



- Option for Protocol Analyzer, when paired with the eDP 1.4a option is capable of eDP1.4a protocol analysis
- **Applicable Model:** BF7264 PRO Bus Finder
- The embedded DisplayPort (eDP) 1.4a enables a higher video data transfer rate for increased panel resolution, greater color depth and higher refresh rates, incorporating VESA Display Stream Compression (DSC) Standard v1.1 and new segmented panel architecture that enables higher panel integration. These and other refinements were made to take advantage of higher GPU video performance and new display technologies, while also enabling reduced system power and form factor
- Primarily used in embedded display applications, such as laptops, tablets and all-in-one computers for connecting internal displays to the graphics output. Key applications include high-resolution displays with high refresh rates (up to 8K), power efficiency, and features like Display Stream Compression (DSC) and Panel Self Refresh (PSR)
- eDP1.4a Way Station support;
 - ✓ eDP 1.4a up to 5.4Gbps, 4 Lanes
 - ✓ Data Filter removes dummy, video data, filling S/E to save memory
 - ✓ Display eDP image data including RGB, YCbCr, format or compressed DSC packets
 - ✓ eDP command statistics include numbers of packets, individual command, different data length and errors
 - ✓ eDP command trigger
- 32Gb RAM as buffer to stream eDP data into SSD HD to record data flow from Low Power to High-Speed Mode

SOFTWARE:

- Display eDP1.4a protocol packet data in table format, including DP Aux Ch command analysis

