



Clock Timing Calculator for MIPI Panels

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CONTENTS

1	Disclaimer	1
2	Clock Timing Calculator for MIPI Panels	2

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CLOCK TIMING CALCULATOR FOR MIPI PANELS

MIPI Screen Properties	Input Values
Horizontal Active Area (HACT) in pixels	480
Horizontal Back Porch (HBP) in pixels	50
Horizontal Front Porch (HFP) in pixels	50
Horizontal Sync Active (HSA) in pixels	10
Vertical Active Area (VACT) in lines	800
Vertical Back Porch (VBP) in lines	24
Vertical Front Porch (VFP) in lines	24
Vertical Sync Active (VSA) in lines	10
Device Output Frame Rate	60
Output Format Type (output_format_t)	24
Number of lanes used	2
MIPI Tx Output Mode	1

MIPI Device Properties	Output Values
Video Packet Size (vid_pkt_size)	480
Number of Pixels in HSA (vid_hsa_pixels)	10
Number of Pixels in HBP (vid_hbp_pixels)	50
Number of Pixels in HFP (vid_hfp_pixels)	50
Total Number of Pixels in a Line (vid_hline_pixels)	590
Number of Lines in VSA (vid_vsa_lines)	10
Number of Lines in VBP (vid_vbp_lines)	24
Number of Lines in VFP (vid_vfp_lines)	24
Number of Lines in VACT (vid_active_lines)	800
Physical Data Rate (phy_data_rate in Mbps)	365
Pixel Clock (pixel_clk in kHz)	30374
Unit Interval (UI in ns)	1.369863014
Time per HSA Interval (tHSA in microseconds)	0.164383562
Time per HBP Interval (tHBP in microseconds)	0.821917808
Time per HFP Interval (tHFP in microseconds)	0.821917808
Time per HACT Interval (tHACT in microseconds)	7.890410959

