // (msec)
                                                     1025 lines
// V Bottom Border = 0.000:
                                     // (msec)
                                                         0 lines
// V Front Porch
                    = 0.011:
                                     // (msec)
                                                         1 lines
                                                =
Ver Svnc Time
                    = 0.033:
                                     // (msec)
                                                         3 lines
// V Back Porch
                    = 0.483;
                                     // (msec)
                                                =
                                                        44 lines
// V Top Border
                                                         0 lines
                    = 0.000;
                                     // (msec)
```

Adopted: 5/1/07

Resolution: 1280 x 1024 at 120 Hz (non-interlaced) REDUCED BLANKING DMT ID: 26h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

### **Detailed Timing Parameters**

```
1280 x 1024 @ 120Hz CVT (Reduced Blanking);
Timing Name
                     = 1280:
Hor Pixels
                                       // Pixels
Ver Pixels
                     = 1024;
                                       // Lines
Hor Frequency
                     = 130.035:
                                       // kHz
                                                          7.7 usec
                                                                      / line
Ver Frequency
                     = 119.958;
                                                          8.3 msec
                                       // Hz
                                                   =
                                                                     / frame
Pixel Clock
                     = 187.250:
                                       // MHz
                                                   =
                                                          5.3 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                        42.7 nsec
                     = 8;
                                                   =
                                                                           1.1 %
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                     11.1% of HTotal
Hor Sync Polarity
                     = POSITIVE;
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                      // VBlank
                                                        5.5% of VTotal
                     = 7.690;
Hor Total Time
                                       // (usec)
                                                         180 chars =
                                                                         1440 Pixels
Hor Addr Time
                     = 6.836;
                                                                         1280 Pixels
                                       // (usec)
                                                         160 \text{ chars} =
Hor Blank Start
                     = 6.836;
                                       // (usec)
                                                         160
                                                              chars =
                                                                         1280 Pixels
Hor Blank Time
                     = 0.854;
                                       // (usec)
                                                          20 \text{ chars} =
                                                                           160 Pixels
Hor Sync Start
                     = 7.092;
                                       // (usec)
                                                   =
                                                         166 chars =
                                                                         1328 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.256;
                                       // (usec)
                                                            6 \text{ chars} =
                                                                            48 Pixels
                                                   =
Hor Sync Time
                     = 0.171:
                                       // (usec)
                                                              chars =
                                                                            32 Pixels
                                                   =
// H Back Porch
                                                          10 \text{ chars} =
                                                                            80 Pixels
                     = 0.427:
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 8.336:
                                       // (msec)
                                                        1084 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 7.875;
                                       // (msec)
                                                        1024 lines
                                                                             = 0.44
                     = 7.875:
Ver Blank Start
                                       // (msec)
                                                        1024 lines
Ver Blank Time
                     = 0.461;
                                       // (msec)
                                                          60 lines
                                                   =
Ver Sync Start
                     = 7.898;
                                       // (msec)
                                                        1027 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                   =
                                                            0 lines
// V Front Porch
                     = 0.023;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.054;
                                                           7 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.385;
                                       // (msec)
                                                          50 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 8/21/03

Resolution: 1360 x 768 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 27h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

## **Detailed Timing Parameters**

```
Timing Name
                     = 1360 \times 768 @ 60Hz;
Hor Pixels
                     = 1360;
                                       // Pixels
Ver Pixels
                                       // Lines
                     = 768;
Hor Frequency
                     = 47.712:
                                       // kHz
                                                         21.0 usec
                                                                      / line
Ver Frequency
                     = 60.015;
                                                         16.7 msec
                                       // Hz
                                                   =
                                                                      / frame
Pixel Clock
                     = 85.500;
                                       // MHz
                                                   =
                                                         11.7 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                         93.6 nsec
                     = 8;
                                                   =
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                            5.4 %
                                       // HBlank =
                                                      24.1% of HTotal
Hor Sync Polarity
                     = POSITIVE;
Ver Svnc Polarity
                     = POSITIVE;
                                       // VBlank
                                                        3.4% of VTotal
                                                   =
                     = 20.959:
Hor Total Time
                                       // (usec)
                                                         224 chars =
                                                                          1792 Pixels
Hor Addr Time
                     = 15.906;
                                                                          1360 Pixels
                                       // (usec)
                                                         170 \text{ chars} =
Hor Blank Start
                     = 15.906;
                                       // (usec)
                                                          170 \text{ chars} =
                                                                          1360 Pixels
Hor Blank Time
                     = 5.053;
                                       // (usec)
                                                           54 \text{ chars} =
                                                                           432 Pixels
Hor Sync Start
                     = 16.655;
                                       // (usec)
                                                   =
                                                          178 chars =
                                                                          1424 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.749;
                                       // (usec)
                                                            8 \text{ chars} =
                                                                            64 Pixels
                                                   =
Hor Sync Time
                     = 1.310:
                                       // (usec)
                                                           14 chars =
                                                                           112 Pixels
// H Back Porch
                     = 2.994;
                                                           32 chars =
                                                                           256 Pixels
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
                                                         795 lines
Ver Total Time
                     = 16.662:
                                       // (msec)
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 16.097;
                                       // (msec)
                                                         768 lines
                                                                             = 4.1
                                                   =
Ver Blank Start
                     = 16.097:
                                       // (msec)
                                                         768 lines
Ver Blank Time
                     = 0.566;
                                       // (msec)
                                                           27 lines
                                                   =
Ver Sync Start
                     = 16.159;
                                       // (msec)
                                                         771 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                   =
                                                            0 lines
// V Front Porch
                     = 0.063;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.126;
                                                            6 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.377;
                                       // (msec)
                                                           18 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 5/1/07

Resolution: 1360 x 768 at 120 Hz (non-interlaced) REDUCED BLANKING EDID ID: DMT ID: 28h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

## **Detailed Timing Parameters**

```
1360 x 768 @ 120Hz CVT (Reduced Blanking);
Timing Name
Hor Pixels
                     = 1360;
                                       // Pixels
                                       // Lines
Ver Pixels
                     = 768;
Hor Frequency
                     = 97.533:
                                       // kHz
                                                         10.3 usec
                                                                      / line
Ver Frequency
                     = 119.967;
                                                          8.3 msec
                                       // Hz
                                                   =
                                                                     / frame
Pixel Clock
                     = 148.250;
                                       // MHz
                                                   =
                                                          6.7 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                         54.0 nsec
                     = 8;
                                                   =
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                           1.1 %
Hor Sync Polarity
                     = POSITIVE;
                                                      10.5% of HTotal
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                       // VBlank
                                                        5.5% of VTotal
Hor Total Time
                     = 10.253:
                                       // (usec)
                                                         190 chars =
                                                                         1520 Pixels
Hor Addr Time
                                                                         1360 Pixels
                     = 9.174:
                                       // (usec)
                                                         170 \text{ chars} =
                     = 9.174:
Hor Blank Start
                                       // (usec)
                                                         170 \text{ chars} =
                                                                         1360 Pixels
Hor Blank Time
                     = 1.079:
                                       // (usec)
                                                          20 \text{ chars} =
                                                                           160 Pixels
Hor Sync Start
                     = 9.497;
                                       // (usec)
                                                   =
                                                         176 chars =
                                                                         1408 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.324;
                                       // (usec)
                                                            6 \text{ chars} =
                                                                            48 Pixels
                                                   =
Hor Sync Time
                     = 0.216:
                                       // (usec)
                                                              chars =
                                                                            32 Pixels
                                                   =
// H Back Porch
                                                                            80 Pixels
                     = 0.540;
                                       // (usec)
                                                          10 chars =
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 8.336:
                                       // (msec)
                                                         813 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 7.874;
                                       // (msec)
                                                         768 lines
                                                                             = 0.53
                                                   =
Ver Blank Start
                     = 7.874:
                                       // (msec)
                                                         768 lines
Ver Blank Time
                     = 0.461;
                                       // (msec)
                                                          45 lines
                                                   =
Ver Sync Start
                     = 7.905;
                                       // (msec)
                                                         771 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                   =
                                                           0 lines
// V Front Porch
                     = 0.031;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.051;
                                                            5 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.379;
                                       // (msec)
                                                          37 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 11/17/08

Resolution: 1366 x 768 at 60 Hz (non-interlaced) NORMAL BLANKING DMT ID: 51h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

## **Detailed Timing Parameters**

```
Timing Name
                    = 1366 \times 768 @ 60Hz;
Hor Pixels
                    = 1366;
                                       // Pixels
Ver Pixels
                     = 768:
                                       // Lines
Hor Frequency
                     = 47.712:
                                       // KHz
                                                                     / line
                                                        21.0 usec
Ver Frequency
                     = 59.790;
                                      // Hz
                                                        16.7 msec
                                                                    / frame
                                                  =
Pixel Clock
                                                                       \pm 0.5\%
                     = 85.500;
                                       // MHz
                                                        11.7 nsec
Character Width
                                       // Pixels
                                                        11.7 nsec
                     = 1;
                                                  =
Scan Type
                     = NONINTERLACED;
                                                         // H Phase =
                                                                          4.0 %
                                                      23.8% of HTotal
Hor Sync Polarity
                     = POSITIVE;
                                       // HBlank =
Ver Svnc Polarity
                     = POSITIVE:
                                      // VBlank
                                                  =
                                                       3.8% of VTotal
Hor Total Time
                     = 20.959:
                                      // (usec)
                                                       1792 \text{ chars} =
                                                                         1792 Pixels
Hor Addr Time
                     = 15.977;
                                      // (usec)
                                                       1366 chars =
                                                                         1366 Pixels
Hor Blank Start
                     = 15.977;
                                       // (usec)
                                                       1366 \text{ chars} =
                                                                         1366 Pixels
Hor Blank Time
                     = 4.982;
                                      // (usec)
                                                  =
                                                        426 chars =
                                                                          426 Pixels
Hor Sync Start
                     = 16.795:
                                      // (usec)
                                                       1436 \text{ chars} =
                                                                         1436 Pixels
// H Right Border
                     = 0.000:
                                                           \mathbf{0} chars =
                                       // (usec)
                                                                            0 Pixels
// H Front Porch
                     = 0.819;
                                       // (usec)
                                                          70 chars =
                                                                           70 Pixels
                                                  =
Hor Sync Time
                     = 1.673:
                                      // (usec)
                                                  =
                                                         143 chars =
                                                                          143 Pixels
// H Back Porch
                     = 2.491;
                                       // (usec)
                                                         213 chars =
                                                                          213 Pixels
                                                  =
                                                                            0 Pixels
// H Left Border
                     = 0.000:
                                       // (usec)
                                                           \mathbf{0} chars =
Ver Total Time
                     = 16.725:
                                                        798 lines
                                                                       HT - (1.06xHA)
                                      // (msec)
                                                  =
Ver Addr Time
                                                         768 lines
                                                                            = 4.02
                     = 16.097;
                                       // (msec)
                                                  =
Ver Blank Start
                     = 16.097;
                                       // (msec)
                                                  =
                                                         768 lines
Ver Blank Time
                     = 0.629;
                                      // (msec)
                                                          30 lines
                                                  =
                                                         771 lines
Ver Sync Start
                     = 16.159:
                                       // (msec)
                                                           0 lines
// V Bottom Border
                     = 0.000;
                                       // (msec)
// V Front Porch
                     = 0.063:
                                       // (msec)
                                                           3 lines
                                                  =
Ver Sync Time
                     = 0.063;
                                      // (msec)
                                                  =
                                                           3 lines
// V Back Porch
                     = 0.503;
                                      // (msec)
                                                          24 lines
                                                  =
// V Top Border
                     = 0.000:
                                       // (msec)
                                                           0 lines
                                                  =
```

Adopted: 11/17/08

Resolution: 1366 x 768 at 60 Hz (non-interlaced) REDUCED BLANKING EDID ID: DMT ID: 56h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

## **Detailed Timing Parameters**

```
Timing Name
                    = 1366 \times 768 @ 60Hz;
Hor Pixels
                    = 1366;
                                       // Pixels
Ver Pixels
                     = 768:
                                       // Lines
Hor Frequency
                     = 48.000:
                                       // KHz
                                                                     / line
                                                        20.8 usec
Ver Frequency
                                       // Hz
                                                        16.7 msec
                                                                    / frame
                     = 60.000;
                                                  =
Pixel Clock
                                                        13.9 nsec
                                                                       \pm 0.5\%
                     = 72.000;
                                       // MHz
Character Width
                                       // Pixels
                                                        13.9 nsec
                     = 1;
                                                  =
Scan Type
                     = NONINTERLACED;
                                                         // H Phase =
                                                                           1.7 %
                                                       8.9% of HTotal
Hor Sync Polarity
                     = POSITIVE;
                                       // HBlank =
Ver Svnc Polarity
                     = POSITIVE:
                                      // VBlank
                                                       4.0% of VTotal
Hor Total Time
                     = 20.833:
                                       // (usec)
                                                       1500 \text{ chars} =
                                                                         1500 Pixels
                                                  =
Hor Addr Time
                     = 18.972;
                                       // (usec)
                                                                         1366 Pixels
                                                       1366 chars =
Hor Blank Start
                     = 18.972;
                                       // (usec)
                                                       1366 \text{ chars} =
                                                                         1366 Pixels
Hor Blank Time
                     = 1.861;
                                       // (usec)
                                                  =
                                                        134 chars =
                                                                          134 Pixels
Hor Sync Start
                                       // (usec)
                                                        1380 \text{ chars} =
                                                                         1380 Pixels
                     = 19.167:
// H Right Border
                     = 0.000:
                                                           \mathbf{0} chars =
                                       // (usec)
                                                                            0 Pixels
// H Front Porch
                     = 0.194;
                                       // (usec)
                                                          14 chars =
                                                                           14 Pixels
                                                  =
Hor Sync Time
                     = 0.778;
                                       // (usec)
                                                  =
                                                          56 chars =
                                                                           56 Pixels
// H Back Porch
                     = 0.889;
                                       // (usec)
                                                          64 chars =
                                                                           64 Pixels
                                                  =
// H Left Border
                                                                            0 Pixels
                     = 0.000:
                                       // (usec)
                                                           \mathbf{0} chars =
Ver Total Time
                                                                       HT - (1.06xHA)
                     = 16.667:
                                       // (msec)
                                                         800 lines
                                                  =
Ver Addr Time
                                                         768 lines
                                                                            = 0.72
                     = 16.000;
                                       // (msec)
                                                  =
Ver Blank Start
                     = 16.000;
                                       // (msec)
                                                  =
                                                         768 lines
Ver Blank Time
                     = 0.667;
                                       // (msec)
                                                          32 lines
                                                  =
                                                         769 lines
Ver Sync Start
                     = 16.021:
                                       // (msec)
// V Bottom Border
                     = 0.000;
                                       // (msec)
                                                           0 lines
// V Front Porch
                     = 0.021;
                                       // (msec)
                                                           1 lines
                                                  =
Ver Sync Time
                     = 0.063;
                                       // (msec)
                                                  =
                                                           3 lines
// V Back Porch
                     = 0.583;
                                       // (msec)
                                                          28 lines
                                                  =
// V Top Border
                     = 0.000:
                                       // (msec)
                                                           0 lines
                                                  =
```

Adopted: 8/21/03

Resolution: 1400 x 1050 at 60 Hz (non-interlaced) REDUCED BLANKING

EDID ID: DMT ID: 29h; STD 2 Byte Code: n/a; CVT 3 Byte Code: (0C, 20, 21)h

Method: CVT Reduced Blanking

## **Detailed Timing Parameters**

```
= 1400 x 1050 @ 60Hz CVT (Reduced Blanking);
Timing Name
Hor Pixels
                     = 1400:
                                       // Pixels
Ver Pixels
                     = 1050;
                                       // Lines
Hor Frequency
                     = 64.744:
                                       // kHz
                                                        15.4 usec
                                                                     / line
Ver Frequency
                     = 59.948;
                                                        16.7 msec
                                       // Hz
                                                   =
                                                                     / frame
Pixel Clock
                     = 101.000:
                                       // MHz
                                                   =
                                                         9.9 nsec
                                                                       \pm 0.5\%
Character Width
                                       // Pixels
                                                        79.2 nsec
                     = 8;
                                                   =
                                                          // H Phase =
Scan Type
                     = NONINTERLACED;
                                                                           1.0 %
Hor Sync Polarity
                     = POSITIVE;
                                                      10.3% of HTotal
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                      // VBlank
                                                       2.8% of VTotal
                     = 15.446;
Hor Total Time
                                       // (usec)
                                                         195 chars =
                                                                         1560 Pixels
Hor Addr Time
                     = 13.861:
                                                         175 chars =
                                                                         1400 Pixels
                                       // (usec)
Hor Blank Start
                     = 13.861:
                                       // (usec)
                                                         175
                                                              chars =
                                                                         1400 Pixels
Hor Blank Time
                     = 1.584;
                                       // (usec)
                                                          20 \text{ chars} =
                                                                          160 Pixels
Hor Sync Start
                     = 14.337;
                                       // (usec)
                                                   =
                                                         181 chars =
                                                                         1448 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.475;
                                       // (usec)
                                                           6 \text{ chars} =
                                                                            48 Pixels
                                                   =
Hor Sync Time
                     = 0.317:
                                       // (usec)
                                                           4 \text{ chars} =
                                                                            32 Pixels
                                                   =
// H Back Porch
                     = 0.792:
                                                          10 \text{ chars} =
                                                                           80 Pixels
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 16.681:
                                       // (msec)
                                                        1080 lines
                                                                       HT - (1.06xHA)
Ver Addr Time
                     = 16.218;
                                       // (msec)
                                                        1050 lines
                                                                             = 0.75
Ver Blank Start
                     = 16.218:
                                                        1050 lines
                                       // (msec)
Ver Blank Time
                     = 0.463;
                                       // (msec)
                                                          30 lines
                                                   =
Ver Sync Start
                     = 16.264;
                                       // (msec)
                                                        1053 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                           0 lines
// V Front Porch
                     = 0.046;
                                       // (msec)
                                                   =
                                                           3 lines
Ver Sync Time
                     = 0.062;
                                                           4 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.355;
                                       // (msec)
                                                          23 lines
                                                   =
// V Top Border
                                                           0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 8/21/03

Resolution: 1400 x 1050 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 2Ah; STD 2 Byte Code: (90, 40)h; CVT 3 Byte Code: (0C, 20, 28)h

Method: CVT Compliant

## **Detailed Timing Parameters**

```
Timing Name
                    = 1400 x 1050 @ 60Hz;;
Hor Pixels
                    = 1400:
                                      // Pixels
Ver Pixels
                     = 1050;
                                      // Lines
Hor Frequency
                     = 65.317:
                                      // kHz
                                                        15.3 usec
                                                                     / line
Ver Frequency
                     = 59.978;
                                                        16.7 msec
                                      // Hz
                                                  =
                                                                     / frame
Pixel Clock
                     = 121.750:
                                      // MHz
                                                  =
                                                         8.2 nsec
                                                                       \pm 0.5\%
Character Width
                                      // Pixels
                                                        65.7 nsec
                     = 8;
                                                  =
Scan Type
                     = NONINTERLACED;
                                                         // H Phase =
                                                                          3.9 %
Hor Sync Polarity
                     = NEGATIVE // HBlank =
                                                     24.9% of HTotal
Ver Sync Polarity
                     = POSITIVE;
                                      // VBlank
                                                       3.6% of VTotal
                     = 15.310:
Hor Total Time
                                      // (usec)
                                                        233 chars =
                                                                        1864 Pixels
Hor Addr Time
                     = 11.499:
                                                                        1400 Pixels
                                      // (usec)
                                                        175 \text{ chars} =
Hor Blank Start
                     = 11.499:
                                      // (usec)
                                                         175
                                                              chars =
                                                                        1400 Pixels
Hor Blank Time
                     = 3.811;
                                      // (usec)
                                                          58 \text{ chars} =
                                                                          464 Pixels
Hor Sync Start
                     = 12.222;
                                      // (usec)
                                                  =
                                                         186 chars =
                                                                        1488 Pixels
// H Right Border
                     = 0.000:
                                      // (usec)
                                                  =
                                                           \mathbf{0} chars =
                                                                            0 Pixels
// H Front Porch
                     = 0.723;
                                      // (usec)
                                                          11 chars =
                                                                           88 Pixels
                                                  =
Hor Sync Time
                     = 1.183:
                                      // (usec)
                                                          18 chars =
                                                                          144 Pixels
                                                  =
// H Back Porch
                     = 1.906:
                                                          29 chars =
                                                                          232 Pixels
                                      // (usec)
                                                  =
// H Left Border
                     = 0.000:
                                      // (usec)
                                                  =
                                                           \mathbf{0} chars =
                                                                            0 Pixels
Ver Total Time
                     = 16.673:
                                      // (msec)
                                                       1089 lines
                                                                       HT - (1.06xHA)
Ver Addr Time
                     = 16.076;
                                      // (msec)
                                                       1050 lines
                                                                            = 3.12
Ver Blank Start
                                                       1050 lines
                     = 16.076;
                                      // (msec)
Ver Blank Time
                     = 0.597;
                                      // (msec)
                                                          39 lines
                                                  =
Ver Sync Start
                     = 16.121;
                                      // (msec)
                                                       1053 lines
// V Bottom Border
                     = 0.000:
                                      // (msec)
                                                  =
                                                           0 lines
// V Front Porch
                     = 0.046;
                                      // (msec)
                                                  =
                                                           3 lines
Ver Sync Time
                     = 0.061;
                                                           4 lines
                                      // (msec)
                                                  =
// V Back Porch
                     = 0.490;
                                      // (msec)
                                                          32 lines
                                                  =
// V Top Border
                                                           0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 8/21/03

Resolution: 1400 x 1050 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 2Bh; STD 2 Byte Code: (90, 4F)h; CVT 3 Byte Code: (0C, 20, 44)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
Timing Name
                    = 1400 \times 1050 @ 75Hz;
Hor Pixels
                     = 1400:
                                       // Pixels
Ver Pixels
                     = 1050;
                                       // Lines
Hor Frequency
                     = 82.278:
                                       // kHz
                                                        12.2 usec
                                                                     / line
Ver Frequency
                                                        13.4 msec
                     = 74.867;
                                       // Hz
                                                   =
                                                                     / frame
Pixel Clock
                     = 156.000:
                                       // MHz
                                                   =
                                                         6.4 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                        51.3 nsec
                     = 8;
                                                   =
                                                          // H Phase =
Scan Type
                     = NONINTERLACED;
                                                                           3.8 %
Hor Sync Polarity
                     = NEGATIVE // HBlank =
                                                      26.2% of HTotal
Ver Sync Polarity
                     = POSITIVE;
                                       // VBlank
                                                       4.5% of VTotal
                                                  =
Hor Total Time
                     = 12.154:
                                       // (usec)
                                                         237 \text{ chars} =
                                                                         1896 Pixels
Hor Addr Time
                     = 8.974;
                                                                         1400 Pixels
                                       // (usec)
                                                         175 \text{ chars} =
Hor Blank Start
                     = 8.974;
                                       // (usec)
                                                         175
                                                              chars =
                                                                         1400 Pixels
Hor Blank Time
                     = 3.179;
                                       // (usec)
                                                          62 \text{ chars} =
                                                                          496 Pixels
Hor Sync Start
                     = 9.641;
                                       // (usec)
                                                   =
                                                         188 chars =
                                                                         1504 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.667;
                                       // (usec)
                                                          13 chars =
                                                                           104 Pixels
                                                   =
Hor Sync Time
                     = 0.923:
                                       // (usec)
                                                          18 chars =
                                                                           144 Pixels
                                                   =
// H Back Porch
                     = 1.590;
                                                                          248 Pixels
                                       // (usec)
                                                          31 chars =
                                                   =
// H Left Border
                     = 0.000;
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 13.357:
                                       // (msec)
                                                        1099 lines
                                                                       HT - (1.06xHA)
Ver Addr Time
                     = 12.762;
                                       // (msec)
                                                        1050 lines
                                                                             = 2.64
Ver Blank Start
                     = 12.762;
                                       // (msec)
                                                        1050 lines
Ver Blank Time
                     = 0.596;
                                       // (msec)
                                                          49 lines
                                                   =
Ver Sync Start
                     = 12.798;
                                       // (msec)
                                                        1053 lines
// V Bottom Border
                                                           0 lines
                     = 0.000:
                                       // (msec)
                                                   =
// V Front Porch
                     = 0.036;
                                       // (msec)
                                                   =
                                                           3 lines
Ver Sync Time
                     = 0.049;
                                                           4 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.510;
                                       // (msec)
                                                          42 lines
                                                   =
// V Top Border
                                                           0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 8/21/03

Resolution: 1400 x 1050 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 2Ch; STD 2 Byte Code: (90, 59)h; CVT 3 Byte Code: (0C, 20, 62)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
Timing Name
                    = 1400 \times 1050 @ 85Hz;
Hor Pixels
                     = 1400:
                                       // Pixels
Ver Pixels
                     = 1050;
                                       // Lines
Hor Frequency
                     = 93.881:
                                       // kHz
                                                        10.7 usec
                                                                     / line
Ver Frequency
                     = 84.960;
                                                        11.8 msec
                                       // Hz
                                                  =
                                                                     / frame
Pixel Clock
                     = 179.500:
                                       // MHz
                                                  =
                                                         5.6 nsec
                                                                       \pm 0.5\%
Character Width
                                       // Pixels
                                                        44.6 nsec
                     = 8;
                                                  =
Scan Type
                     = NONINTERLACED;
                                                         // H Phase =
                                                                          4.0 %
Hor Sync Polarity
                     = NEGATIVE // HBlank =
                                                      26.8% of HTotal
Ver Sync Polarity
                     = POSITIVE;
                                       // VBlank
                                                       5.0% of VTotal
                                                  =
                                                         239 chars =
Hor Total Time
                     = 10.652:
                                       // (usec)
                                                                         1912 Pixels
Hor Addr Time
                     = 7.799;
                                                         175 chars =
                                                                         1400 Pixels
                                       // (usec)
                     = 7.799;
Hor Blank Start
                                       // (usec)
                                                         175
                                                              chars =
                                                                         1400 Pixels
Hor Blank Time
                     = 2.852;
                                       // (usec)
                                                          64 \text{ chars} =
                                                                          512 Pixels
Hor Sync Start
                     = 8.379;
                                       // (usec)
                                                  =
                                                         188 chars =
                                                                         1504 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                  =
                                                           \mathbf{0} chars =
                                                                            0 Pixels
// H Front Porch
                     = 0.579;
                                       // (usec)
                                                          13 chars =
                                                                          104 Pixels
                                                  =
Hor Sync Time
                     = 0.847:
                                       // (usec)
                                                          19 chars =
                                                                          152 Pixels
                                                  =
// H Back Porch
                     = 1.426:
                                                                          256 Pixels
                                       // (usec)
                                                          32 \text{ chars} =
                                                  =
// H Left Border
                     = 0.000;
                                       // (usec)
                                                  =
                                                           \mathbf{0} chars =
                                                                            0 Pixels
Ver Total Time
                     = 11.770:
                                       // (msec)
                                                        1105 lines
                                                                       HT - (1.06xHA)
Ver Addr Time
                     = 11.184;
                                       // (msec)
                                                        1050 lines
                                                                            = 2.38
Ver Blank Start
                                                        1050 lines
                     = 11.184:
                                       // (msec)
Ver Blank Time
                     = 0.586;
                                       // (msec)
                                                          55 lines
                                                  =
Ver Sync Start
                     = 11.216;
                                       // (msec)
                                                        1053 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                  =
                                                           0 lines
// V Front Porch
                     = 0.032;
                                       // (msec)
                                                  =
                                                           3 lines
Ver Sync Time
                     = 0.043;
                                                           4 lines
                                       // (msec)
                                                  =
// V Back Porch
                     = 0.511;
                                       // (msec)
                                                          48 lines
                                                  =
// V Top Border
                                                           0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 5/1/07

Resolution: 1400 x 1050 at 120 Hz (non-interlaced) REDUCED BLANKING DMT ID: 2Dh; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

## **Detailed Timing Parameters**

```
1400 x 1050 @ 120Hz CVT (Reduced Blanking);
Timing Name
Hor Pixels
                     = 1400;
                                       // Pixels
Ver Pixels
                     = 1050;
                                       // Lines
Hor Frequency
                     = 133.333:
                                       // kHz
                                                          7.5 usec
                                                                     / line
Ver Frequency
                     = 119.904;
                                                          8.3 msec
                                       // Hz
                                                   =
                                                                     / frame
Pixel Clock
                     = 208.000;
                                       // MHz
                                                   =
                                                          4.8 nsec
                                                                       \pm 0.5\%
Character Width
                                       // Pixels
                                                        38.5 nsec
                     = 8;
                                                   =
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                           1.0 %
Hor Sync Polarity
                     = POSITIVE;
                                                      10.3% of HTotal
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                      // VBlank
                                                       5.6% of VTotal
Hor Total Time
                     = 7.500:
                                       // (usec)
                                                         195 chars =
                                                                         1560 Pixels
Hor Addr Time
                                                         175 chars =
                                                                         1400 Pixels
                     = 6.731:
                                       // (usec)
Hor Blank Start
                     = 6.731:
                                       // (usec)
                                                         175
                                                              chars =
                                                                         1400 Pixels
Hor Blank Time
                     = 0.769;
                                       // (usec)
                                                          20 \text{ chars} =
                                                                          160 Pixels
Hor Sync Start
                     = 6.962;
                                       // (usec)
                                                   =
                                                         181 chars =
                                                                         1448 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.231;
                                       // (usec)
                                                           6 \text{ chars} =
                                                                            48 Pixels
                                                   =
Hor Sync Time
                     = 0.154:
                                       // (usec)
                                                              chars =
                                                                            32 Pixels
                                                   =
// H Back Porch
                                                          10 \text{ chars} =
                                                                           80 Pixels
                     = 0.385:
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 8.340:
                                       // (msec)
                                                        1112 lines
                                                                       HT - (1.06xHA)
Ver Addr Time
                     = 7.875;
                                       // (msec)
                                                        1050 lines
                                                                             = 0.37
Ver Blank Start
                     = 7.875:
                                       // (msec)
                                                        1050 lines
Ver Blank Time
                     = 0.465;
                                       // (msec)
                                                          62 lines
                                                   =
Ver Sync Start
                     = 7.898;
                                       // (msec)
                                                        1053 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                   =
                                                           0 lines
// V Front Porch
                     = 0.023;
                                       // (msec)
                                                   =
                                                           3 lines
Ver Sync Time
                     = 0.030;
                                                           4 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.413;
                                       // (msec)
                                                          55 lines
                                                   =
// V Top Border
                                                           0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 10/24/04

Resolution: 1440 x 900 at 60 Hz (non-interlaced) REDUCED BLANKING

EDID ID: DMT ID: 2Eh; STD 2 Byte Code: n/a; CVT 3 Byte Code: (C1, 18, 21)h

Method: CVT Reduced Blanking

### **Detailed Timing Parameters**

```
= 1440 x 900 @ 60Hz CVT (Reduced Blanking);
Timing Name
Hor Pixels
                    = 1440;
                                       // Pixels
Ver Pixels
                     = 900;
                                      // Lines
                     = 55.469;
Hor Frequency
                                      // kHz
                                                  =
                                                        18.0 usec
                                                                    / line
Ver Frequency
                     = 59.901:
                                                        16.7 msec
                                      // Hz
                                                                    / frame
Pixel Clock
                     = 88.750;
                                      // MHz
                                                        11.3 nsec
                                                                       \pm 0.5\%
                                                  =
                                                        90.1 nsec
Character Width
                     = 8:
                                      // Pixels
Scan Type
                                                         // H Phase =
                                                                          1.0 %
                     = NONINTERLACED;
Hor Sync Polarity
                                                      10.0% of HTotal
                     = POSITIVE:
                                      // HBlank =
Ver Sync Polarity
                     = NEGATIVE
                                      // VBlank =
                                                       2.8% of VTotal
Hor Total Time
                     = 18.028:
                                      // (usec)
                                                         200 \text{ chars} =
                                                                        1600 Pixels
Hor Addr Time
                     = 16.225;
                                      // (usec)
                                                         180 chars =
                                                                        1440 Pixels
                     = 16.225;
Hor Blank Start
                                      // (usec)
                                                         180 \text{ chars} =
                                                                        1440 Pixels
                                                  =
                     = 1.803;
Hor Blank Time
                                      // (usec)
                                                         20 \text{ chars} =
                                                                          160 Pixels
Hor Svnc Start
                     = 16.766;
                                      // (usec)
                                                         186 chars =
                                                                        1488 Pixels
// H Right Border
                     = 0.000:
                                                           \mathbf{0} chars =
                                      // (usec)
                                                                            0 Pixels
                                                  =
// H Front Porch
                     = 0.541:
                                      // (usec)
                                                  =
                                                           6 \text{ chars} =
                                                                           48 Pixels
Hor Sync Time
                     = 0.361;
                                                           4 chars =
                                                                           32 Pixels
                                      // (usec)
// H Back Porch
                     = 0.901;
                                      // (usec)
                                                          10 chars =
                                                                           80 Pixels
                                                  =
// H Left Border
                     = 0.000:
                                      // (usec)
                                                           \mathbf{0} chars =
                                                                            0 Pixels
                                                  =
Ver Total Time
                     = 16.694;
                                      // (msec)
                                                         926 lines
                                                                       HT - (1.06xHA)
Ver Addr Time
                     = 16.225:
                                                         900 lines
                                                                            = 0.83
                                      // (msec)
                                                  =
Ver Blank Start
                     = 16.225;
                                      // (msec)
                                                         900 lines
Ver Blank Time
                     = 0.469;
                                      // (msec)
                                                          26 lines
Ver Svnc Start
                     = 16.279;
                                                        903 lines
                                      // (msec)
                                                  =
                                                           0 lines
// V Bottom Border
                    = 0.000:
                                      // (msec)
                                                  =
// V Front Porch
                     = 0.054:
                                                           3 lines
                                      // (msec)
                                                  =
Ver Sync Time
                     = 0.108:
                                       // (msec)
                                                           6 lines
                                                  =
// V Back Porch
                     = 0.306;
                                                          17 lines
                                      // (msec)
                                                  =
// V Top Border
                     = 0.000;
                                                           0 lines
                                       // (msec)
```

Adopted: 10/24/04

Resolution: 1440 x 900 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 2Fh; STD 2 Byte Code: (95, 00)h; CVT 3 Byte Code: (C1, 18, 28)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
Timing Name
                    = 1440 x 900 @ 60Hz;
Hor Pixels
                    = 1440;
                                      // Pixels
Ver Pixels
                     = 900;
                                      // Lines
                     = 55.935;
Hor Frequency
                                      // kHz
                                                  =
                                                        17.9 usec
                                                                    / line
Ver Frequency
                     = 59.887:
                                                        16.7 msec
                                      // Hz
                                                                    / frame
Pixel Clock
                     = 106.500;
                                      // MHz
                                                        9.4 nsec
                                                                      \pm 0.5\%
                                                  =
Character Width
                     = 8:
                                      // Pixels
                                                       75.1 nsec
Scan Type
                                                        // H Phase =
                                                                          4.0 %
                     = NONINTERLACED;
Hor Sync Polarity
                                                     24.4% of HTotal
                     = NEGATIVE
                                     // HBlank =
Ver Sync Polarity
                     = POSITIVE;
                                      // VBlank =
                                                       3.6% of VTotal
Hor Total Time
                     = 17.878:
                                      // (usec)
                                                        238 chars =
                                                                        1904 Pixels
Hor Addr Time
                                                        180 chars =
                     = 13.521;
                                      // (usec)
                                                                        1440 Pixels
Hor Blank Start
                     = 13.521;
                                      // (usec)
                                                        180 \text{ chars} =
                                                                        1440 Pixels
                                                  =
Hor Blank Time
                     = 4.357:
                                      // (usec)
                                                         58 chars =
                                                                         464 Pixels
Hor Sync Start
                     = 14.272;
                                      // (usec)
                                                        190 \text{ chars} =
                                                                        1520 Pixels
// H Right Border
                     = 0.000:
                                                          \mathbf{0} chars =
                                      // (usec)
                                                                           0 Pixels
                                                  =
// H Front Porch
                     = 0.751:
                                      // (usec)
                                                  =
                                                         10
                                                             chars =
                                                                          80 Pixels
Hor Sync Time
                     = 1.427;
                                                             chars =
                                                                         152 Pixels
                                      // (usec)
                                                         19
// H Back Porch
                     = 2.178;
                                      // (usec)
                                                             chars =
                                                                         232 Pixels
                                                  =
// H Left Border
                     = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
Ver Total Time
                     = 16.698:
                                      // (msec)
                                                        934 lines
                                                                      HT - (1.06xHA)
Ver Addr Time
                     = 16.090;
                                                        900 lines
                                                                           = 3.55
                                      // (msec)
                                                  =
Ver Blank Start
                     = 16.090;
                                      // (msec)
                                                        900 lines
Ver Blank Time
                     = 0.608;
                                      // (msec)
                                                         34 lines
Ver Sync Start
                     = 16.144;
                                                        903 lines
                                      // (msec)
                                                  =
                                                          0 lines
// V Bottom Border = 0.000;
                                      // (msec)
                                                  =
// V Front Porch
                     = 0.054:
                                                          3 lines
                                      // (msec)
                                                  =
Ver Sync Time
                     = 0.107;
                                      // (msec)
                                                          6 lines
                                                  =
// V Back Porch
                     = 0.447;
                                                         25 lines
                                      // (msec)
                                                  =
// V Top Border
                     = 0.000;
                                                          0 lines
                                      // (msec)
```

Adopted: 10/24/04

Resolution: 1440 x 900 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 30h; STD 2 Byte Code: (95, 0F)h; CVT 3 Byte Code: (C1, 18, 44)h

Method: CVT Compliant

## **Detailed Timing Parameters**

```
Timing Name
                    = 1440 \times 900 @ 75Hz;
Hor Pixels
                    = 1440:
                                      // Pixels
Ver Pixels
                                      // Lines
                    = 900;
Hor Frequency
                    = 70.635:
                                      // kHz
                                                        14.2 usec
                                                                    / line
Ver Frequency
                    = 74.984;
                                                        13.3 msec
                                                                    / frame
                                      // Hz
Pixel Clock
                    = 136.750;
                                      // MHz
                                                                      \pm 0.5\%
                                                         7.3 nsec
                                                  =
Character Width
                                      // Pixels
                                                       58.5 nsec
                    = 8:
Scan Type
                    = NONINTERLACED:
                                                         // H Phase =
                                                                          3.9 %
Hor Sync Polarity
                                     // HBlank = 25.6% of HTotal
                    = NEGATIVE
                                                       4.5% of VTotal
Ver Sync Polarity
                                      // VBlank =
                    = POSITIVE;
                                                        242 chars =
Hor Total Time
                    = 14.157:
                                      // (usec)
                                                                        1936 Pixels
Hor Addr Time
                    = 10.530;
                                      // (usec)
                                                        180 chars =
                                                                        1440 Pixels
                                                  =
Hor Blank Start
                    = 10.530:
                                      // (usec)
                                                        180 chars =
                                                                        1440 Pixels
                                                  =
Hor Blank Time
                                                         62 \text{ chars} =
                                                                         496 Pixels
                    = 3.627:
                                      // (usec)
Hor Sync Start
                    = 11.232;
                                      // (usec)
                                                        192 \text{ chars} =
                                                                        1536 Pixels
// H Right Border
                    = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
// H Front Porch
                                                                          96 Pixels
                    = 0.702;
                                      // (usec)
                                                  =
                                                         12 chars =
Hor Sync Time
                    = 1.112;
                                      // (usec)
                                                  =
                                                         19 chars =
                                                                         152 Pixels
// H Back Porch
                    = 1.814:
                                      // (usec)
                                                         31 \text{ chars} =
                                                                         248 Pixels
// H Left Border
                    = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
Ver Total Time
                    = 13.336;
                                      // (msec)
                                                        942 lines
                                                                      HT - (1.06xHA)
                                                  =
Ver Addr Time
                    = 12.741:
                                      // (msec)
                                                        900 lines
                                                  =
                                                                           =3
Ver Blank Start
                    = 12.741;
                                                        900 lines
                                      // (msec)
                                                  =
Ver Blank Time
                    = 0.595;
                                      // (msec)
                                                  =
                                                         42 lines
Ver Sync Start
                    = 12.784;
                                      // (msec)
                                                  =
                                                        903 lines
// V Bottom Border
                    = 0.000:
                                      // (msec)
                                                          0 lines
                                                  =
// V Front Porch
                    = 0.042;
                                      // (msec)
                                                          3 lines
                                                  =
Ver Svnc Time
                    = 0.085:
                                                          6 lines
                                      // (msec)
                                                  =
// V Back Porch
                                                         33 lines
                    = 0.467:
                                      // (msec)
                                                  =
// V Top Border
                    = 0.000;
                                                          0 lines
                                      // (msec)
                                                  =
```

Adopted: 10/24/04

Resolution: 1440 x 900 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 31h; STD 2 Byte Code: (95, 19)h; CVT 3 Byte Code: (C1, 18, 68)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
Timing Name
                    = 1440 \times 900 @ 85Hz;
Hor Pixels
                    = 1440:
                                      // Pixels
Ver Pixels
                                      // Lines
                     = 900;
Hor Frequency
                     = 80.430:
                                      // kHz
                                                        12.4 usec
                                                                    / line
Ver Frequency
                     = 84.842;
                                                        11.8 msec
                                                                    / frame
                                      // Hz
Pixel Clock
                                      // MHz
                                                         6.4 nsec
                                                                      \pm 0.5\%
                     = 157.000;
                                                  =
Character Width
                                      // Pixels
                                                        51.0 nsec
                     = 8:
Scan Type
                     = NONINTERLACED:
                                                         // H Phase =
                                                                          3.9 %
                                     // HBlank = 26.2% of HTotal
Hor Sync Polarity
                     = NEGATIVE
Ver Sync Polarity
                                      // VBlank =
                                                       5.1% of VTotal
                     = POSITIVE;
Hor Total Time
                     = 12.433:
                                      // (usec)
                                                        244 chars =
                                                                        1952 Pixels
Hor Addr Time
                     = 9.172;
                                      // (usec)
                                                        180 chars =
                                                                        1440 Pixels
                                                  =
Hor Blank Start
                     = 9.172:
                                      // (usec)
                                                        180 \text{ chars} =
                                                                        1440 Pixels
                                                  =
Hor Blank Time
                                                                         512 Pixels
                     = 3.261:
                                      // (usec)
                                                         64 chars =
Hor Sync Start
                     = 9.834;
                                      // (usec)
                                                        193 \text{ chars} =
                                                                        1544 Pixels
// H Right Border
                     = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                            0 Pixels
                                                  =
// H Front Porch
                     = 0.662:
                                      // (usec)
                                                  =
                                                         13
                                                             chars =
                                                                          104 Pixels
Hor Sync Time
                     = 0.968;
                                      // (usec)
                                                  =
                                                         19 chars =
                                                                         152 Pixels
// H Back Porch
                     = 1.631;
                                      // (usec)
                                                         32 \text{ chars} =
                                                                         256 Pixels
// H Left Border
                     = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                            0 Pixels
                                                  =
Ver Total Time
                     = 11.787;
                                      // (msec)
                                                        948 lines
                                                                      HT - (1.06xHA)
                                                  =
Ver Addr Time
                     = 11.190;
                                      // (msec)
                                                        900 lines
                                                                            = 2.71
                                                  =
Ver Blank Start
                     = 11.190:
                                                        900 lines
                                      // (msec)
                                                  =
Ver Blank Time
                     = 0.597;
                                      // (msec)
                                                  =
                                                         48 lines
Ver Sync Start
                     = 11.227;
                                      // (msec)
                                                        903 lines
                                                  =
// V Bottom Border
                     = 0.000:
                                      // (msec)
                                                           0 lines
                                                  =
// V Front Porch
                     = 0.037;
                                      // (msec)
                                                           3 lines
                                                  =
Ver Sync Time
                     = 0.075:
                                                          6 lines
                                      // (msec)
                                                  =
// V Back Porch
                                                         39 lines
                     = 0.485;
                                      // (msec)
                                                  =
// V Top Border
                     = 0.000;
                                      // (msec)
                                                  =
                                                          0 lines
```

Adopted: 5/1/07

Resolution: 1440 x 900 at 120 Hz (non-interlaced) REDUCED BLANKING EDID ID: DMT ID: 32h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

## **Detailed Timing Parameters**

```
1440 x 900 @ 120Hz CVT (Reduced Blanking);
Timing Name
                     = 1440:
Hor Pixels
                                       // Pixels
Ver Pixels
                                       // Lines
                     = 900;
Hor Frequency
                     = 114.219:
                                       // kHz
                                                          8.8 usec
                                                                      / line
Ver Frequency
                     = 119.852;
                                                          8.3 msec
                                       // Hz
                                                   =
                                                                      / frame
Pixel Clock
                     = 182.750:
                                       // MHz
                                                   =
                                                          5.5 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                         43.8 nsec
                     = 8;
                                                   =
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                            1.0 %
Hor Sync Polarity
                     = POSITIVE;
                                                       10.0% of HTotal
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                       // VBlank
                                                        5.6% of VTotal
                     = 8.755:
Hor Total Time
                                       // (usec)
                                                         200 \text{ chars} =
                                                                          1600 Pixels
Hor Addr Time
                     = 7.880;
                                                                          1440 Pixels
                                       // (usec)
                                                          180 \text{ chars} =
Hor Blank Start
                     = 7.880;
                                       // (usec)
                                                          180 \text{ chars} =
                                                                          1440 Pixels
Hor Blank Time
                     = 0.876;
                                       // (usec)
                                                           20 \text{ chars} =
                                                                           160 Pixels
Hor Sync Start
                     = 8.142;
                                       // (usec)
                                                   =
                                                          186 chars =
                                                                          1488 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.263;
                                       // (usec)
                                                            6 \text{ chars} =
                                                                            48 Pixels
                                                   =
Hor Sync Time
                     = 0.175:
                                       // (usec)
                                                               chars =
                                                                            32 Pixels
                                                   =
// H Back Porch
                                                                            80 Pixels
                     = 0.438:
                                       // (usec)
                                                           10 chars =
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 8.344:
                                       // (msec)
                                                         953 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 7.880;
                                       // (msec)
                                                         900 lines
                                                                             = 0.4
                                                   =
Ver Blank Start
                     = 7.880:
                                       // (msec)
                                                         900 lines
Ver Blank Time
                     = 0.464;
                                       // (msec)
                                                           53 lines
                                                   =
                                                         903 lines
Ver Sync Start
                     = 7.906;
                                       // (msec)
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                   =
                                                            0 lines
// V Front Porch
                     = 0.026;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.053;
                                                            6 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.385;
                                       // (msec)
                                                           44 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000:
                                       // (msec)
```

Adopted: 11/17/08

Resolution: 1600 x 900 at 60 Hz (non-interlaced) REDUCED BLANKING
EDID ID: DMT ID: 53h; STD 2 Byte Code: A9h, C0h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

**Detailed Timing Parameters** 

```
Timing Name
                    = 1600 \times 900 @ 60Hz;
Hor Pixels
                    = 1600;
                                       // Pixels
Ver Pixels
                     = 900:
                                       // Lines
Hor Frequency
                     = 60.000:
                                       // KHz
                                                                     / line
                                                        16.7 usec
Ver Frequency
                                       // Hz
                                                        16.7 msec
                                                                     / frame
                     = 60.000;
                                                  =
Pixel Clock
                                                         9.3 nsec
                                                                       \pm 0.5\%
                     = 108.000;
                                       // MHz
Character Width
                                       // Pixels
                                                        74.1 nsec
                     = 8;
                                                  =
Scan Type
                     = NONINTERLACED;
                                                         // H Phase =
                                                                           2.0 %
Hor Sync Polarity
                     = POSITIVE;
                                       // HBlank = 11.1% of HTotal
Ver Sync Polarity
                     = POSITIVE:
                                      // VBlank
                                                 =
                                                      10.0% of VTotal
Hor Total Time
                     = 16.667:
                                       // (usec)
                                                         225 chars =
                                                                         1800 Pixels
                                                  =
Hor Addr Time
                                       // (usec)
                                                         200 \text{ chars} =
                                                                         1600 Pixels
                     = 14.815;
                                                  =
Hor Blank Start
                     = 14.815;
                                       // (usec)
                                                         200 \text{ chars} =
                                                                         1600 Pixels
Hor Blank Time
                     = 1.852;
                                       // (usec)
                                                  =
                                                          25 \text{ chars} =
                                                                          200 Pixels
Hor Sync Start
                     = 15.037;
                                       // (usec)
                                                         203 chars =
                                                                         1624 Pixels
// H Right Border
                                                           0
                                                              chars =
                     = 0.000:
                                       // (usec)
                                                                            0 Pixels
                                                  =
// H Front Porch
                     = 0.222;
                                       // (usec)
                                                           3 \text{ chars} =
                                                                            24 Pixels
                                                  =
Hor Sync Time
                     = 0.741:
                                       // (usec)
                                                  =
                                                          10 \text{ chars} =
                                                                            80 Pixels
// H Back Porch
                     = 0.889;
                                       // (usec)
                                                          12 chars =
                                                                           96 Pixels
                                                  =
// H Left Border
                                                                            0 Pixels
                     = 0.000:
                                       // (usec)
                                                           \mathbf{0} chars =
Ver Total Time
                                                                       HT - (1.06xHA)
                     = 16.667:
                                       // (msec)
                                                        1000 lines
                                                  =
Ver Addr Time
                     = 15.000;
                                                         900 lines
                                                                            = 0.96
                                       // (msec)
                                                  =
Ver Blank Start
                     = 15.000;
                                       // (msec)
                                                  =
                                                         900 lines
Ver Blank Time
                     = 1.667;
                                       // (msec)
                                                         100 lines
                                                  =
Ver Sync Start
                     = 15.017:
                                       // (msec)
                                                         901 lines
// V Bottom Border
                     = 0.000;
                                       // (msec)
                                                           0 lines
// V Front Porch
                     = 0.017:
                                       // (msec)
                                                           1 lines
                                                  =
Ver Sync Time
                     = 0.050;
                                       // (msec)
                                                  =
                                                           3 lines
// V Back Porch
                     = 1.600;
                                       // (msec)
                                                          96 lines
                                                  =
// V Top Border
                     = 0.000:
                                       // (msec)
                                                           0 lines
                                                  =
```

Adopted: 12/18/96

Resolution: 1600 x 1200 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 33h; STD 2 Byte Code: (A9, 40)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

#### **Detailed Timing Parameters**

```
Timing Name
                    = 1600 x 1200 @ 60Hz:
Hor Pixels
                    = 1600:
                                      // Pixels
Ver Pixels
                    = 1200;
                                      // Lines
Hor Frequency
                    = 75.000:
                                      // kHz
                                                       13.3 usec
                                                                   / line
Ver Frequency
                    = 60.000;
                                      // Hz
                                                 =
                                                       16.7 msec
                                                                  / frame
Pixel Clock
                    = 162.000:
                                      // MHz
                                                        6.2 nsec
                                                                     \pm 0.5\%
                                                 =
                                                      49.4 nsec
Character Width
                    = 8;
                                      // Pixels
Scan Type
                    = NONINTERLACED;
                                                       // H Phase =
                                                                        5.6 %
                    = POSITIVE:
Hor Sync Polarity
                                     // HBlank = 25.9% of HTotal
Ver Sync Polarity
                    = POSITIVE:
                                     // VBlank =
                                                     4.0% of VTotal
Hor Total Time
                    = 13.333:
                                                       270 chars =
                                      // (usec)
                                                                      2160 Pixels
Hor Addr Time
                    = 9.877:
                                      // (usec)
                                                 =
                                                       200 \text{ chars} =
                                                                       1600 Pixels
Hor Blank Start
                    = 9.877;
                                      // (usec)
                                                       200 \text{ chars} =
                                                                       1600 Pixels
Hor Blank Time
                    = 3.457;
                                      // (usec)
                                                        70 \text{ chars} =
                                                                        560 Pixels
                                                 =
Hor Sync Start
                                                       208 chars =
                                                                       1664 Pixels
                    = 10.272;
                                      // (usec)
// H Right Border
                    = 0.000;
                                                         \mathbf{0} chars =
                                                                          0 Pixels
                                      // (usec)
                                                 =
// H Front Porch
                    = 0.395:
                                      // (usec)
                                                         8 \text{ chars} =
                                                                         64 Pixels
                                                 =
Hor Svnc Time
                    = 1.185:
                                      // (usec)
                                                        24 chars =
                                                                        192 Pixels
// H Back Porch
                    = 1.877;
                                      // (usec)
                                                        38 chars =
                                                                        304 Pixels
                                                 =
// H Left Border
                    = 0.000;
                                      // (usec)
                                                         0 chars =
                                                                          0 Pixels
Ver Total Time
                    = 16.667:
                                      // (msec)
                                                 =
                                                      1250 lines
                                                                     HT - (1.06xHA)
Ver Addr Time
                    = 16.000;
                                      // (msec)
                                                      1200 lines
                                                                          = 2.86
                                                 =
Ver Blank Start
                    = 16.000;
                                      // (msec)
                                                      1200 lines
                                                 =
Ver Blank Time
                                                        50 lines
                    = 0.667:
                                      // (msec)
Ver Sync Start
                    = 16.013;
                                      // (msec)
                                                      1201 lines
// V Bottom Border = 0.000:
                                      // (msec)
                                                         0 lines
                                                 =
// V Front Porch
                    = 0.013;
                                      // (msec)
                                                         1 lines
                                                 =
Ver Sync Time
                    = 0.040;
                                      // (msec)
                                                         3 lines
                                                 =
// V Back Porch
                    = 0.613;
                                      // (msec)
                                                        46 lines
                                                 =
// V Top Border
                    = 0.000:
                                      // (msec)
                                                         0 lines
                                                 =
```

Adopted: 12/18/96

Resolution: 1600 x 1200 at 65 Hz (non-interlaced)

EDID ID: DMT ID: 34h; STD 2 Byte Code: (A9, 45)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

# **Detailed Timing Parameters**

```
Timing Name
                    = 1600 \times 1200 @ 65Hz;
Hor Pixels
                    = 1600:
                                      // Pixels
Ver Pixels
                    = 1200:
                                      // Lines
                    = 81.250;
Hor Frequency
                                      // kHz
                                                       12.3 usec
                                                                   / line
Ver Frequency
                    = 65.000;
                                      // Hz
                                                       15.4 msec
                                                                  / frame
Pixel Clock
                    = 175.500;
                                                                     \pm 0.5\%
                                      // MHz
                                                        5.7 nsec
                                                 =
Character Width
                    = 8:
                                      // Pixels
                                                      45.6 nsec
Scan Type
                    = NONINTERLACED;
                                                        // H Phase =
                                                                         5.6 %
Hor Sync Polarity
                    = POSITIVE;
                                      // HBlank = 25.9% of HTotal
Ver Sync Polarity
                                      // VBlank =
                                                      4.0% of VTotal
                    = POSITIVE;
Hor Total Time
                    = 12.308;
                                      // (usec)
                                                       270 \text{ chars} =
                                                                       2160 Pixels
Hor Addr Time
                    = 9.117;
                                      // (usec)
                                                       200 \text{ chars} =
                                                                       1600 Pixels
                                                 =
Hor Blank Start
                    = 9.117:
                                      // (usec)
                                                       200 \text{ chars} =
                                                                       1600 Pixels
                                                 =
Hor Blank Time
                    = 3.191:
                                                        70 \text{ chars} =
                                      // (usec)
                                                                        560 Pixels
Hor Sync Start
                    = 9.481;
                                      // (usec)
                                                       208 \text{ chars} =
                                                                       1664 Pixels
// H Right Border
                    = 0.000;
                                      // (usec)
                                                          0 chars =
                                                                          0 Pixels
                                                 =
// H Front Porch
                                                                         64 Pixels
                    = 0.365;
                                      // (usec)
                                                 =
                                                          8 \text{ chars} =
Hor Sync Time
                    = 1.094;
                                      // (usec)
                                                 =
                                                        24 chars =
                                                                        192 Pixels
// H Back Porch
                    = 1.732;
                                      // (usec)
                                                         38 chars =
                                                                        304 Pixels
                                                 =
// H Left Border
                    = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                          0 Pixels
Ver Total Time
                    = 15.385;
                                                      1250 lines
                                                                     HT - (1.06xHA)
                                      // (msec)
Ver Addr Time
                                                                          = 2.64
                    = 14.769:
                                      // (msec)
                                                      1200 lines
                                                 =
Ver Blank Start
                    = 14.769:
                                                      1200 lines
                                      // (msec)
                                                 =
Ver Blank Time
                    = 0.615;
                                      // (msec)
                                                 =
                                                         50 lines
Ver Sync Start
                    = 14.782;
                                      // (msec)
                                                      1201 lines
                                                 =
// V Bottom Border = 0.000;
                                      // (msec)
                                                 =
                                                          0 lines
// V Front Porch
                    = 0.012:
                                      // (msec)
                                                          1 lines
                                                 =
Ver Svnc Time
                    = 0.037:
                                      // (msec)
                                                          3 lines
// V Back Porch
                    = 0.566;
                                      // (msec)
                                                         46 lines
                                                 =
// V Top Border
                    = 0.000;
                                                          0 lines
                                      // (msec)
```

Adopted: 12/18/96

Resolution: 1600 x 1200 at 70 Hz (non-interlaced)

EDID ID: DMT ID: 35h; STD 2 Byte Code: (A9, 4A)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

## **Detailed Timing Parameters**