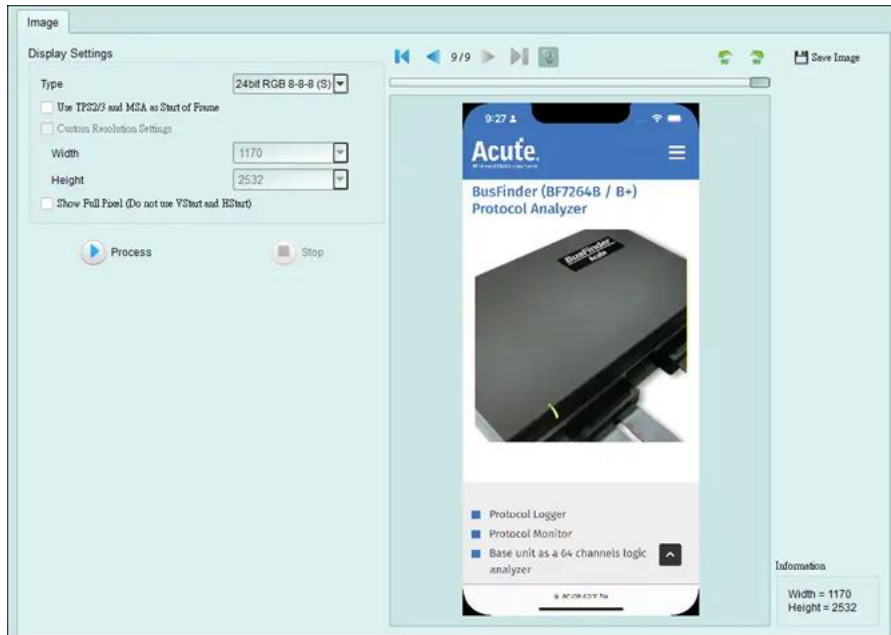
Timestamp (h:m:s.us.ns.dsr)	Type	Lane0	Lane1	Lane2	Lane3	Timestamp (h:m:s.us.ns.dsr)	VMC	Command	Description	Description
14:59:03.655.788.371.173.0	Blanking Start	[S] SF BF BS	[S] SF BF BS	[S] SF BF BS	[S] SF BF BS	14:59:03.622.049.236.000.00			{E-0}SYMBOL_ERROR_COUNT_L	
14:59:03.655.789.289.022.0	DP Data	10 54 02 ...	10 54 02 ...	10 54 02 ...	10 54 02 ...	14:59:03.622.049.236.000.00			{T}SYMBOL_ERROR_COUNT_LAN	Valid
14:59:03.655.789.405.019.0	Dummy(Ch0)					14:59:03.622.049.236.000.00			0021b SYMBOL_ERROR_COUNT_LA	
14:59:03.655.789.509.105.0	Blanking End	[SE]	[SE]	[SE]	[SE]	14:59:03.622.049.236.000.00			{T-0}SYMBOL_ERROR_COUNT_L	
14:59:03.655.789.509.000.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.622.049.236.000.00			0021b SYMBOL_ERROR_COUNT_LA	
14:59:03.655.789.721.004.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.622.049.236.000.00			{T}SYMBOL_ERROR_COUNT_LAN	Valid
14:59:03.655.789.825.200.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.622.049.236.000.00			{E-0}SYMBOL_ERROR_COUNT_L	
14:59:03.655.789.938.013.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.622.049.236.000.00			{T-0}SYMBOL_ERROR_COUNT_L	
14:59:03.655.789.139.199.0	Frame1	[FP FE]	[FP FE]	[FP FE]	[FP FE]	14:59:03.622.049.236.000.00			0021b SYMBOL_ERROR_COUNT_LAN	Valid
14:59:03.655.789.139.004.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.622.049.236.000.00			{T}SYMBOL_ERROR_COUNT_LAN	Valid
14:59:03.655.789.131.022.0	Frame1	[FP FE]	[FP FE]	[FP FE]	[FP FE]	14:59:03.622.049.236.000.00			{E-0}SYMBOL_ERROR_COUNT_L	
14:59:03.655.789.364.200.0	Frame1	[FP FE]	[FP FE]	[FP FE]	[FP FE]	14:59:03.622.049.236.000.00			0021b SYMBOL_ERROR_COUNT_LAN	Valid
14:59:03.655.789.364.004.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.622.049.236.000.00			{T}SYMBOL_ERROR_COUNT_LAN	Valid
14:59:03.655.789.364.199.0	Frame1	[FP FE]	[FP FE]	[FP FE]	[FP FE]	14:59:03.622.049.236.000.00			{E-0}SYMBOL_ERROR_COUNT_L	
14:59:03.655.789.561.013.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.622.049.236.000.00			0021b SYMBOL_ERROR_COUNT_LA	
14:59:03.655.789.704.200.0	Frame1	[FP FE]	[FP FE]	[FP FE]	[FP FE]	14:59:03.622.049.236.000.00			{E-0}SYMBOL_ERROR_COUNT_L	
14:59:03.655.789.704.022.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.622.049.236.000.00			{T}SYMBOL_ERROR_COUNT_LAN	He valid
14:59:03.655.789.990.199.0	Frame1	[FP FE]	[FP FE]	[FP FE]	[FP FE]	14:59:03.622.049.236.000.00				
14:59:03.655.790.011.013.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.622.049.236.000.00				
14:59:03.655.790.221.200.0	Frame1	[FP FE]	[FP FE]	[FP FE]	[FP FE]	14:59:03.648.762.027.022.81		Request Native Read (9)		
14:59:03.655.790.225.004.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.648.762.027.022.81		Reply ACK ACK		
14:59:03.655.790.420.199.0	Frame1	[FP FE]	[FP FE]	[FP FE]	[FP FE]	14:59:03.648.831.047.000.00				
14:59:03.655.790.441.022.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.648.831.047.000.00			0001b DEVICE_SERVICE_IRQ_V	
14:59:03.655.790.444.200.0	Frame1	[FP FE]	[FP FE]	[FP FE]	[FP FE]	14:59:03.648.831.047.000.00				
14:59:03.655.790.450.013.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.648.831.047.000.00			{1}SYMBOL_ERROR_COUNT_L	
14:59:03.655.790.454.200.0	Frame1	[FP FE]	[FP FE]	[FP FE]	[FP FE]	14:59:03.648.831.047.000.00			{2}ICP_IRQ: 0	
14:59:03.655.790.454.004.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.648.831.047.000.00			{3}INCC_IRQ: 0	
14:59:03.655.790.471.004.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.648.831.047.000.00			{4}IDMOP_DEF_IRQ_RDY: 0	
14:59:03.655.791.074.200.0	Frame1	[FP FE]	[FP FE]	[FP FE]	[FP FE]	14:59:03.648.831.047.000.00			{5}IDP_IRQ_RDY: 0	
14:59:03.655.791.089.022.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.648.831.047.000.00			{6}IDMOP_SPECIFIC_IRQ: 0	
14:59:03.655.791.161.173.0	Blanking Start	[S] SF BF BS	[S] SF BF BS	[S] SF BF BS	[S] SF BF BS	14:59:03.649.130.040.00.30		Request Native Read (9)		
14:59:03.655.791.274.013.0	DP Data	10 54 02 ...	10 54 02 ...	10 54 02 ...	10 54 02 ...	14:59:03.649.204.870.049.02		Reply ACK ACK		
14:59:03.655.791.274.010.0	Dummy(Ch0)					14:59:03.649.204.870.000.00			0001b Firmware/Software Ver.	
14:59:03.655.791.404.105.0	Blanking End	[SE]	[SE]	[SE]	[SE]	14:59:03.649.204.870.000.00			{3}SET_DP_DEVICE_DP_PWR_L	
14:59:03.655.791.404.000.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.649.204.870.000.00			{4}SET_DP_DEVICE_DP_PWR_L	
14:59:03.655.791.411.200.0	Frame1	[FP FE]	[FP FE]	[FP FE]	[FP FE]	14:59:03.649.204.870.000.00			{1}SET_DP_DEVICE_DP_PWR_L	
14:59:03.655.791.418.004.0	Frame1	00 00 00 ...	00 00 00 ...	00 00 00 ...	00 00 00 ...	14:59:03.649.312.046.007.67		Request Native Write L		
14:59:03.655.791.621.200.0	Frame1	[FP FE]	[FP FE]	[FP FE]	[FP FE]	14:59:03.649.389.615.077.06		Reply ACK ACK		

- eDP Lane Skew display and statistics:

Timestamp (h:m:s.us.ns.dsr)	Type	Lane0	Lane1	Lane2	Lane3
10:12:16.976.750.808.0 (Ma...	Lane Skew	+3	+1	+0	

Statistics	Trns	Bytes
▼ Lane0		
+0	0	
+1	1	
+2	7	
+3	2	
+4	0	
>= +5	0	
▼ Lane1		
+0	0	
+1	8	
+2	2	
+3	0	
+4	0	
>= +5	0	
▼ Lane2		
+0	10	
+1	0	
+2	0	
+3	0	
+4	0	
>= +5	0	

- Display eDP image data including RGB, YCbCr, format or compressed DSC packets:



- eDP command trigger, can trigger external oscilloscopes synchronously:

