UFG-04 DP
DisplayPort™ frame grabber

Full Featured DisplayPort Receiver

UFG-04 DP frame grabber enables the capture of full resolution DP image content with up to 12 bits per color depth and resolution up to WQXGA (2560 x 1600). The on-board video memory enables the capture of frame-to-frame video clips regardless of the PC bus bottlenecks.

DisplayPort™ Reference Sink

Unigraf DisplayPort™ Reference Sink realised with UFG-04 DP board is an optimum solution for testing DisplayPort™ 1.1 Source devices. It implements the full requirements set in DisplayPort™ specification and supports all required display modes. Options include e.g. Link Layer and HDCP Compliance testing features.

With the native software library the application designer can effectively integrate the UFG-04 as a part of their system. By integration of the UFG-04 with Unigraf’s VTG-5000 series video pattern generators the user can create an unique combination of most advanced video testing system available.

Benefits

- Full featured DisplayPort™ Receiver
- Certified for DP LL CTS testing
- Up to WQXGA (2560 x 1600)
- Up to 12 bits per color depth
- Up to 500 frames on-board capture
- User programmable EDID for emulation of any monitor model
- Sustained PCIe bus data transfer speed up to 140 MBytes/s

Options:
- DisplayPort™ Link Layer CTS test
- DisplayPort™ HDCP CTS test
Video Interface Test

Test the output quality of your video input board within seconds. Measure each of the millions of pixels reliably every time. Analyze any test images with the accuracy that your quality criteria demands. Review each individual result in detail and include the long term trends into your quality reports.

Unigraf’s unique Video Input Board Test System consists of a Unigraf VTG video pattern source and a Unigraf UFG frame grabber. The combination provides flexible tools for creation of test functions and sequences to meet your video board testing needs. For more information, contact your local representative or send us an email at sales@unigraf.fi.

Options (Preliminary)

Option L  DisplayPort™ Link Layer CTS, VESA DP Compliance Test Standard suite
Option H  DisplayPort™-HDCP Compliance Test Specification suite

Specifications

- **DisplayPort™ input**: DisplayPort™ connector
- **Color spaces**: RGB or YUV
- **Capture Pixel Depth**: 24, 30 or 36 bits per pixel
  - (36 bits only YUV)
- **Resolutions**: All VESA DMT/CVT and CEA 861-D timings up to WQXGA (RB) 60 Hz (2560x1600)
- **Link bandwidth**: 10.8 Gbps over 4 lanes
- **Number of lanes**: 1, 2 or 4 Main Link lanes
- **EDID**: User programmable
- **Frame buffer**: 2 GBytes
- **Capture modes**: Last frame, every n:th frame, frame-to-frame buffer save.
- **Capturing preview**: Preview window on control monitor
- **Audio**: Currently not supported
- **Data Interface**: PCIe™ bus master; sustained transfer rate up to 140 MBytes/s.
- **Operating Systems**: Windows® XP
- **SW Interface**: Custom C/C++ library with functions for accessing the configuration parameters and capturing the image.
- **Multi-board Support**:
  - **Module Size**: 107 x 168 mm
  - **Power Consumption**: 10 Watts

UFG-04 DP
DisplayPort™ frame grabber

Output Signal
D.U.T.
Video Quality Software

UFG-04 Frame Grabber

www.unigraf.fi