```
Timing Name
                    = 1600 \times 1200 @ 70Hz;
Hor Pixels
                    = 1600:
                                      // Pixels
Ver Pixels
                    = 1200:
                                      // Lines
                    = 87.500;
Hor Frequency
                                      // kHz
                                                                   / line
                                                       11.4 usec
Ver Frequency
                    = 70.000;
                                      // Hz
                                                       14.3 msec
                                                                   / frame
Pixel Clock
                    = 189.000;
                                                                      \pm 0.5\%
                                      // MHz
                                                        5.3 nsec
                                                 =
Character Width
                    = 8:
                                      // Pixels
                                                       42.3 nsec
Scan Type
                    = NONINTERLACED;
                                                        // H Phase =
                                                                         5.6 %
Hor Sync Polarity
                    = POSITIVE;
                                      // HBlank = 25.9% of HTotal
Ver Sync Polarity
                                                      4.0% of VTotal
                    = POSITIVE;
                                      // VBlank =
Hor Total Time
                    = 11.429:
                                      // (usec)
                                                       270 \text{ chars} =
                                                                       2160 Pixels
Hor Addr Time
                    = 8.466;
                                      // (usec)
                                                       200 \text{ chars} =
                                                                       1600 Pixels
                                                 =
Hor Blank Start
                    = 8.466:
                                                       200 \text{ chars} =
                                                                       1600 Pixels
                                      // (usec)
                                                 =
Hor Blank Time
                    = 2.963:
                                      // (usec)
                                                        70 \text{ chars} =
                                                                        560 Pixels
Hor Sync Start
                    = 8.804;
                                      // (usec)
                                                       208 \text{ chars} =
                                                                       1664 Pixels
// H Right Border
                    = 0.000;
                                                          0 chars =
                                                                          0 Pixels
                                      // (usec)
                                                 =
// H Front Porch
                                                                         64 Pixels
                    = 0.339;
                                      // (usec)
                                                 =
                                                          8 \text{ chars} =
Hor Sync Time
                    = 1.016;
                                      // (usec)
                                                 =
                                                        24 chars =
                                                                        192 Pixels
// H Back Porch
                    = 1.608;
                                      // (usec)
                                                         38 chars =
                                                                        304 Pixels
                                                 =
// H Left Border
                    = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                          0 Pixels
Ver Total Time
                    = 14.286;
                                                      1250 lines
                                                                     HT - (1.06xHA)
                                      // (msec)
Ver Addr Time
                                                                          = 2.46
                    = 13.714:
                                      // (msec)
                                                      1200 lines
                                                 =
Ver Blank Start
                    = 13.714;
                                                      1200 lines
                                      // (msec)
                                                 =
Ver Blank Time
                    = 0.571;
                                      // (msec)
                                                 =
                                                         50 lines
Ver Sync Start
                    = 13.726;
                                      // (msec)
                                                      1201 lines
                                                 =
// V Bottom Border = 0.000;
                                      // (msec)
                                                 =
                                                          0 lines
// V Front Porch
                    = 0.011:
                                      // (msec)
                                                          1 lines
                                                 =
Ver Svnc Time
                    = 0.034:
                                                          3 lines
                                      // (msec)
                                                 =
// V Back Porch
                    = 0.526;
                                                         46 lines
                                      // (msec)
                                                 =
// V Top Border
                                                          0 lines
                    = 0.000;
                                      // (msec)
```

Adopted: 12/18/96

Resolution: 1600 x 1200 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 36h; STD 2 Byte Code: (A9, 4F)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

### **Detailed Timing Parameters**

```
Timing Name
                    = 1600 \times 1200 @ 75Hz;
Hor Pixels
                    = 1600:
                                      // Pixels
Ver Pixels
                    = 1200:
                                      // Lines
                    = 93.750;
Hor Frequency
                                      // kHz
                                                       10.7 usec
                                                                   / line
Ver Frequency
                    = 75.000;
                                      // Hz
                                                       13.3 msec
                                                                  / frame
Pixel Clock
                    = 202.500;
                                                        4.9 nsec
                                                                     \pm 0.5\%
                                      // MHz
                                                 =
Character Width
                    = 8:
                                      // Pixels
                                                       39.5 nsec
Scan Type
                    = NONINTERLACED;
                                                        // H Phase =
                                                                         5.6 %
Hor Sync Polarity
                    = POSITIVE;
                                      // HBlank = 25.9% of HTotal
Ver Sync Polarity
                                      // VBlank =
                                                      4.0% of VTotal
                    = POSITIVE;
Hor Total Time
                    = 10.667:
                                      // (usec)
                                                       270 \text{ chars} =
                                                                       2160 Pixels
Hor Addr Time
                    = 7.901;
                                      // (usec)
                                                       200 \text{ chars} =
                                                                       1600 Pixels
                                                 =
Hor Blank Start
                    = 7.901:
                                      // (usec)
                                                       200 \text{ chars} =
                                                                       1600 Pixels
                                                 =
Hor Blank Time
                    = 2.765:
                                                        70 \text{ chars} =
                                      // (usec)
                                                                        560 Pixels
Hor Sync Start
                    = 8.217;
                                      // (usec)
                                                       208 \text{ chars} =
                                                                       1664 Pixels
// H Right Border
                    = 0.000;
                                      // (usec)
                                                          0 chars =
                                                                          0 Pixels
                                                 =
// H Front Porch
                                                                         64 Pixels
                    = 0.316;
                                      // (usec)
                                                 =
                                                          8 \text{ chars} =
Hor Sync Time
                    = 0.948;
                                      // (usec)
                                                 =
                                                        24 chars =
                                                                        192 Pixels
// H Back Porch
                    = 1.501;
                                      // (usec)
                                                         38 chars =
                                                                        304 Pixels
                                                 =
// H Left Border
                    = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                          0 Pixels
Ver Total Time
                    = 13.333:
                                                      1250 lines
                                                                     HT - (1.06xHA)
                                      // (msec)
Ver Addr Time
                    = 12.800:
                                                                          = 2.29
                                      // (msec)
                                                      1200 lines
                                                 =
Ver Blank Start
                    = 12.800;
                                                      1200 lines
                                      // (msec)
                                                 =
Ver Blank Time
                    = 0.533;
                                      // (msec)
                                                 =
                                                         50 lines
Ver Sync Start
                    = 12.811;
                                      // (msec)
                                                      1201 lines
                                                 =
// V Bottom Border = 0.000;
                                      // (msec)
                                                 =
                                                          0 lines
// V Front Porch
                    = 0.011:
                                      // (msec)
                                                          1 lines
                                                 =
Ver Svnc Time
                    = 0.032:
                                      // (msec)
                                                          3 lines
// V Back Porch
                    = 0.491:
                                      // (msec)
                                                         46 lines
                                                 =
// V Top Border
                    = 0.000;
                                                          0 lines
                                      // (msec)
```

Adopted: 12/18/96

Resolution: 1600 x 1200 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 37h; STD 2 Byte Code: (A9, 59)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

# **Detailed Timing Parameters**

```
Timing Name
                    = 1600 \times 1200 @ 85Hz;
Hor Pixels
                    = 1600:
                                      // Pixels
Ver Pixels
                    = 1200:
                                      // Lines
                    = 106.250:
Hor Frequency
                                      // kHz
                                                        9.4 usec
                                                                   / line
Ver Frequency
                    = 85.000;
                                      // Hz
                                                       11.8 msec
                                                                  / frame
Pixel Clock
                    = 229.500;
                                                                      \pm 0.5\%
                                      // MHz
                                                        4.4 nsec
                                                 =
Character Width
                    = 8:
                                      // Pixels
                                                       34.9 nsec
Scan Type
                    = NONINTERLACED;
                                                        // H Phase =
                                                                         5.6 %
Hor Sync Polarity
                    = POSITIVE;
                                      // HBlank = 25.9% of HTotal
Ver Sync Polarity
                                      // VBlank =
                                                      4.0% of VTotal
                    = POSITIVE;
Hor Total Time
                    = 9.412:
                                      // (usec)
                                                       270 \text{ chars} =
                                                                       2160 Pixels
Hor Addr Time
                    = 6.972;
                                      // (usec)
                                                       200 \text{ chars} =
                                                                       1600 Pixels
                                                 =
Hor Blank Start
                    = 6.972:
                                      // (usec)
                                                       200 \text{ chars} =
                                                                       1600 Pixels
                                                 =
Hor Blank Time
                                                        70 \text{ chars} =
                    = 2.440:
                                      // (usec)
                                                                        560 Pixels
Hor Sync Start
                    = 7.251;
                                      // (usec)
                                                       208 \text{ chars} =
                                                                       1664 Pixels
// H Right Border
                    = 0.000;
                                      // (usec)
                                                          0 chars =
                                                                          0 Pixels
                                                 =
// H Front Porch
                                                                         64 Pixels
                    = 0.279;
                                      // (usec)
                                                 =
                                                          8 \text{ chars} =
Hor Sync Time
                    = 0.837;
                                      // (usec)
                                                 =
                                                        24 chars =
                                                                        192 Pixels
// H Back Porch
                    = 1.325;
                                      // (usec)
                                                         38 chars =
                                                                        304 Pixels
                                                 =
// H Left Border
                    = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                          0 Pixels
Ver Total Time
                    = 11.765:
                                                      1250 lines
                                                                     HT - (1.06xHA)
                                      // (msec)
Ver Addr Time
                    = 11.294:
                                                                          = 2.02
                                      // (msec)
                                                      1200 lines
                                                 =
Ver Blank Start
                    = 11.294;
                                                      1200 lines
                                      // (msec)
                                                 =
Ver Blank Time
                    = 0.471;
                                      // (msec)
                                                 =
                                                         50 lines
Ver Sync Start
                    = 11.304;
                                      // (msec)
                                                      1201 lines
                                                 =
// V Bottom Border = 0.000;
                                      // (msec)
                                                 =
                                                          0 lines
// V Front Porch
                    = 0.009;
                                      // (msec)
                                                          1 lines
                                                 =
Ver Svnc Time
                    = 0.028:
                                      // (msec)
                                                          3 lines
// V Back Porch
                    = 0.433:
                                      // (msec)
                                                         46 lines
                                                 =
// V Top Border
                                                          0 lines
                    = 0.000;
                                      // (msec)
```

Adopted: 5/1/07

Resolution: 1600 x 1200 at 120 Hz (non-interlaced) REDUCED BLANKING DMT ID: 38h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

#### **Detailed Timing Parameters**

```
1600 x 1200 @ 120Hz CVT (Reduced Blanking);
Timing Name
Hor Pixels
                     = 1600;
                                        // Pixels
Ver Pixels
                     = 1200;
                                        // Lines
Hor Frequency
                      = 152.415:
                                        // kHz
                                                           6.6 usec
                                                                       / line
Ver Frequency
                      = 119.917;
                                                           8.3 msec
                                        // Hz
                                                    =
                                                                      / frame
Pixel Clock
                      = 268.250;
                                        // MHz
                                                    =
                                                           3.7 nsec
                                                                         \pm 0.5\%
Character Width
                      = 8;
                                        // Pixels
                                                         29.8 nsec
                                                    =
                                                                            0.9 %
Scan Type
                      = NONINTERLACED;
                                                           // H Phase =
                                                         9.1% of HTotal
Hor Sync Polarity
                      = POSITIVE;
                                       // HBlank =
Ver Svnc Polarity
                      = NEGATIVE
                                       // VBlank
                                                        5.6% of VTotal
                      = 6.561:
Hor Total Time
                                        // (usec)
                                                          220 \text{ chars} =
                                                                          1760 Pixels
Hor Addr Time
                      = 5.965;
                                                                          1600 Pixels
                                        // (usec)
                                                          200 \text{ chars} =
Hor Blank Start
                     = 5.965:
                                        // (usec)
                                                          200 \text{ chars} =
                                                                           1600 Pixels
Hor Blank Time
                      = 0.596;
                                        // (usec)
                                                           20 \text{ chars} =
                                                                            160 Pixels
Hor Sync Start
                      = 6.144;
                                        // (usec)
                                                    =
                                                          206 \text{ chars} =
                                                                          1648 Pixels
// H Right Border
                      = 0.000:
                                        // (usec)
                                                    =
                                                            \mathbf{0} chars =
                                                                              0 Pixels
// H Front Porch
                      = 0.179;
                                        // (usec)
                                                             6 \text{ chars} =
                                                                             48 Pixels
                                                    =
Hor Sync Time
                      = 0.119:
                                        // (usec)
                                                               chars =
                                                                             32 Pixels
                                                    =
// H Back Porch
                      = 0.298:
                                                           10 \text{ chars} =
                                                                             80 Pixels
                                        // (usec)
                                                    =
// H Left Border
                      = 0.000:
                                        // (usec)
                                                    =
                                                             \mathbf{0} chars =
                                                                              0 Pixels
Ver Total Time
                      = 8.339:
                                        // (msec)
                                                         1271 lines
                                                                         HT - (1.06xHA)
Ver Addr Time
                      = 7.873;
                                        // (msec)
                                                         1200 lines
                                                                              = 0.24
Ver Blank Start
                      = 7.873:
                                                         1200 lines
                                        // (msec)
Ver Blank Time
                      = 0.466;
                                        // (msec)
                                                           71 lines
                                                    =
                                                         1203 lines
Ver Sync Start
                      = 7.893;
                                        // (msec)
// V Bottom Border
                     = 0.000:
                                        // (msec)
                                                             0 lines
// V Front Porch
                      = 0.020;
                                        // (msec)
                                                    =
                                                             3 lines
Ver Sync Time
                      = 0.026;
                                                             4 lines
                                        // (msec)
                                                    =
// V Back Porch
                      = 0.420;
                                        // (msec)
                                                           64 lines
                                                    =
// V Top Border
                                                             0 lines
                      = 0.000;
                                        // (msec)
```

Adopted: 10/24/04

Resolution: 1680 x 1050 at 60 Hz (non-interlaced) REDUCED BLANKING

EDID ID: DMT ID: 39h; STD 2 Byte Code: n/a; CVT 3 Byte Code: (0C, 28, 21)h

Method: CVT Reduced Blanking

# **Detailed Timing Parameters**

```
= 1680 x 1050 @ 60Hz CVT (Reduced Blanking);
Timing Name
Hor Pixels
                    = 1680:
                                       // Pixels
                                       // Lines
Ver Pixels
                     = 1050:
Hor Frequency
                     = 64.674:
                                       // kHz
                                                        15.5 usec
                                                                     / line
Ver Frequency
                     = 59.883;
                                       // Hz
                                                        16.7 msec
                                                                     / frame
Pixel Clock
                     = 119.000;
                                       // MHz
                                                         8.4 nsec
                                                                       \pm 0.5\%
                                                  =
Character Width
                     = 8:
                                       // Pixels
                                                        67.2 nsec
Scan Type
                     = NONINTERLACED:
                                                         // H Phase =
                                                                           0.9 %
                                                        8.7% of HTotal
Hor Sync Polarity
                     = POSITIVE:
                                       // HBlank =
Ver Sync Polarity
                     = NEGATIVE
                                      // VBlank
                                                        2.8% of VTotal
Hor Total Time
                     = 15.462:
                                       // (usec)
                                                         230 \text{ chars} =
                                                                         1840 Pixels
Hor Addr Time
                     = 14.118;
                                       // (usec)
                                                         210 \text{ chars} =
                                                                         1680 Pixels
Hor Blank Start
                     = 14.118;
                                       // (usec)
                                                         210 \text{ chars} =
                                                                         1680 Pixels
                                                  =
Hor Blank Time
                     = 1.345:
                                       // (usec)
                                                          20 \text{ chars} =
                                                                          160 Pixels
                                                  =
                     = 14.521;
Hor Sync Start
                                                         216 \text{ chars} =
                                                                         1728 Pixels
                                       // (usec)
// H Right Border
                     = 0.000:
                                       // (usec)
                                                  =
                                                           \mathbf{0} chars =
                                                                            0 Pixels
// H Front Porch
                     = 0.403:
                                       // (usec)
                                                           6 	ext{ chars} =
                                                                           48 Pixels
                                                  =
Hor Sync Time
                                       // (usec)
                     = 0.269:
                                                  =
                                                           4 chars =
                                                                           32 Pixels
// H Back Porch
                                                                           80 Pixels
                     = 0.672:
                                       // (usec)
                                                          10 chars =
// H Left Border
                     = 0.000;
                                       // (usec)
                                                           \mathbf{0} chars =
                                                                            0 Pixels
Ver Total Time
                     = 16.699;
                                       // (msec)
                                                        1080 lines
                                                                       HT - (1.06xHA)
                                                  =
Ver Addr Time
                     = 16.235:
                                       // (msec)
                                                        1050 lines
                                                                            = 0.5
                                                  =
                     = 16.235;
Ver Blank Start
                                       // (msec)
                                                        1050 lines
                                                  =
Ver Blank Time
                     = 0.464:
                                       // (msec)
                                                          30 lines
Ver Svnc Start
                     = 16.282:
                                       // (msec)
                                                        1053 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                  =
                                                           0 lines
// V Front Porch
                     = 0.046:
                                       // (msec)
                                                  =
                                                           3 lines
Ver Sync Time
                                                           6 lines
                     = 0.093;
                                       // (msec)
// V Back Porch
                     = 0.325;
                                       // (msec)
                                                          21 lines
                                                  =
// V Top Border
                     = 0.000:
                                                           0 lines
                                       // (msec)
```

Adopted: 10/24/04

Resolution: 1680 x 1050 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 3Ah; STD 2 Byte Code: (B3, 00)h; CVT 3 Byte Code: (0C, 28, 28)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
Timing Name
                    = 1680 \times 1050 @ 60Hz;
Hor Pixels
                    = 1680:
                                      // Pixels
Ver Pixels
                     = 1050;
                                      // Lines
                     = 65.290:
Hor Frequency
                                      // kHz
                                                        15.3 usec
                                                                    / line
Ver Frequency
                     = 59.954;
                                                        16.7 msec
                                                                    / frame
                                      // Hz
Pixel Clock
                     = 146.250;
                                      // MHz
                                                                      \pm 0.5\%
                                                         6.8 nsec
                                                  =
Character Width
                                      // Pixels
                                                       54.7 nsec
                     = 8:
Scan Type
                     = NONINTERLACED:
                                                         // H Phase =
                                                                          3.9 %
Hor Sync Polarity
                                     // HBlank = 25.0% of HTotal
                     = NEGATIVE
Ver Sync Polarity
                                      // VBlank =
                                                       3.6% of VTotal
                     = POSITIVE;
Hor Total Time
                     = 15.316;
                                      // (usec)
                                                        280 \text{ chars} =
                                                                        2240 Pixels
Hor Addr Time
                     = 11.487;
                                      // (usec)
                                                        210 \text{ chars} =
                                                                        1680 Pixels
                                                  =
Hor Blank Start
                     = 11.487:
                                      // (usec)
                                                        210 \text{ chars} =
                                                                        1680 Pixels
                                                  =
Hor Blank Time
                     = 3.829:
                                      // (usec)
                                                         70 \text{ chars} =
                                                                         560 Pixels
Hor Sync Start
                     = 12.198;
                                      // (usec)
                                                        223 chars =
                                                                        1784 Pixels
// H Right Border
                     = 0.000:
                                      // (usec)
                                                          0 chars =
                                                                           0 Pixels
                                                  =
// H Front Porch
                     = 0.711;
                                      // (usec)
                                                  =
                                                         13
                                                             chars =
                                                                         104 Pixels
Hor Sync Time
                                                         22 chars =
                     = 1.203;
                                      // (usec)
                                                  =
                                                                         176 Pixels
// H Back Porch
                     = 1.915:
                                      // (usec)
                                                         35
                                                             chars =
                                                                         280 Pixels
// H Left Border
                     = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
Ver Total Time
                     = 16.679;
                                      // (msec)
                                                       1089 lines
                                                                      HT - (1.06xHA)
                                                  =
Ver Addr Time
                     = 16.082:
                                      // (msec)
                                                       1050 lines
                                                                           = 3.14
                                                  =
Ver Blank Start
                                      // (msec)
                                                       1050 lines
                     = 16.082;
                                                  =
Ver Blank Time
                     = 0.597;
                                      // (msec)
                                                  =
                                                          39 lines
Ver Sync Start
                     = 16.128;
                                      // (msec)
                                                  =
                                                       1053 lines
// V Bottom Border
                     = 0.000:
                                      // (msec)
                                                           0 lines
                                                  =
// V Front Porch
                     = 0.046;
                                      // (msec)
                                                           3 lines
                                                  =
Ver Sync Time
                     = 0.092:
                                                          6 lines
                                      // (msec)
                                                  =
// V Back Porch
                     = 0.459:
                                                         30 lines
                                      // (msec)
                                                  =
// V Top Border
                     = 0.000;
                                                          0 lines
                                      // (msec)
                                                  =
```

