

VGA 640 x 480 @ 60 Hz pixel clock 25.175 MHz

	Horizontal Timing (pixels)	Vertical Timing (lines)
Visible area	640	480
Front porch	16	10
Sync pulse	96	2
Back porch	48	33
Whole line/frame	800	525

SXGA 1280 x 1024 @ 60 Hz pixel clock 108.0 MHz

	Horizontal Timing (pixels)	Vertical Timing (lines)
Visible area	1280	1024
Front porch	48	1
Sync pulse	112	3
Back porch	248	38
Whole line/frame	1688	1066

SVGA 800 x 600 @ 60 Hz pixel clock 40.0 MHz

	Horizontal Timing (pixels)	Vertical Timing (lines)
Visible area	800	600
Front porch	40	1
Sync pulse	128	4
Back porch	88	23
Whole line/frame	1056	628

UXGA 1600 x 1200 @ 60 Hz pixel clock 162.0 MHz

	Horizontal Timing (pixels)	Vertical Timing (lines)
Visible area	1600	1200
Front porch	64	1
Sync pulse	192	3
Back porch	304	46
Whole line/frame	2160	1250

XGA 1024 x 768 @ 60 Hz pixel clock 65.0 MHz

	Horizontal Timing (pixels)	Vertical Timing (lines)
Visible area	1024	768
Front porch	24	3
Sync pulse	136	6
Back porch	160	29
Whole line/frame	1344	806

WUXGA 1920 x 1200 @ 60 Hz pixel clock 193.16 MHz

	Horizontal Timing (pixels)	Vertical Timing (lines)
Visible area	1920	1200
Front porch	128	1
Sync pulse	208	3
Back porch	336	38
Whole line/frame	2592	1242

VESA 1280 x 960 @ 60 Hz pixel clock 102.1 MHz

	Horizontal Timing (pixels)	Vertical Timing (lines)
Visible area	1280	960
Front porch	80	1
Sync pulse	136	3
Back porch	216	30
Whole line/frame	1712	994

HD 720p (1280 x 720) @ 60Hz pixel clock 74.25 MHz

	Horizontal Timing (pixels)	Vertical Timing (lines)
Visible area	1280	720
Front porch	110	5
Sync pulse	40	5
Back porch	220	20
Whole line/frame	1650	750

VESA 1440 x 900 @ 60 Hz pixel clock 106.47 MHz

	Horizontal Timing (pixels)	Vertical Timing (lines)
Visible area	1440	900
Front porch	80	1
Sync pulse	152	3
Back porch	232	28
Whole line/frame	1904	932

HD 1080p (1920 x 1080) @ 60Hz pixel clock 148.25 MHz

	Horizontal Timing (pixels)	Vertical Timing (lines)
Visible area	1920	1080
Front porch	88	4
Sync pulse	44	5
Back porch	148	36
Whole line/frame	2200	1125

Notes

These video resolutions and respective timing parameters have been tested and are known working on the following LCD and LCD high-definition flat panel displays:

HPVS17E
DELL™ SE198WFP
DELL™ ST2210

Zipcores gives no guarantees that these timing parameters will work for all display types.

Revision History

Revision	Change description	Date
1.0	Initial revision	05/10/2010
1.1	Added HD video formats	23/08/2011
1.2	Tested older VESA formats with HP flat-panel	21/01/2013