Adopted: 10/24/04

Resolution: 1680 x 1050 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 3Bh; STD 2 Byte Code: (B3, 0F)h; CVT 3 Byte Code: (0C, 28, 44)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
Timing Name
                    = 1680 \times 1050 @ 75Hz;
Hor Pixels
                    = 1680:
                                      // Pixels
Ver Pixels
                    = 1050;
                                      // Lines
                    = 82.306:
Hor Frequency
                                      // kHz
                                                       12.1 usec
                                                                    / line
Ver Frequency
                    = 74.892;
                                                       13.4 msec
                                                                   / frame
                                      // Hz
Pixel Clock
                                      // MHz
                                                                      \pm 0.5\%
                    = 187.000;
                                                        5.3 nsec
                                                  =
Character Width
                                      // Pixels
                                                       42.8 nsec
                    = 8:
Scan Type
                    = NONINTERLACED:
                                                        // H Phase =
                                                                         3.9 %
                                     // HBlank = 26.1% of HTotal
Hor Sync Polarity
                    = NEGATIVE
                                                       4.5% of VTotal
Ver Sync Polarity
                                      // VBlank =
                     = POSITIVE;
Hor Total Time
                    = 12.150:
                                      // (usec)
                                                        284 chars =
                                                                       2272 Pixels
Hor Addr Time
                    = 8.984;
                                      // (usec)
                                                        210 \text{ chars} =
                                                                        1680 Pixels
Hor Blank Start
                    = 8.984:
                                      // (usec)
                                                        210 \text{ chars} =
                                                                        1680 Pixels
                                                  =
Hor Blank Time
                                                                         592 Pixels
                    = 3.166:
                                      // (usec)
                                                         74 \text{ chars} =
Hor Sync Start
                     = 9.626;
                                      // (usec)
                                                        225 chars =
                                                                        1800 Pixels
// H Right Border
                    = 0.000:
                                      // (usec)
                                                          0 chars =
                                                                           0 Pixels
                                                  =
// H Front Porch
                    = 0.642;
                                      // (usec)
                                                  =
                                                         15
                                                             chars =
                                                                         120 Pixels
Hor Sync Time
                                                            chars =
                    = 0.941;
                                      // (usec)
                                                  =
                                                         22
                                                                         176 Pixels
// H Back Porch
                    = 1.583;
                                      // (usec)
                                                         37
                                                             chars =
                                                                         296 Pixels
// H Left Border
                    = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
Ver Total Time
                    = 13.353;
                                      // (msec)
                                                       1099 lines
                                                                      HT - (1.06xHA)
                                                  =
Ver Addr Time
                    = 12.757:
                                      // (msec)
                                                       1050 lines
                                                                           = 2.63
                                                  =
Ver Blank Start
                    = 12.757;
                                      // (msec)
                                                       1050 lines
                                                  =
Ver Blank Time
                    = 0.595;
                                      // (msec)
                                                  =
                                                         49 lines
Ver Sync Start
                    = 12.794;
                                      // (msec)
                                                  =
                                                       1053 lines
// V Bottom Border
                    = 0.000:
                                      // (msec)
                                                          0 lines
                                                  =
// V Front Porch
                    = 0.036;
                                      // (msec)
                                                          3 lines
                                                  =
Ver Svnc Time
                    = 0.073:
                                                          6 lines
                                      // (msec)
                                                  =
// V Back Porch
                                                         40 lines
                    = 0.486;
                                      // (msec)
                                                  =
// V Top Border
                    = 0.000;
                                      // (msec)
                                                  =
                                                          0 lines
```

Adopted: 10/24/04

Resolution: 1680 x 1050 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 3Ch; STD 2 Byte Code: (B3, 19)h; CVT 3 Byte Code: (0C, 28, 68)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
Timing Name
                    = 1680 \times 1050 @ 85Hz;
Hor Pixels
                    = 1680:
                                      // Pixels
Ver Pixels
                                      // Lines
                     = 1050;
                     = 93.859:
Hor Frequency
                                      // kHz
                                                        10.7 usec
                                                                    / line
Ver Frequency
                     = 84.941;
                                                        11.8 msec
                                                                    / frame
                                      // Hz
Pixel Clock
                                      // MHz
                                                         4.7 nsec
                                                                      \pm 0.5\%
                     = 214.750;
                                                  =
Character Width
                                      // Pixels
                                                       37.3 nsec
                     = 8:
Scan Type
                     = NONINTERLACED:
                                                         // H Phase =
                                                                          3.8 %
                                     // HBlank = 26.6% of HTotal
Hor Sync Polarity
                     = NEGATIVE
Ver Sync Polarity
                                      // VBlank =
                                                       5.0% of VTotal
                     = POSITIVE;
Hor Total Time
                     = 10.654:
                                      // (usec)
                                                        286 chars =
                                                                        2288 Pixels
Hor Addr Time
                     = 7.823;
                                      // (usec)
                                                        210 \text{ chars} =
                                                                        1680 Pixels
                                                  =
Hor Blank Start
                     = 7.823:
                                      // (usec)
                                                        210 \text{ chars} =
                                                                        1680 Pixels
                                                  =
Hor Blank Time
                     = 2.831:
                                                                         608 Pixels
                                      // (usec)
                                                         76 \text{ chars} =
Hor Sync Start
                     = 8.419;
                                      // (usec)
                                                        226 \text{ chars} =
                                                                        1808 Pixels
// H Right Border
                     = 0.000:
                                      // (usec)
                                                          0 chars =
                                                                           0 Pixels
                                                  =
// H Front Porch
                     = 0.596;
                                      // (usec)
                                                  =
                                                         16
                                                             chars =
                                                                         128 Pixels
Hor Sync Time
                                                             chars =
                     = 0.820;
                                      // (usec)
                                                  =
                                                         22
                                                                         176 Pixels
// H Back Porch
                     = 1.416:
                                      // (usec)
                                                         38
                                                             chars =
                                                                         304 Pixels
                                                  =
// H Left Border
                     = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
                                                  =
Ver Total Time
                     = 11.773;
                                      // (msec)
                                                       1105 lines
                                                                      HT - (1.06xHA)
                                                  =
Ver Addr Time
                     = 11.187:
                                      // (msec)
                                                       1050 lines
                                                                           = 2.36
                                                  =
Ver Blank Start
                     = 11.187:
                                      // (msec)
                                                       1050 lines
                                                  =
Ver Blank Time
                     = 0.586;
                                      // (msec)
                                                  =
                                                         55 lines
Ver Sync Start
                     = 11.219;
                                      // (msec)
                                                  =
                                                       1053 lines
// V Bottom Border
                     = 0.000:
                                      // (msec)
                                                           0 lines
                                                  =
// V Front Porch
                     = 0.032;
                                      // (msec)
                                                           3 lines
                                                  =
Ver Sync Time
                                                          6 lines
                     = 0.064:
                                      // (msec)
                                                  =
// V Back Porch
                     = 0.490:
                                                         46 lines
                                      // (msec)
                                                  =
// V Top Border
                     = 0.000;
                                                          0 lines
                                      // (msec)
                                                  =
```

Adopted: 5/1/07

Resolution: 1680 x 1050 at 120 Hz (non-interlaced) REDUCED BLANKING DMT ID: 3Dh; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

#### **Detailed Timing Parameters**

```
Timing Name
                        1680 x 1050 @ 120Hz CVT (Reduced Blanking);
                     = 1680:
Hor Pixels
                                        // Pixels
Ver Pixels
                     = 1050;
                                        // Lines
Hor Frequency
                      = 133.424:
                                        // kHz
                                                           7.5 usec
                                                                       / line
Ver Frequency
                      = 119.986;
                                                           8.3 msec
                                        // Hz
                                                    =
                                                                      / frame
Pixel Clock
                      = 245.500;
                                        // MHz
                                                    =
                                                           4.1 nsec
                                                                         \pm 0.5\%
Character Width
                      = 8;
                                        // Pixels
                                                          32.6 nsec
                                                    =
                                                           // H Phase =
Scan Type
                      = NONINTERLACED;
                                                                            0.9 %
                                                         8.7% of HTotal
Hor Sync Polarity
                      = POSITIVE;
                                       // HBlank =
Ver Svnc Polarity
                      = NEGATIVE
                                       // VBlank
                                                        5.6% of VTotal
                      = 7.495:
Hor Total Time
                                        // (usec)
                                                          230 \text{ chars} =
                                                                          1840 Pixels
Hor Addr Time
                      = 6.843:
                                                                          1680 Pixels
                                        // (usec)
                                                          210 \text{ chars} =
Hor Blank Start
                     = 6.843:
                                        // (usec)
                                                          210 \text{ chars} =
                                                                          1680 Pixels
Hor Blank Time
                      = 0.652;
                                        // (usec)
                                                           20 \text{ chars} =
                                                                            160 Pixels
Hor Sync Start
                      = 7.039;
                                        // (usec)
                                                    =
                                                          216 \text{ chars} =
                                                                          1728 Pixels
// H Right Border
                      = 0.000:
                                        // (usec)
                                                    =
                                                            \mathbf{0} chars =
                                                                              0 Pixels
// H Front Porch
                      = 0.196;
                                        // (usec)
                                                             6 \text{ chars} =
                                                                             48 Pixels
                                                    =
Hor Sync Time
                      = 0.130:
                                        // (usec)
                                                               chars =
                                                                             32 Pixels
                                                    =
// H Back Porch
                                                           10 \text{ chars} =
                                                                             80 Pixels
                      = 0.326;
                                        // (usec)
                                                    =
// H Left Border
                      = 0.000:
                                        // (usec)
                                                    =
                                                             \mathbf{0} chars =
                                                                              0 Pixels
Ver Total Time
                      = 8.334:
                                        // (msec)
                                                         1112 lines
                                                                         HT - (1.06xHA)
Ver Addr Time
                      = 7.870;
                                        // (msec)
                                                         1050 lines
                                                                              = 0.24
Ver Blank Start
                      = 7.870:
                                        // (msec)
                                                         1050 lines
Ver Blank Time
                      = 0.465;
                                        // (msec)
                                                           62 lines
                                                    =
Ver Sync Start
                      = 7.892;
                                        // (msec)
                                                         1053 lines
// V Bottom Border
                     = 0.000:
                                        // (msec)
                                                    =
                                                             0 lines
// V Front Porch
                      = 0.022;
                                        // (msec)
                                                    =
                                                             3 lines
Ver Sync Time
                      = 0.045;
                                                             6 lines
                                        // (msec)
                                                    =
// V Back Porch
                      = 0.397;
                                        // (msec)
                                                           53 lines
                                                    =
// V Top Border
                      = 0.000;
                                                             0 lines
                                        // (msec)
```

Adopted: 9/17/98

Resolution: 1792 x 1344 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 3Eh; STD 2 Byte Code: (C1, 40)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

# **Detailed Timing Parameters**

```
= 1792 x 1344 @ 60 Hz
Timing Name
Hor Pixels
                    = 1792:
                                      // Pixels
Ver Pixels
                                      // Lines
                    = 1344:
Hor Frequency
                    = 83.640;
                                      // kHz
                                                        12.0 usec
                                                                    / line
                                                  =
Ver Frequency
                     = 60.000:
                                      // Hz
                                                        16.7 msec
                                                                    / frame
                    = 204.750;
                                                         4.9 nsec
                                                                       \pm 0.5\%
Pixel Clock
                                      // MHz
                                                  =
Character Width
                    = 8;
                                      // Pixels
                                                  =
                                                        39.1 nsec
Scan Type
                    = NONINTERLACED;
                                                         // H Phase =
                                                                          4.1 %
Hor Sync Polarity
                     = NEGATIVE: // HBlank = 26.8% of HTotal
Ver Sync Polarity
                     = POSITIVE:
                                      // VBlank
                                                       3.6% of VTotal
Hor Total Time
                    = 11.956;
                                      // (usec)
                                                        306 \text{ chars} =
                                                                        2448 Pixels
Hor Addr Time
                    = 8.752:
                                      // (usec)
                                                        224 chars =
                                                                        1792 Pixels
                                                  =
Hor Blank Start
                    = 8.752:
                                      // (usec)
                                                        224 chars =
                                                                        1792 Pixels
                                                  =
Hor Blank Time
                                                         82 \text{ chars} =
                                                                         656 Pixels
                    = 3.204:
                                      // (usec)
Hor Sync Start
                                                                        1920 Pixels
                    = 9.377;
                                      // (usec)
                                                  =
                                                        240 \text{ chars} =
                    = 0.000:
// H Right Border
                                                          \mathbf{0} chars =
                                      // (usec)
                                                                            0 Pixels
                                                  =
// H Front Porch
                    = 0.625;
                                      // (usec)
                                                  =
                                                         16 chars =
                                                                         128 Pixels
                                                                         200 Pixels
Hor Sync Time
                    = 0.977;
                                      // (usec)
                                                  =
                                                         25 chars =
// H Back Porch
                    = 1.602;
                                      // (usec)
                                                         41 chars =
                                                                         328 Pixels
// H Left Border
                     = 0.000;
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                            0 Pixels
                                                                       HT - (1.06xHA)
Ver Total Time
                    = 16.667;
                                      // (msec)
                                                       1394 lines
                                                  =
Ver Addr Time
                    = 16.069;
                                                       1344 lines
                                                                            = 2.68
                                      // (msec)
                                                  =
Ver Blank Start
                    = 16.069;
                                      // (msec)
                                                       1344 lines
                                                  =
Ver Blank Time
                    = 0.598:
                                                         50 lines
                                      // (msec)
Ver Sync Start
                     = 16.081;
                                      // (msec)
                                                       1345 lines
// V Bottom Border
                    = 0.000:
                                      // (msec)
                                                          0 lines
// V Front Porch
                    = 0.012:
                                      // (msec)
                                                          1 lines
                                                  =
Ver Sync Time
                    = 0.036;
                                      // (msec)
                                                          3 lines
                                                  =
// V Back Porch
                    = 0.550;
                                      // (msec)
                                                  =
                                                         46 lines
// V Top Border
                    = 0.000;
                                      // (msec)
                                                          0 lines
```

Adopted: 9/17/98

Resolution: 1792 x 1344 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 3Fh; STD 2 Byte Code: (C1, 4F)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

# **Detailed Timing Parameters**

```
Timing Name
                    = 1792 x 1344 @ 75Hz;
Hor Pixels
                    = 1792:
                                      // Pixels
Ver Pixels
                                      // Lines
                    = 1344:
                                                        9.4 usec
                                      // kHz
Hor Frequency
                    = 106.270:
                                                                   / line
                                                 =
Ver Frequency
                    = 74.997;
                                      // Hz
                                                       13.3 msec
                                                                   / frame
Pixel Clock
                    = 261.000;
                                     // MHz
                                                        3.8 nsec
                                                                     \pm 0.5\%
                                                 =
Character Width
                                                       30.7 nsec
                    = 8;
                                      // Pixels
Scan Type
                    = NONINTERLACED;
                                                        // H Phase =
                                                                        5.2 %
                    = NEGATIVE; // HBlank = 27.0% of HTotal
Hor Sync Polarity
Ver Sync Polarity
                                     // VBlank =
                                                      5.2% of VTotal
                    = POSITIVE:
Hor Total Time
                    = 9.410:
                                                       307 chars =
                                      // (usec)
                                                                       2456 Pixels
Hor Addr Time
                                                       224 chars =
                    = 6.866;
                                      // (usec)
                                                                       1792 Pixels
Hor Blank Start
                    = 6.866;
                                     // (usec)
                                                       224 chars =
                                                                       1792 Pixels
                                                 =
Hor Blank Time
                    = 2.544;
                                     // (usec)
                                                        83 chars =
                                                                        664 Pixels
                                                 =
Hor Sync Start
                    = 7.234;
                                     // (usec)
                                                       236 \text{ chars} =
                                                                       1888 Pixels
// H Right Border
                    = 0.000:
                                      // (usec)
                                                         \mathbf{0} chars =
                                                                          0 Pixels
// H Front Porch
                    = 0.368:
                                      // (usec)
                                                        12 chars =
                                                                         96 Pixels
                                                 =
                                                                        216 Pixels
Hor Svnc Time
                    = 0.828:
                                                        27
                                      // (usec)
                                                            chars =
// H Back Porch
                                                                        352 Pixels
                    = 1.349;
                                     // (usec)
                                                 =
                                                        44 chars =
// H Left Border
                    = 0.000;
                                      // (usec)
                                                         0
                                                            chars =
                                                                          0 Pixels
Ver Total Time
                    = 13.334:
                                     // (msec)
                                                      1417 lines
                                                                     HT - (1.06xHA)
Ver Addr Time
                    = 12.647;
                                      // (msec)
                                                      1344 lines
                                                                          = 2.13
                                                 =
Ver Blank Start
                    = 12.647;
                                      // (msec)
                                                      1344 lines
                                                 =
Ver Blank Time
                    = 0.687;
                                      // (msec)
                                                 =
                                                        73 lines
Ver Sync Start
                    = 12.656;
                                     // (msec)
                                                      1345 lines
                                                 =
// V Bottom Border
                    = 0.000:
                                                         0 lines
                                     // (msec)
                                                 =
// V Front Porch
                    = 0.009;
                                      // (msec)
                                                         1 lines
                                                 =
Ver Svnc Time
                    = 0.028:
                                      // (msec)
                                                 =
                                                         3 lines
// V Back Porch
                    = 0.649:
                                      // (msec)
                                                        69 lines
                                                 =
// V Top Border
                    = 0.000:
                                      // (msec)
                                                         0 lines
```

Adopted: 5/1/07

Resolution: 1792 x 1344 at 120 Hz (non-interlaced) REDUCED BLANKING DMT ID: 40h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

#### **Detailed Timing Parameters**

```
Timing Name
                     = 1792 x 1344 @ 120Hz CVT (Reduced Blanking);
Hor Pixels
                     = 1792:
                                       // Pixels
Ver Pixels
                     = 1344;
                                       // Lines
Hor Frequency
                     = 170.722:
                                       // kHz
                                                          5.9 usec
                                                                      / line
Ver Frequency
                     = 119.974;
                                                          8.3 msec
                                       // Hz
                                                   =
                                                                     / frame
Pixel Clock
                     = 333.250:
                                       // MHz
                                                   =
                                                          3.0 nsec
                                                                        \pm 0.5\%
Character Width
                     = 8;
                                       // Pixels
                                                         24.0 nsec
                                                   =
                                                                           0.8 %
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                        8.2% of HTotal
Hor Sync Polarity
                     = POSITIVE;
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                      // VBlank
                                                        5.6% of VTotal
                     = 5.857:
Hor Total Time
                                       // (usec)
                                                         244 chars =
                                                                         1952 Pixels
Hor Addr Time
                     = 5.377:
                                                                         1792 Pixels
                                       // (usec)
                                                         224 chars =
Hor Blank Start
                     = 5.377:
                                       // (usec)
                                                         224
                                                              chars =
                                                                         1792 Pixels
Hor Blank Time
                     = 0.480;
                                       // (usec)
                                                          20 \text{ chars} =
                                                                           160 Pixels
Hor Sync Start
                     = 5.521;
                                       // (usec)
                                                   =
                                                         230 \text{ chars} =
                                                                         1840 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.144;
                                       // (usec)
                                                           6 \text{ chars} =
                                                                            48 Pixels
                                                   =
Hor Sync Time
                     = 0.096;
                                       // (usec)
                                                              chars =
                                                                            32 Pixels
                                                   =
// H Back Porch
                                                          10 \text{ chars} =
                                                                            80 Pixels
                     = 0.240:
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 8.335:
                                       // (msec)
                                                        1423 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 7.872;
                                       // (msec)
                                                        1344 lines
                                                                             = 0.16
Ver Blank Start
                                                        1344 lines
                     = 7.872:
                                       // (msec)
Ver Blank Time
                     = 0.463;
                                       // (msec)
                                                          79 lines
                                                   =
Ver Sync Start
                     = 7.890;
                                       // (msec)
                                                        1347 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                            0 lines
// V Front Porch
                     = 0.018;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.023;
                                                            4 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.422;
                                       // (msec)
                                                          72 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 9/17/98

Resolution: 1856 x 1392 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 41h; STD 2 Byte Code: (C9, 40)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

# **Detailed Timing Parameters**

```
Timing Name
                    = 1856 \times 1392 \text{ at } 60 \text{Hz};
                    = 1856:
Hor Pixels
                                       // Pixels
Ver Pixels
                                       // Lines
                     = 1392;
Hor Frequency
                     = 86.333:
                                       // kHz
                                                        11.6 usec
                                                                     / line
                                                  =
Ver Frequency
                     = 59.995:
                                      // Hz
                                                        16.7 msec
                                                                    / frame
                                                                       \pm 0.5\%
Pixel Clock
                     = 218.250;
                                      // MHz
                                                         4.6 nsec
                                                  =
Character Width
                     = 8;
                                      // Pixels
                                                  =
                                                        36.7 nsec
Scan Type
                     = NONINTERLACED;
                                                         // H Phase =
                                                                          5.1 %
                     = NEGATIVE; // HBlank = 26.6% of HTotal
Hor Sync Polarity
Ver Sync Polarity
                                      // VBlank =
                                                       3.3% of VTotal
                     = POSITIVE:
Hor Total Time
                     = 11.583;
                                       // (usec)
                                                         316 \text{ chars} =
                                                                         2528 Pixels
Hor Addr Time
                     = 8.504;
                                      // (usec)
                                                         232 chars =
                                                                         1856 Pixels
Hor Blank Start
                     = 8.504:
                                      // (usec)
                                                         232 \text{ chars} =
                                                                         1856 Pixels
                                                  =
Hor Blank Time
                     = 3.079;
                                      // (usec)
                                                         84 chars =
                                                                          672 Pixels
                                                  =
Hor Sync Start
                     = 8.944:
                                      // (usec)
                                                         244 chars =
                                                                         1952 Pixels
// H Right Border
                     = 0.000:
                                      // (usec)
                                                           \mathbf{0} chars =
                                                                            0 Pixels
// H Front Porch
                     = 0.440:
                                       // (usec)
                                                          12 \text{ chars} =
                                                                           96 Pixels
                                                  =
Hor Svnc Time
                     = 1.026:
                                                          28 chars =
                                                                          224 Pixels
                                      // (usec)
                                                  =
// H Back Porch
                     = 1.613;
                                      // (usec)
                                                  =
                                                          44 chars =
                                                                          352 Pixels
// H Left Border
                     = 0.000;
                                      // (usec)
                                                           0
                                                             chars =
                                                                            0 Pixels
Ver Total Time
                     = 16.668;
                                      // (msec)
                                                       1439 lines
                                                                       HT - (1.06xHA)
Ver Addr Time
                     = 16.124;
                                      // (msec)
                                                       1392 lines
                                                                            = 2.57
                                                  =
Ver Blank Start
                     = 16.124;
                                       // (msec)
                                                       1392 lines
                                                  =
Ver Blank Time
                     = 0.544;
                                      // (msec)
                                                  =
                                                          47 lines
Ver Sync Start
                     = 16.135;
                                      // (msec)
                                                       1393 lines
                                                  =
// V Bottom Border = 0.000;
                                                           0 lines
                                      // (msec)
                                                  =
// V Front Porch
                     = 0.012;
                                      // (msec)
                                                           1 lines
                                                  =
Ver Svnc Time
                     = 0.035:
                                       // (msec)
                                                  =
                                                           3 lines
// V Back Porch
                     = 0.498:
                                       // (msec)
                                                          43 lines
                                                  =
// V Top Border
                     = 0.000:
                                       // (msec)
                                                           0 lines
```

Adopted: 9/17/98

Resolution: 1856 x 1392 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 42h; STD 2 Byte Code: (C9, 4F)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

# **Detailed Timing Parameters**

```
Timing Name
                    = 1856 x 1392 @ 75Hz;
                    = 1856:
Hor Pixels
                                      // Pixels
Ver Pixels
                                      // Lines
                    = 1392;
                    = 112.500:
Hor Frequency
                                      // kHz
                                                        8.9 usec
                                                                    / line
                                                 =
Ver Frequency
                    = 75.000;
                                      // Hz
                                                       13.3 msec
                                                                    / frame
                                                                      \pm 0.5\%
Pixel Clock
                    = 288.000;
                                      // MHz
                                                 =
                                                        3.5 nsec
Character Width
                                      // Pixels
                    = 8;
                                                       27.8 nsec
Scan Type
                    = NONINTERLACED;
                                                        // H Phase =
                                                                         4.4 %
Hor Sync Polarity
                    = NEGATIVE: // HBlank = 27.5% of HTotal
Ver Sync Polarity
                     = POSITIVE:
                                      // VBlank =
                                                      7.2% of VTotal
Hor Total Time
                    = 8.889:
                                      // (usec)
                                                        320 \text{ chars} =
                                                                       2560 Pixels
                                                 =
Hor Addr Time
                    = 6.444;
                                      // (usec)
                                                        232 chars =
                                                                        1856 Pixels
Hor Blank Start
                    = 6.444;
                                      // (usec)
                                                        232 chars =
                                                                        1856 Pixels
                                                 =
                                                         88 chars =
Hor Blank Time
                    = 2.444:
                                      // (usec)
                                                                         704 Pixels
                                                                        1984 Pixels
Hor Sync Start
                    = 6.889;
                                      // (usec)
                                                        248 \text{ chars} =
// H Right Border
                    = 0.000:
                                                          \mathbf{0} chars =
                                      // (usec)
                                                                           0 Pixels
                                                 =
// H Front Porch
                    = 0.444:
                                      // (usec)
                                                         16 chars =
                                                                         128 Pixels
                                                 =
Hor Sync Time
                    = 0.778;
                                      // (usec)
                                                 =
                                                         28 chars =
                                                                         224 Pixels
                                                         44 chars =
// H Back Porch
                    = 1.222;
                                      // (usec)
                                                 =
                                                                         352 Pixels
// H Left Border
                    = 0.000;
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
Ver Total Time
                    = 13.333;
                                                       1500 lines
                                                                      HT - (1.06xHA)
                                      // (msec)
                                                 =
Ver Addr Time
                    = 12.373;
                                      // (msec)
                                                       1392 lines
                                                                           = 2.06
Ver Blank Start
                    = 12.373;
                                      // (msec)
                                                      1392 lines
                                                 =
Ver Blank Time
                    = 0.960;
                                      // (msec)
                                                        108 lines
                                                 =
Ver Sync Start
                    = 12.382;
                                                       1393 lines
                                      // (msec)
                                                 =
// V Bottom Border
                    = 0.000;
                                                          0 lines
                                      // (msec)
                                                 =
// V Front Porch
                    = 0.009;
                                      // (msec)
                                                 =
                                                          1 lines
Ver Sync Time
                    = 0.027;
                                      // (msec)
                                                          3 lines
                                                 =
// V Back Porch
                    = 0.924:
                                      // (msec)
                                                 =
                                                        104 lines
                    = 0.000;
// V Top Border
                                      // (msec)
                                                          0 lines
```

Adopted: 5/1/07

Resolution: 1856 x 1392 at 120 Hz (non-interlaced) REDUCED BLANKING DMT ID: 43h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

#### **Detailed Timing Parameters**

```
1856 x 1392 @ 120Hz CVT (Reduced Blanking);
Timing Name
                     = 1856:
Hor Pixels
                                       // Pixels
Ver Pixels
                     = 1392;
                                       // Lines
Hor Frequency
                     = 176.835:
                                       // kHz
                                                          5.7 usec
                                                                      / line
Ver Frequency
                     = 119.970;
                                                          8.3 msec
                                       // Hz
                                                   =
                                                                     / frame
Pixel Clock
                     = 356.500:
                                       // MHz
                                                   =
                                                          2.8 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                         22.4 nsec
                     = 8;
                                                   =
                                                                           0.8 %
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
Hor Sync Polarity
                     = POSITIVE;
                                                        7.9% of HTotal
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                      // VBlank
                                                        5.6% of VTotal
                     = 5.655;
Hor Total Time
                                       // (usec)
                                                         252 chars =
                                                                         2016 Pixels
Hor Addr Time
                     = 5.206;
                                                         232 chars =
                                                                         1856 Pixels
                                       // (usec)
Hor Blank Start
                     = 5.206;
                                       // (usec)
                                                         232 \text{ chars} =
                                                                         1856 Pixels
Hor Blank Time
                     = 0.449;
                                       // (usec)
                                                          20 \text{ chars} =
                                                                           160 Pixels
Hor Sync Start
                     = 5.341;
                                       // (usec)
                                                   =
                                                         238 chars =
                                                                         1904 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.135;
                                       // (usec)
                                                           6 \text{ chars} =
                                                                            48 Pixels
                                                   =
Hor Sync Time
                     = 0.090;
                                       // (usec)
                                                              chars =
                                                                            32 Pixels
                                                   =
// H Back Porch
                     = 0.224:
                                                          10 \text{ chars} =
                                                                            80 Pixels
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 8.335:
                                       // (msec)
                                                        1474 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 7.872;
                                       // (msec)
                                                        1392 lines
                                                                             = 0.14
Ver Blank Start
                                                        1392 lines
                     = 7.872:
                                       // (msec)
Ver Blank Time
                     = 0.464;
                                       // (msec)
                                                          82 lines
                                                   =
Ver Sync Start
                     = 7.889;
                                       // (msec)
                                                        1395 lines
// V Bottom Border
                                                           0 lines
                     = 0.000:
                                       // (msec)
// V Front Porch
                     = 0.017;
                                       // (msec)
                                                   =
                                                           3 lines
Ver Sync Time
                     = 0.023;
                                                            4 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.424;
                                       // (msec)
                                                          75 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 11/17/08

Resolution: 1920 x 1080 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 52h; STD 2 Byte Code: (D1, C0)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

Per CEA-861 --- 1080p (Code 16) Timing Definition

# **Detailed Timing Parameters**

```
= 1920 x 1080 @ 60Hz;
Timing Name
Hor Pixels
                    = 1920:
                                      // Pixels
Ver Pixels
                     = 1080;
                                      // Lines
Hor Frequency
                     = 67.500;
                                      // kHz
                                                        14.8 usec
                                                                    / line
                                                  =
Ver Frequency
                     = 60.000;
                                      // Hz
                                                        16.7 msec
                                                                    / frame
Pixel Clock
                     = 148.500:
                                      // MHz
                                                         6.7 nsec
                                                                      \pm 0.5\%
                                                  =
Character Width
                                      // Pixels
                     = 4:
                                                  =
                                                        26.9 nsec
Scan Type
                     = NONINTERLACED;
                                                         // H Phase =
                                                                          1.4 %
                                                    12.7% of HTotal
Hor Sync Polarity
                     = POSITIVE
                                      // HBlank =
Ver Sync Polarity
                                      // VBlank
                                                       4.0% of VTotal
                     = POSITIVE
Hor Total Time
                     = 14.815:
                                                                        2200 Pixels
                                      // (usec)
                                                        550 chars =
Hor Addr Time
                     = 12.929;
                                      // (usec)
                                                        480 chars =
                                                                        1920 Pixels
Hor Blank Start
                     = 12.929;
                                                                        1920 Pixels
                                      // (usec)
                                                        480 chars =
                                                  =
Hor Blank Time
                     = 1.886;
                                      // (usec)
                                                         70 \text{ chars} =
                                                                         280 Pixels
Hor Sync Start
                     = 13.522;
                                      // (usec)
                                                        502 chars =
                                                                        2008 Pixels
// H Right Border
                     = 0.000:
                                                          \mathbf{0} chars =
                                      // (usec)
                                                  =
                                                                            0 Pixels
// H Front Porch
                     = 0.593:
                                      // (usec)
                                                         22 chars =
                                                                          88 Pixels
                                                  =
Hor Sync Time
                     = 0.296;
                                                         11 chars =
                                                                          44 Pixels
                                      // (usec)
// H Back Porch
                     = 0.997;
                                      // (usec)
                                                         37 chars =
                                                                         148 Pixels
// H Left Border
                                                                            0 Pixels
                     = 0.000;
                                      // (usec)
                                                  =
                                                          \mathbf{0} chars =
Ver Total Time
                                                       1125 lines
                     = 16.667;
                                      // (msec)
                                                                      HT - (1.06xHA)
Ver Addr Time
                                                       1080 lines
                     = 16.000;
                                      // (msec)
                                                                           = 1.11
                                                  =
Ver Blank Start
                     = 16.000;
                                      // (msec)
                                                       1080 lines
Ver Blank Time
                     = 0.667;
                                      // (msec)
                                                         45 lines
                                                  =
                                      // (msec)
                                                       1084 lines
Ver Sync Start
                     = 16.059:
// V Bottom Border
                    = 0.000:
                                                          0 lines
                                      // (msec)
// V Front Porch
                     = 0.059:
                                      // (msec)
                                                  =
                                                          4 lines
Ver Sync Time
                     = 0.074;
                                      // (msec)
                                                          5 lines
// V Back Porch
                     = 0.533;
                                      // (msec)
                                                         36 lines
                                                  =
// V Top Border
                     = 0.000;
                                      // (msec)
                                                  =
                                                          0 lines
```

Adopted: 8/21/03

Resolution: 1920 x 1200 at 60 Hz (non-interlaced) REDUCED BLANKING

EDID ID: DMT ID: 44h; STD 2 Byte Code: n/a; CVT 3 Byte Code: (57, 28, 21)h

Method: CVT Reduced Blanking

# **Detailed Timing Parameters**

```
1920 x 1200 @ 60Hz CVT (Reduced Blanking);
Timing Name
Hor Pixels
                     = 1920:
                                       // Pixels
Ver Pixels
                     = 1200;
                                       // Lines
Hor Frequency
                     = 74.038;
                                       // kHz
                                                         13.5 usec
                                                                      / line
Ver Frequency
                     = 59.950;
                                                         16.7 msec
                                       // Hz
                                                   =
                                                                     / frame
Pixel Clock
                     = 154.000:
                                       // MHz
                                                   =
                                                          6.5 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                         51.9 nsec
                     = 8;
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                           0.8 %
                                                        7.7% of HTotal
Hor Sync Polarity
                     = POSITIVE;
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                       // VBlank
                                                        2.8% of VTotal
Hor Total Time
                     = 13.506:
                                       // (usec)
                                                         260 chars =
                                                                         2080 Pixels
Hor Addr Time
                     = 12.468:
                                                                         1920 Pixels
                                       // (usec)
                                                         240 \text{ chars} =
Hor Blank Start
                     = 12.468:
                                       // (usec)
                                                         240 chars =
                                                                         1920 Pixels
Hor Blank Time
                     = 1.039;
                                       // (usec)
                                                          20 \text{ chars} =
                                                                           160 Pixels
Hor Sync Start
                     = 12.779;
                                       // (usec)
                                                   =
                                                         246 chars =
                                                                         1968 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.312;
                                       // (usec)
                                                            6 \text{ chars} =
                                                                            48 Pixels
                                                   =
Hor Sync Time
                     = 0.208:
                                       // (usec)
                                                            4 chars =
                                                                            32 Pixels
// H Back Porch
                                                          10 \text{ chars} =
                                                                            80 Pixels
                     = 0.519:
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 16.681:
                                       // (msec)
                                                        1235 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 16.208;
                                       // (msec)
                                                        1200 lines
                                                                             = 0.29
Ver Blank Start
                     = 16.208:
                                                        1200 lines
                                       // (msec)
Ver Blank Time
                     = 0.473;
                                       // (msec)
                                                          35 lines
                                                   =
Ver Sync Start
                     = 16.248;
                                       // (msec)
                                                        1203 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                            0 lines
// V Front Porch
                     = 0.041;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.081;
                                                            6 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.351;
                                       // (msec)
                                                          26 lines
                                                   =
// V Top Border
                     = 0.000:
                                                            0 lines
                                       // (msec)
```

Adopted: 8/21/03

Resolution: 1920 x 1200 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 45h; STD 2 Byte Code: (D1, 00)h; CVT 3 Byte Code: (57, 28, 28)h

Method: CVT Compliant

#### **Detailed Timing Parameters**

```
Timing Name
                    = 1920 \times 1200 @ 60Hz;
Hor Pixels
                     = 1920:
                                       // Pixels
Ver Pixels
                     = 1200;
                                       // Lines
Hor Frequency
                     = 74.556;
                                       // kHz
                                                        13.4 usec
                                                                     / line
Ver Frequency
                     = 59.885;
                                                        16.7 msec
                                       // Hz
                                                   =
                                                                     / frame
Pixel Clock
                     = 193.250:
                                       // MHz
                                                   =
                                                          5.2 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                        41.4 nsec
                     = 8;
                                                   =
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                           3.9 %
Hor Sync Polarity
                     = NEGATIVE // HBlank =
                                                      25.9% of HTotal
Ver Sync Polarity
                     = POSITIVE;
                                       // VBlank
                                                        3.6% of VTotal
Hor Total Time
                     = 13.413:
                                       // (usec)
                                                         324 chars =
                                                                         2592 Pixels
Hor Addr Time
                     = 9.935;
                                                                         1920 Pixels
                                       // (usec)
                                                         240 \text{ chars} =
                     = 9.935:
Hor Blank Start
                                       // (usec)
                                                         240 \text{ chars} =
                                                                         1920 Pixels
Hor Blank Time
                     = 3.477;
                                       // (usec)
                                                          84 \text{ chars} =
                                                                          672 Pixels
Hor Sync Start
                     = 10.639;
                                       // (usec)
                                                   =
                                                         257 chars =
                                                                         2056 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.704;
                                       // (usec)
                                                          17 chars =
                                                                           136 Pixels
                                                   =
Hor Sync Time
                     = 1.035:
                                       // (usec)
                                                          25 chars =
                                                                          200 Pixels
                                                   =
// H Back Porch
                     = 1.739;
                                                          42 chars =
                                                                          336 Pixels
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 16.699:
                                       // (msec)
                                                        1245 lines
                                                                       HT - (1.06xHA)
Ver Addr Time
                     = 16.095;
                                       // (msec)
                                                        1200 lines
                                                                             = 2.88
Ver Blank Start
                                                        1200 lines
                     = 16.095:
                                       // (msec)
Ver Blank Time
                     = 0.604;
                                       // (msec)
                                                          45 lines
                                                   =
Ver Sync Start
                     = 16.135;
                                       // (msec)
                                                        1203 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                           0 lines
// V Front Porch
                     = 0.040;
                                       // (msec)
                                                   =
                                                           3 lines
Ver Sync Time
                     = 0.080;
                                                           6 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.483;
                                       // (msec)
                                                          36 lines
                                                   =
// V Top Border
                     = 0.000:
                                                           0 lines
                                       // (msec)
```

Adopted: 8/21/03

Resolution: 1920 x 1200 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 46h; STD 2 Byte Code: (D1, 0F)h; CVT 3 Byte Code: (57, 28, 44)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
Timing Name
                    = 1920 \times 1200 @ 75Hz;
Hor Pixels
                     = 1920:
                                       // Pixels
Ver Pixels
                     = 1200;
                                       // Lines
Hor Frequency
                     = 94.038;
                                       // kHz
                                                        10.6 usec
                                                                     / line
Ver Frequency
                     = 74.930;
                                                        13.3 msec
                                                                     / frame
                                       // Hz
                                                   =
Pixel Clock
                     = 245.250;
                                       // MHz
                                                   =
                                                          4.1 nsec
                                                                       \pm 0.5\%
Character Width
                     = 8;
                                       // Pixels
                                                        32.6 nsec
                                                   =
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                           4.0 %
Hor Sync Polarity
                     = NEGATIVE
                                      // HBlank =
                                                      26.4% of HTotal
Ver Sync Polarity
                     = POSITIVE;
                                       // VBlank
                                                       4.4% of VTotal
Hor Total Time
                     = 10.634:
                                       // (usec)
                                                         326 \text{ chars} =
                                                                         2608 Pixels
Hor Addr Time
                     = 7.829;
                                                                         1920 Pixels
                                       // (usec)
                                                         240 \text{ chars} =
Hor Blank Start
                     = 7.829:
                                       // (usec)
                                                         240 \text{ chars} =
                                                                         1920 Pixels
Hor Blank Time
                     = 2.805;
                                       // (usec)
                                                          86 chars =
                                                                          688 Pixels
Hor Sync Start
                     = 8.383;
                                       // (usec)
                                                   =
                                                         257 chars =
                                                                         2056 Pixels
// H Right Border
                     = 0.000;
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.555;
                                       // (usec)
                                                          17 chars =
                                                                          136 Pixels
                                                   =
Hor Sync Time
                                                                          208 Pixels
                     = 0.848;
                                       // (usec)
                                                          26 chars =
                                                   =
// H Back Porch
                     = 1.403:
                                       // (usec)
                                                          43 chars =
                                                                          344 Pixels
                                                   =
// H Left Border
                     = 0.000;
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 13.346:
                                       // (msec)
                                                        1255 lines
                                                                       HT - (1.06xHA)
Ver Addr Time
                     = 12.761;
                                       // (msec)
                                                        1200 lines
                                                                             = 2.34
Ver Blank Start
                     = 12.761;
                                                        1200 lines
                                       // (msec)
Ver Blank Time
                     = 0.585;
                                       // (msec)
                                                          55 lines
                                                   =
Ver Sync Start
                     = 12.793;
                                       // (msec)
                                                        1203 lines
// V Bottom Border
                     = 0.000;
                                       // (msec)
                                                           0 lines
// V Front Porch
                     = 0.032;
                                       // (msec)
                                                   =
                                                           3 lines
Ver Sync Time
                     = 0.064;
                                                           6 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.489;
                                       // (msec)
                                                          46 lines
                                                   =
// V Top Border
                     = 0.000;
                                                           0 lines
                                       // (msec)
```

Adopted: 8/21/03

Resolution: 1920 x 1200 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 47h; STD 2 Byte Code: (D1, 19)h; CVT 3 Byte Code: (57, 28, 62)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
Timing Name
                     = 1920 \times 1200 @ 85Hz;
Hor Pixels
                     = 1920:
                                       // Pixels
Ver Pixels
                     = 1200;
                                       // Lines
                                                                      / line
Hor Frequency
                     = 107.184:
                                       // kHz
                                                          9.3 usec
Ver Frequency
                     = 84.932;
                                                         11.8 msec
                                                                     / frame
                                       // Hz
                                                   =
Pixel Clock
                     = 281.250:
                                       // MHz
                                                   =
                                                          3.6 nsec
                                                                        \pm 0.5\%
Character Width
                     = 8;
                                       // Pixels
                                                         28.4 nsec
                                                   =
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                           4.0 %
Hor Sync Polarity
                     = NEGATIVE // HBlank =
                                                      26.8% of HTotal
Ver Sync Polarity
                     = POSITIVE;
                                       // VBlank
                                                        4.9% of VTotal
                     = 9.330;
Hor Total Time
                                       // (usec)
                                                         328 \text{ chars} =
                                                                         2624 Pixels
Hor Addr Time
                     = 6.827:
                                                                         1920 Pixels
                                       // (usec)
                                                         240 \text{ chars} =
Hor Blank Start
                     = 6.827:
                                       // (usec)
                                                         240 \text{ chars} =
                                                                         1920 Pixels
Hor Blank Time
                     = 2.503;
                                       // (usec)
                                                          88 \text{ chars} =
                                                                           704 Pixels
Hor Sync Start
                     = 7.339;
                                       // (usec)
                                                   =
                                                         258 chars =
                                                                         2064 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.512;
                                       // (usec)
                                                           18 chars =
                                                                           144 Pixels
                                                   =
Hor Sync Time
                     = 0.740;
                                                                           208 Pixels
                                       // (usec)
                                                           26 chars =
                                                   =
// H Back Porch
                                                           44 chars =
                                                                           352 Pixels
                     = 1.252:
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 11.774:
                                       // (msec)
                                                        1262 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 11.196;
                                       // (msec)
                                                        1200 lines
                                                                             = 2.09
Ver Blank Start
                                                        1200 lines
                     = 11.196:
                                       // (msec)
Ver Blank Time
                     = 0.578;
                                       // (msec)
                                                           62 lines
                                                   =
Ver Sync Start
                     = 11.224;
                                       // (msec)
                                                        1203 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                   =
                                                            0 lines
// V Front Porch
                     = 0.028;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.056;
                                                            6 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.494;
                                       // (msec)
                                                           53 lines
                                                   =
// V Top Border
                     = 0.000:
                                                            0 lines
                                       // (msec)
```

Adopted: 5/1/07

Resolution: 1920 x 1200 at 120 Hz (non-interlaced) REDUCED BLANKING DMT ID: 48h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

# **Detailed Timing Parameters**

```
1920 x 1200 @ 120Hz CVT (Reduced Blanking);
Timing Name
                     = 1920:
Hor Pixels
                                       // Pixels
Ver Pixels
                     = 1200;
                                       // Lines
Hor Frequency
                     = 152.404:
                                       // kHz
                                                          6.6 usec
                                                                      / line
Ver Frequency
                     = 119.909;
                                                          8.3 msec
                                       // Hz
                                                   =
                                                                     / frame
Pixel Clock
                     = 317.000:
                                       // MHz
                                                   =
                                                          3.2 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                         25.2 nsec
                     = 8;
                                                   =
                                                                           0.8 %
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
Hor Sync Polarity
                     = POSITIVE;
                                                        7.7% of HTotal
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                       // VBlank
                                                        5.6% of VTotal
                     = 6.562:
Hor Total Time
                                       // (usec)
                                                         260 chars =
                                                                         2080 Pixels
Hor Addr Time
                                                                         1920 Pixels
                     = 6.057:
                                       // (usec)
                                                         240 \text{ chars} =
Hor Blank Start
                     = 6.057:
                                       // (usec)
                                                         240 chars =
                                                                         1920 Pixels
Hor Blank Time
                     = 0.505;
                                       // (usec)
                                                          20 \text{ chars} =
                                                                           160 Pixels
Hor Sync Start
                     = 6.208;
                                       // (usec)
                                                   =
                                                         246 chars =
                                                                         1968 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.151;
                                       // (usec)
                                                            6 \text{ chars} =
                                                                            48 Pixels
                                                   =
Hor Sync Time
                     = 0.101:
                                       // (usec)
                                                              chars =
                                                                            32 Pixels
// H Back Porch
                     = 0.252:
                                                          10 \text{ chars} =
                                                                            80 Pixels
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 8.340:
                                       // (msec)
                                                        1271 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 7.874;
                                       // (msec)
                                                        1200 lines
                                                                             = 0.14
Ver Blank Start
                     = 7.874:
                                                        1200 lines
                                       // (msec)
Ver Blank Time
                     = 0.466;
                                       // (msec)
                                                          71 lines
                                                   =
Ver Sync Start
                                                        1203 lines
                     = 7.894;
                                       // (msec)
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                            0 lines
// V Front Porch
                     = 0.020;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.039;
                                                            6 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.407;
                                       // (msec)
                                                          62 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 9/17/98

Resolution: 1920 x 1440 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 49h; STD 2 Byte Code: (D1, 40)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

# **Detailed Timing Parameters**

```
= 1920 x 1440 @ 60Hz;
Timing Name
Hor Pixels
                    = 1920:
                                      // Pixels
Ver Pixels
                                      // Lines
                    = 1440;
                     = 90.000:
                                      // kHz
Hor Frequency
                                                        11.1 usec
                                                                    / line
                                                  =
Ver Frequency
                     = 60.000:
                                      // Hz
                                                        16.7 msec
                                                                    / frame
Pixel Clock
                    = 234.000;
                                      // MHz
                                                         4.3 nsec
                                                                       \pm 0.5\%
                                                  =
Character Width
                    = 8;
                                      // Pixels
                                                  =
                                                        34.2 nsec
Scan Type
                     = NONINTERLACED;
                                                         // H Phase =
                                                                          4.2 %
                    = NEGATIVE; // HBlank = 26.2% of HTotal
Hor Sync Polarity
Ver Sync Polarity
                                      // VBlank =
                     = POSITIVE:
                                                      4.0% of VTotal
Hor Total Time
                                                        325 chars =
                    = 11.111;
                                      // (usec)
                                                                        2600 Pixels
Hor Addr Time
                    = 8.205;
                                      // (usec)
                                                        240 \text{ chars} =
                                                                        1920 Pixels
Hor Blank Start
                    = 8.205:
                                      // (usec)
                                                        240 \text{ chars} =
                                                                        1920 Pixels
                                                  =
Hor Blank Time
                    = 2.906;
                                      // (usec)
                                                         85 \text{ chars} =
                                                                         680 Pixels
                                                  =
Hor Sync Start
                     = 8.752;
                                      // (usec)
                                                        256 \text{ chars} =
                                                                        2048 Pixels
// H Right Border
                     = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                            0 Pixels
// H Front Porch
                    = 0.547:
                                      // (usec)
                                                         16 chars =
                                                                         128 Pixels
                                                  =
                                                                         208 Pixels
Hor Svnc Time
                    = 0.889:
                                                         26 chars =
                                      // (usec)
                                                  =
// H Back Porch
                                                                         344 Pixels
                    = 1.470;
                                      // (usec)
                                                  =
                                                         43 chars =
// H Left Border
                     = 0.000;
                                      // (usec)
                                                          0
                                                             chars =
                                                                           0 Pixels
Ver Total Time
                     = 16.667:
                                      // (msec)
                                                       1500 lines
                                                                      HT - (1.06xHA)
                                                  =
Ver Addr Time
                     = 16.000;
                                      // (msec)
                                                       1440 lines
                                                                           = 2.41
                                                  =
Ver Blank Start
                    = 16.000;
                                      // (msec)
                                                       1440 lines
                                                  =
Ver Blank Time
                                                         60 lines
                    = 0.667;
                                      // (msec)
                                                  =
Ver Sync Start
                    = 16.011;
                                      // (msec)
                                                       1441 lines
                                                  =
// V Bottom Border
                    = 0.000:
                                                          0 lines
                                      // (msec)
                                                  =
// V Front Porch
                    = 0.011;
                                      // (msec)
                                                           1 lines
                                                  =
Ver Svnc Time
                    = 0.033:
                                      // (msec)
                                                  =
                                                          3 lines
// V Back Porch
                    = 0.622:
                                      // (msec)
                                                         56 lines
                                                  =
// V Top Border
                     = 0.000:
                                      // (msec)
                                                          0 lines
```

Adopted: 9/17/98

Resolution: 1920 x 1440 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 4Ah; STD 2 Byte Code: (D1, 4F)h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

# **Detailed Timing Parameters**

```
Timing Name
                    = 1920 \times 1440 @ 75Hz;
                                     // Pixels
Hor Pixels
                    = 1920:
Ver Pixels
                                     // Lines
                    = 1440:
                    = 112.500;
                                     // kHz
Hor Frequency
                                                       8.9 usec
                                                                   / line
                                                 =
Ver Frequency
                    = 75.000;
                                     // Hz
                                                 =
                                                      13.3 msec
                                                                  / frame
Pixel Clock
                    = 297.000;
                                     // MHz
                                                 =
                                                       3.4 nsec
                                                                     \pm 0.5\%
Character Width
                    = 8;
                                     // Pixels
                                                      26.9 nsec
Scan Type
                                                       // H Phase =
                                                                        3.9 %
                    = NONINTERLACED;
Hor Sync Polarity
                    = NEGATIVE // HBlank = 27.3% of HTotal
Ver Sync Polarity
                    = POSITIVE;
                                     // VBlank =
                                                     4.0% of VTotal
Hor Total Time
                    = 8.889;
                                                       330 \text{ chars} =
                                                                      2640 Pixels
                                     // (usec)
Hor Addr Time
                                                                      1920 Pixels
                    = 6.465:
                                     // (usec)
                                                       240 chars =
Hor Blank Start
                    = 6.465;
                                     // (usec)
                                                 =
                                                       240 chars =
                                                                      1920 Pixels
Hor Blank Time
                    = 2.424;
                                     // (usec)
                                                        90 \text{ chars} =
                                                                       720 Pixels
                                                 =
                                                                      2064 Pixels
Hor Sync Start
                    = 6.949;
                                     // (usec)
                                                       258 chars =
                                                 =
// H Right Border
                                                         \mathbf{0} chars =
                    = 0.000;
                                     // (usec)
                                                                          0 Pixels
                                                 =
// H Front Porch
                    = 0.485:
                                     // (usec)
                                                        18 chars =
                                                                        144 Pixels
                                                 =
Hor Sync Time
                    = 0.754;
                                     // (usec)
                                                        28
                                                           chars =
                                                                       224 Pixels
                                                 =
// H Back Porch
                                                        44 chars =
                                                                       352 Pixels
                    = 1.185;
                                     // (usec)
                                                 =
                                                         \mathbf{0} chars =
// H Left Border
                    = 0.000;
                                     // (usec)
                                                                          0 Pixels
Ver Total Time
                                                                     HT - (1.06xHA)
                    = 13.333:
                                     // (msec)
                                                      1500 lines
                    = 12.800:
Ver Addr Time
                                     // (msec)
                                                      1440 lines
                                                                          = 2.04
Ver Blank Start
                    = 12.800;
                                                      1440 lines
                                     // (msec)
Ver Blank Time
                    = 0.533;
                                     // (msec)
                                                 =
                                                        60 lines
Ver Sync Start
                    = 12.809:
                                     // (msec)
                                                      1441 lines
// V Bottom Border = 0.000:
                                     // (msec)
                                                         0 lines
// V Front Porch
                    = 0.009:
                                     // (msec)
                                                         1 lines
                                                 =
Ver Svnc Time
                    = 0.027:
                                     // (msec)
                                                 =
                                                         3 lines
// V Back Porch
                    = 0.498;
                                     // (msec)
                                                 =
                                                        56 lines
// V Top Border
                    = 0.000;
                                                         0 lines
                                     // (msec)
```

Adopted: 5/1/07

Resolution: 1920 x 1440 at 120 Hz (non-interlaced) REDUCED BLANKING DMT ID: 4Bh; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

#### **Detailed Timing Parameters**

```
Timing Name
                        1920 x 1440 @ 120Hz CVT (Reduced Blanking);
Hor Pixels
                     = 1920:
                                       // Pixels
Ver Pixels
                     = 1440;
                                       // Lines
Hor Frequency
                     = 182.933:
                                       // kHz
                                                          5.5 usec
                                                                      / line
Ver Frequency
                     = 119.956;
                                                          8.3 msec
                                       // Hz
                                                   =
                                                                     / frame
Pixel Clock
                     = 380.500;
                                       // MHz
                                                   =
                                                          2.6 nsec
                                                                        \pm 0.5\%
Character Width
                                       // Pixels
                                                         21.0 nsec
                     = 8;
                                                   =
                                                                           0.8 %
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
Hor Sync Polarity
                     = POSITIVE;
                                                        7.7% of HTotal
                                       // HBlank =
Ver Svnc Polarity
                     = NEGATIVE
                                       // VBlank
                                                        5.6% of VTotal
                     = 5.466;
Hor Total Time
                                       // (usec)
                                                         260 chars =
                                                                         2080 Pixels
Hor Addr Time
                     = 5.046;
                                                                         1920 Pixels
                                       // (usec)
                                                         240 \text{ chars} =
Hor Blank Start
                     = 5.046:
                                       // (usec)
                                                         240 chars =
                                                                         1920 Pixels
Hor Blank Time
                     = 0.420;
                                       // (usec)
                                                          20 \text{ chars} =
                                                                           160 Pixels
Hor Sync Start
                     = 5.172;
                                       // (usec)
                                                   =
                                                         246 chars =
                                                                         1968 Pixels
// H Right Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                           \mathbf{0} chars =
                                                                             0 Pixels
// H Front Porch
                     = 0.126;
                                       // (usec)
                                                            6 \text{ chars} =
                                                                            48 Pixels
                                                   =
Hor Sync Time
                     = 0.084:
                                       // (usec)
                                                              chars =
                                                                            32 Pixels
// H Back Porch
                                                          10 \text{ chars} =
                                                                            80 Pixels
                     = 0.210:
                                       // (usec)
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                             0 Pixels
Ver Total Time
                     = 8.336:
                                       // (msec)
                                                        1525 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 7.872;
                                       // (msec)
                                                        1440 lines
                                                                             = 0.12
Ver Blank Start
                                                        1440 lines
                     = 7.872;
                                       // (msec)
Ver Blank Time
                     = 0.465;
                                       // (msec)
                                                          85 lines
                                                   =
Ver Sync Start
                     = 7.888;
                                       // (msec)
                                                        1443 lines
// V Bottom Border
                     = 0.000:
                                       // (msec)
                                                            0 lines
// V Front Porch
                     = 0.016;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.022;
                                                            4 lines
                                       // (msec)
// V Back Porch
                     = 0.426;
                                       // (msec)
                                                          78 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000;
                                       // (msec)
```

Adopted: 11/17/08

Resolution: 2048 x 1152 at 60 Hz (non-interlaced) REDUCED BLANKING EDID ID: DMT ID: 54h; STD 2 Byte Code: E1h, C0h; CVT 3 Byte Code: n/a

Method: \*\*\* NOT CVT COMPLIANT \*\*\*

**Detailed Timing Parameters** 

```
Timing Name
                       2048 x 1152 @ 60Hz;
Hor Pixels
                    = 2048:
                                       // Pixels
Ver Pixels
                     = 1152:
                                       // Lines
Hor Frequency
                     = 72.000:
                                       // KHz
                                                                     / line
                                                        13.9 usec
Ver Frequency
                     = 60.000;
                                       // Hz
                                                        16.7 msec
                                                                    / frame
                                                  =
Pixel Clock
                                                                       \pm 0.5\%
                     = 162.000;
                                       // MHz
                                                         6.2 nsec
Character Width
                                       // Pixels
                                                         6.2 nsec
                     = 1;
                                                  =
Scan Type
                     = NONINTERLACED;
                                                         // H Phase =
                                                                           1.6 %
                                                       9.0% of HTotal
Hor Sync Polarity
                     = POSITIVE;
                                       // HBlank =
Ver Svnc Polarity
                     = POSITIVE:
                                      // VBlank
                                                       4.0% of VTotal
Hor Total Time
                     = 13.889:
                                       // (usec)
                                                       2250 \text{ chars} =
                                                                         2250 Pixels
                                                  =
Hor Addr Time
                     = 12.642;
                                       // (usec)
                                                       2048 \text{ chars} =
                                                                         2048 Pixels
Hor Blank Start
                     = 12.642:
                                       // (usec)
                                                       2048 \text{ chars} =
                                                                         2048 Pixels
Hor Blank Time
                     = 1.247;
                                       // (usec)
                                                  =
                                                         202 \text{ chars} =
                                                                          202 Pixels
Hor Sync Start
                     = 12.802:
                                       // (usec)
                                                       2074 chars =
                                                                         2074 Pixels
// H Right Border
                                                           \mathbf{0} chars =
                     = 0.000:
                                       // (usec)
                                                                            0 Pixels
                                                  =
// H Front Porch
                     = 0.160:
                                       // (usec)
                                                          26 chars =
                                                                           26 Pixels
                                                  =
Hor Sync Time
                     = 0.494:
                                       // (usec)
                                                  =
                                                          80 chars =
                                                                           80 Pixels
// H Back Porch
                     = 0.593;
                                       // (usec)
                                                          96 chars =
                                                                           96 Pixels
                                                  =
                                                                            0 Pixels
// H Left Border
                     = 0.000:
                                       // (usec)
                                                           \mathbf{0} chars =
Ver Total Time
                                                       1200 lines
                                                                       HT - (1.06xHA)
                     = 16.667:
                                       // (msec)
                                                  =
Ver Addr Time
                                                       1152 lines
                                                                            = 0.49
                     = 16.000;
                                       // (msec)
                                                  =
Ver Blank Start
                     = 16.000;
                                       // (msec)
                                                  =
                                                        1152 lines
Ver Blank Time
                     = 0.667;
                                       // (msec)
                                                          48 lines
                                                  =
Ver Sync Start
                     = 16.014:
                                       // (msec)
                                                        1153 lines
// V Bottom Border
                     = 0.000;
                                       // (msec)
                                                           0 lines
// V Front Porch
                     = 0.014:
                                       // (msec)
                                                           1 lines
                                                  =
Ver Sync Time
                     = 0.042:
                                       // (msec)
                                                  =
                                                           3 lines
// V Back Porch
                     = 0.611;
                                       // (msec)
                                                          44 lines
                                                  =
// V Top Border
                     = 0.000:
                                       // (msec)
                                                           0 lines
                                                  =
```

Adopted: 5/1/07

Resolution: 2560 x 1600 at 60 Hz (non-interlaced) REDUCED BLANKING

EDID ID: DMT ID: 4Ch; STD 2 Byte Code: n/a; CVT 3 Byte Code: (1F, 38, 21)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
Timing Name
                    = 2560 x 1600 @ 60Hz CVT (Reduced Blanking);
                    = 2560:
Hor Pixels
                                      // Pixels
Ver Pixels
                                      // Lines
                    = 1600;
                    = 98.713:
                                      // kHz
Hor Frequency
                                                        10.1 usec
                                                                    / line
                                                  =
Ver Frequency
                     = 59.972;
                                      // Hz
                                                        16.7 msec
                                                                    / frame
Pixel Clock
                     = 268.500;
                                      // MHz
                                                         3.7 nsec
                                                                       \pm 0.5\%
                                                  =
Character Width
                    = 8;
                                      // Pixels
                                                        29.8 nsec
Scan Type
                     = NONINTERLACED;
                                                         // H Phase =
                                                                          0.6 %
Hor Sync Polarity
                                      // HBlank =
                                                       5.9% of HTotal
                    = POSITIVE;
Ver Sync Polarity
                     = NEGATIVE: // VBlank =
                                                       2.8% of VTotal
Hor Total Time
                    = 10.130;
                                      // (usec)
                                                         340 \text{ chars} =
                                                                        2720 Pixels
Hor Addr Time
                    = 9.534;
                                      // (usec)
                                                         320 \text{ chars} =
                                                                        2560 Pixels
Hor Blank Start
                    = 9.534;
                                      // (usec)
                                                        320 \text{ chars} =
                                                                        2560 Pixels
                                                  =
Hor Blank Time
                    = 0.596;
                                      // (usec)
                                                         20 \text{ chars} =
                                                                         160 Pixels
                                                  =
Hor Sync Start
                     = 9.713:
                                      // (usec)
                                                         326 chars =
                                                                        2608 Pixels
// H Right Border
                     = 0.000:
                                      // (usec)
                                                           \mathbf{0} chars =
                                                                            0 Pixels
// H Front Porch
                    = 0.179:
                                      // (usec)
                                                           6 \text{ chars} =
                                                                           48 Pixels
                                                  =
Hor Svnc Time
                                                                           32 Pixels
                    = 0.119:
                                      // (usec)
                                                           4 chars =
// H Back Porch
                    = 0.298;
                                                                           80 Pixels
                                      // (usec)
                                                  =
                                                         10 chars =
// H Left Border
                     = 0.000;
                                      // (usec)
                                                           0
                                                             chars =
                                                                            0 Pixels
Ver Total Time
                     = 16.675:
                                      // (msec)
                                                       1646 lines
                                                                       HT - (1.06xHA)
Ver Addr Time
                    = 16.209;
                                      // (msec)
                                                       1600 lines
                                                                            = 0.02
                                                  =
Ver Blank Start
                    = 16.209;
                                      // (msec)
                                                       1600 lines
                                                  =
Ver Blank Time
                                                          46 lines
                    = 0.466;
                                      // (msec)
                                                  =
Ver Sync Start
                    = 16.239;
                                      // (msec)
                                                       1603 lines
                                                  =
// V Bottom Border
                    = 0.000:
                                                           0 lines
                                      // (msec)
                                                  =
// V Front Porch
                    = 0.030;
                                      // (msec)
                                                           3 lines
                                                  =
Ver Svnc Time
                    = 0.061:
                                      // (msec)
                                                  =
                                                           6 lines
// V Back Porch
                    = 0.375:
                                      // (msec)
                                                          37 lines
                                                  =
// V Top Border
                     = 0.000:
                                      // (msec)
                                                           0 lines
```

Adopted: 5/1/07

Resolution: 2560 x 1600 at 60 Hz (non-interlaced)

EDID ID: DMT ID: 4Dh; STD 2 Byte Code: n/a; CVT 3 Byte Code: (1F, 38, 28)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
Timing Name
                    = 2560 x 1600 @ 60Hz;
                    = 2560:
Hor Pixels
                                      // Pixels
Ver Pixels
                                      // Lines
                    = 1600;
                    = 99.458;
Hor Frequency
                                      // kHz
                                                       10.1 usec
                                                                    / line
Ver Frequency
                    = 59.987;
                                      // Hz
                                                       16.7 msec
                                                                    / frame
Pixel Clock
                    = 348.500;
                                      // MHz
                                                        2.9 nsec
                                                                      \pm 0.5\%
                                                 =
Character Width
                    = 8;
                                      // Pixels
                                                       23.0 nsec
Scan Type
                    = NONINTERLACED;
                                                        // H Phase =
                                                                         4.0 %
Hor Sync Polarity
                                     // HBlank = 26.9% of HTotal
                    = NEGATIVE
Ver Sync Polarity
                                      // VBlank =
                                                      3.5% of VTotal
                    = POSITIVE:
Hor Total Time
                    = 10.055;
                                      // (usec)
                                                        438 chars =
                                                                       3504 Pixels
Hor Addr Time
                    = 7.346;
                                      // (usec)
                                                        320 \text{ chars} =
                                                                       2560 Pixels
Hor Blank Start
                    = 7.346;
                                      // (usec)
                                                        320 \text{ chars} =
                                                                       2560 Pixels
                                                 =
Hor Blank Time
                    = 2.709;
                                      // (usec)
                                                        118 chars =
                                                                         944 Pixels
                                                 =
Hor Sync Start
                    = 7.897;
                                      // (usec)
                                                        344
                                                             chars =
                                                                       2752 Pixels
// H Right Border
                    = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
// H Front Porch
                    = 0.551:
                                      // (usec)
                                                         24 chars =
                                                                         192 Pixels
                                                 =
                                                                         280 Pixels
Hor Svnc Time
                    = 0.803:
                                                         35
                                                            chars =
                                      // (usec)
                                                                         472 Pixels
// H Back Porch
                    = 1.354;
                                      // (usec)
                                                 =
                                                         59 chars =
// H Left Border
                    = 0.000;
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
Ver Total Time
                    = 16.670:
                                      // (msec)
                                                       1658 lines
                                                                      HT - (1.06xHA)
                                                 =
Ver Addr Time
                    = 16.087;
                                      // (msec)
                                                       1600 lines
                                                                           = 2.27
                                                 =
Ver Blank Start
                    = 16.087;
                                      // (msec)
                                                       1600 lines
                                                 =
Ver Blank Time
                    = 0.583;
                                      // (msec)
                                                 =
                                                         58 lines
Ver Sync Start
                    = 16.117;
                                      // (msec)
                                                       1603 lines
                                                 =
// V Bottom Border
                    = 0.000:
                                                          0 lines
                                      // (msec)
                                                 =
// V Front Porch
                    = 0.030;
                                      // (msec)
                                                          3 lines
                                                 =
Ver Svnc Time
                    = 0.060:
                                      // (msec)
                                                 =
                                                          6 lines
// V Back Porch
                    = 0.493:
                                      // (msec)
                                                         49 lines
                                                 =
// V Top Border
                    = 0.000:
                                      // (msec)
                                                          0 lines
```

Adopted: 5/1/07

Resolution: 2560 x 1600 at 75 Hz (non-interlaced)

EDID ID: DMT ID: 4Eh; STD 2 Byte Code: n/a; CVT 3 Byte Code: (1F, 38, 44)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
= 2560 x 1600 @ 75Hz;
Timing Name
                    = 2560:
Hor Pixels
                                      // Pixels
Ver Pixels
                                      // Lines
                    = 1600;
                    = 125.354:
Hor Frequency
                                      // kHz
                                                        8.0 usec
                                                                   / line
                                                 =
Ver Frequency
                    = 74.972;
                                      // Hz
                                                       13.3 msec
                                                                   / frame
Pixel Clock
                    = 443.250;
                                      // MHz
                                                        2.3 nsec
                                                                      \pm 0.5\%
                                                 =
Character Width
                    = 8;
                                      // Pixels
                                                       18.0 nsec
Scan Type
                    = NONINTERLACED;
                                                        // H Phase =
                                                                         4.0 %
Hor Sync Polarity
                                     // HBlank = 27.6% of HTotal
                    = NEGATIVE
Ver Sync Polarity
                                                      4.3% of VTotal
                                      // VBlank =
                    = POSITIVE:
Hor Total Time
                    = 7.977;
                                                        442 chars =
                                      // (usec)
                                                                       3536 Pixels
Hor Addr Time
                                                        320 chars =
                    = 5.776;
                                      // (usec)
                                                                       2560 Pixels
Hor Blank Start
                    = 5.776;
                                      // (usec)
                                                        320 \text{ chars} =
                                                                       2560 Pixels
                                                 =
Hor Blank Time
                    = 2.202;
                                      // (usec)
                                                        122 chars =
                                                                        976 Pixels
                                                 =
Hor Sync Start
                    = 6.245;
                                      // (usec)
                                                        346 \text{ chars} =
                                                                       2768 Pixels
// H Right Border
                    = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
// H Front Porch
                    = 0.469:
                                      // (usec)
                                                         26 chars =
                                                                        208 Pixels
                                                 =
                                                                        280 Pixels
Hor Svnc Time
                    = 0.632:
                                                         35
                                      // (usec)
                                                            chars =
// H Back Porch
                                                                        488 Pixels
                    = 1.101;
                                      // (usec)
                                                 =
                                                         61 chars =
// H Left Border
                    = 0.000;
                                      // (usec)
                                                          0
                                                            chars =
                                                                           0 Pixels
Ver Total Time
                    = 13.338:
                                      // (msec)
                                                      1672 lines
                                                                      HT - (1.06xHA)
                                                 =
Ver Addr Time
                    = 12.764;
                                      // (msec)
                                                      1600 lines
                                                                           = 1.86
                                                 =
Ver Blank Start
                    = 12.764;
                                      // (msec)
                                                      1600 lines
                                                 =
Ver Blank Time
                    = 0.574;
                                      // (msec)
                                                 =
                                                         72 lines
Ver Sync Start
                    = 12.788;
                                      // (msec)
                                                      1603 lines
                                                 =
// V Bottom Border
                    = 0.000:
                                                          0 lines
                                      // (msec)
                                                 =
// V Front Porch
                    = 0.024;
                                      // (msec)
                                                          3 lines
                                                 =
Ver Svnc Time
                    = 0.048:
                                      // (msec)
                                                 =
                                                          6 lines
// V Back Porch
                    = 0.503:
                                      // (msec)
                                                         63 lines
                                                 =
// V Top Border
                    = 0.000:
                                      // (msec)
                                                          0 lines
```

Adopted: 5/1/07

Resolution: 2560 x 1600 at 85 Hz (non-interlaced)

EDID ID: DMT ID: 4Fh; STD 2 Byte Code: n/a; CVT 3 Byte Code: (1F, 38, 62)h

Method: CVT Compliant

# **Detailed Timing Parameters**

```
Timing Name
                    = 2560 x 1600 @ 85Hz;
                    = 2560:
Hor Pixels
                                      // Pixels
Ver Pixels
                    = 1600;
                                      // Lines
                                                        7.0 usec
Hor Frequency
                    = 142.887:
                                      // kHz
                                                                   / line
                                                 =
Ver Frequency
                    = 84.951:
                                      // Hz
                                                       11.8 msec
                                                                   / frame
Pixel Clock
                    = 505.250;
                                      // MHz
                                                        2.0 nsec
                                                                      \pm 0.5\%
                                                 =
Character Width
                                      // Pixels
                    = 8;
                                                 =
                                                       15.8 nsec
Scan Type
                    = NONINTERLACED;
                                                        // H Phase =
                                                                         4.0 %
Hor Sync Polarity
                                     // HBlank = 27.6% of HTotal
                    = NEGATIVE
Ver Sync Polarity
                                      // VBlank =
                                                      4.9% of VTotal
                    = POSITIVE:
Hor Total Time
                    = 6.999:
                                      // (usec)
                                                        442 chars =
                                                                       3536 Pixels
Hor Addr Time
                                                        320 chars =
                    = 5.067;
                                      // (usec)
                                                                       2560 Pixels
Hor Blank Start
                    = 5.067:
                                      // (usec)
                                                        320 \text{ chars} =
                                                                       2560 Pixels
                                                 =
Hor Blank Time
                    = 1.932;
                                      // (usec)
                                                        122 chars =
                                                                        976 Pixels
                                                 =
Hor Sync Start
                    = 5.478;
                                      // (usec)
                                                        346 \text{ chars} =
                                                                       2768 Pixels
// H Right Border
                    = 0.000:
                                      // (usec)
                                                          \mathbf{0} chars =
                                                                           0 Pixels
// H Front Porch
                    = 0.412:
                                      // (usec)
                                                         26 chars =
                                                                        208 Pixels
                                                 =
                                                                        280 Pixels
Hor Svnc Time
                                                         35 chars =
                    = 0.554:
                                      // (usec)
                                                 =
// H Back Porch
                                                                        488 Pixels
                    = 0.966;
                                      // (usec)
                                                 =
                                                         61 chars =
// H Left Border
                    = 0.000;
                                      // (usec)
                                                          0
                                                            chars =
                                                                           0 Pixels
Ver Total Time
                    = 11.772;
                                      // (msec)
                                                      1682 lines
                                                                      HT - (1.06xHA)
                                                 =
Ver Addr Time
                    = 11.198;
                                      // (msec)
                                                      1600 lines
                                                                           = 1.63
                                                 =
Ver Blank Start
                    = 11.198;
                                      // (msec)
                                                      1600 lines
                                                 =
Ver Blank Time
                    = 0.574;
                                      // (msec)
                                                 =
                                                         82 lines
Ver Sync Start
                    = 11.219;
                                      // (msec)
                                                      1603 lines
                                                 =
// V Bottom Border
                    = 0.000:
                                                          0 lines
                                      // (msec)
                                                 =
// V Front Porch
                    = 0.021;
                                      // (msec)
                                                          3 lines
                                                 =
Ver Svnc Time
                    = 0.042:
                                      // (msec)
                                                 =
                                                          6 lines
// V Back Porch
                    = 0.511:
                                      // (msec)
                                                         73 lines
                                                 =
// V Top Border
                    = 0.000:
                                      // (msec)
                                                          0 lines
```

Adopted: 5/1/07

Resolution: 2560 x 1600 at 120 Hz (non-interlaced) REDUCED BLANKING DMT ID: 50h; STD 2 Byte Code: n/a; CVT 3 Byte Code: n/a

Method: Generated using CVT (Reduced Blanking) Formula

#### **Detailed Timing Parameters**

```
2560 x 1600 @ 120Hz CVT (Reduced Blanking);
Timing Name
                     = 2560:
Hor Pixels
                                       // Pixels
Ver Pixels
                     = 1600;
                                       // Lines
Hor Frequency
                     = 203.217:
                                       // kHz
                                                          4.9 usec
                                                                      / line
Ver Frequency
                     = 119.963;
                                                          8.3 msec
                                       // Hz
                                                   =
                                                                      / frame
Pixel Clock
                     = 552.750:
                                       // MHz
                                                   =
                                                          1.8 nsec
                                                                         \pm 0.5\%
Character Width
                                       // Pixels
                                                         14.5 nsec
                     = 8;
                                                   =
Scan Type
                     = NONINTERLACED;
                                                          // H Phase =
                                                                            0.6 %
Hor Sync Polarity
                     = POSITIVE;
                                                        5.9% of HTotal
                                       // HBlank =
Ver Sync Polarity
                     = NEGATIVE
                                       // VBlank
                                                        5.5% of VTotal
                     = 4.921:
Hor Total Time
                                       // (usec)
                                                          340 \text{ chars} =
                                                                          2720 Pixels
Hor Addr Time
                     = 4.631:
                                                                          2560 Pixels
                                       // (usec)
                                                          320 \text{ chars} =
                     = 4.631:
Hor Blank Start
                                       // (usec)
                                                          320 \text{ chars} =
                                                                          2560 Pixels
Hor Blank Time
                     = 0.289;
                                       // (usec)
                                                           20 \text{ chars} =
                                                                           160 Pixels
Hor Sync Start
                     = 4.718;
                                       // (usec)
                                                   =
                                                          326 \text{ chars} =
                                                                          2608 Pixels
// H Right Border
                     = 0.000;
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                              0 Pixels
// H Front Porch
                     = 0.087;
                                       // (usec)
                                                            6 \text{ chars} =
                                                                             48 Pixels
                                                   =
Hor Sync Time
                     = 0.058:
                                       // (usec)
                                                               chars =
                                                                             32 Pixels
                                                   =
// H Back Porch
                                                                             80 Pixels
                     = 0.145:
                                       // (usec)
                                                           10 chars =
                                                   =
// H Left Border
                     = 0.000:
                                       // (usec)
                                                   =
                                                            \mathbf{0} chars =
                                                                              0 Pixels
Ver Total Time
                     = 8.336:
                                       // (msec)
                                                         1694 lines
                                                                        HT - (1.06xHA)
Ver Addr Time
                     = 7.873;
                                       // (msec)
                                                         1600 lines
                                                                              = 0.01
Ver Blank Start
                                                         1600 lines
                     = 7.873:
                                       // (msec)
                                                           94 lines
Ver Blank Time
                     = 0.463;
                                       // (msec)
                                                   =
Ver Sync Start
                     = 7.888;
                                       // (msec)
                                                         1603 lines
// V Bottom Border
                                                            0 lines
                     = 0.000:
                                       // (msec)
// V Front Porch
                     = 0.015;
                                       // (msec)
                                                   =
                                                            3 lines
Ver Sync Time
                     = 0.030;
                                                            6 lines
                                       // (msec)
                                                   =
// V Back Porch
                     = 0.418;
                                       // (msec)
                                                           85 lines
                                                   =
// V Top Border
                                                            0 lines
                     = 0.000;
                                        // (msec)
```