Digiteq Automotive

FrameGrabber 4

MultiBox

The FrameGrabber 4 MultiBox is a standalone video grabbing solution from the FrameGrabbers family. It allows capturing multiple video streams from various LVDS buses and directly from in-car displays. By integrating a powerful ARM based video processing platform, it delivers a new level of performance for video grabbing.

FrameGrabber 4 MultiBox is part of Digiteq Automotive FrameGrabber 4 (FG4) modular ecosystem. It is powerful, standalone and versatile solution not only for video applications. It is the best choice for laboratory applications thanks to its scalability.

Multiple FG4 PCIe Cards (sold separately) can be inserted into the device, which brings capability for grabbing of multiple video streams together with generating of multiple video outputs.

Captured video streams can be transmitted via 1 Gbit Ethernet as TCP/UDP stream to a remote PC or stored locally to either an internal SSD drive or a Memory Card.

The device supports H.264 and H.265 video coding and RGB or YUV colour coding for video that is stored locally and/or transmitted via Ethernet to a PC.

FrameGrabber 4 MultiBox offers a wide range of triggered events. GPIO pins and the CAN-FD input can be used as trigger sources with the ability to assign various events to each trigger, such as start/stop capturing, entering sleep mode, etc.

CAN-FD inputs are used not only as the sources of trigger, but also full CAN-FD communication can be captured and re-streamed via 1 Gbit Ethernet as a TCP stream.

The User Web Interface is used for configuring the FrameGrabber 4 MultiBox. It allows an advanced configuration of video input and output parameters, network and storage settings as well as the trigger subsystem.



Key features

- Video stream grabbing compatible with the majority of VW Group infotainment systems
- FPD-Link III and GMSL2/3 LVDS systems used in the VW Group are supported
- Various in-car displays grabbing adaptors are available
- ✓ Up to five FG4 PCIe Cards to be installed
- Multiple GMSL2/3 or FPD-Link III video line inputs (based on number of installed FG4 PCIe Cards)
- Multiple GMSL2/3 or FPD-Link III video line outputs (based on number of installed FG4 PCIe Cards)
- 1 Gbit Ethernet connection for real-time transfer of captured video streams
- ✓ H.264 and H.265 video coding
- ✓ RGB and YUV colour coding
- CAN-FD communication capture
- CAN-FD triggers
- ✓ GPIO triggers
- Storage of captured data on an internal 500 GB SSD and/or Memory Card
- ✓ Easy configuration via User Web Interface



Available interfaces

- > PCI-Express 2.0 x4 for FG4 PCIe Card
- > 1 Gbit Ethernet
- > Internal SATA (500GB SSD included)
- > CAN-FD input

- > GPIO triggers
- > CAN-FD triggers
- > Memory Card slot
- > HDMI

Accessories

- > FG4 PCIe Card
- > FG4 PCIe GMSL 2/3 Interface Module
- > FG4 PCIe FPD-Link III Interface Module
- > Various in-car displays grabbing interface adaptors
- > Power adaptor for ICE cars

Technical parameters

| Number of PCIe Slots | 5 |
|--------------------------------------|---------------------------------------|
| Number of Gbit Ethernets | 1 |
| Number of Internal SSD Drives | 1 |
| Number of SD Card Slots | 1 |
| Number of HDMI Interfaces | 1 |
| Number of GPIO Trigger Inputs | 2 |
| Number of GPIO Outputs | 1 |
| Number of CAN-FD Trigger Inputs | 2 |
| User swappable PCIe Cards | YES |
| PCIe specification | PCI-Express 2.0 x4 |
| PCIe slots Power | PCIe power specification (10W / slot) |
| Input power | 9 – 30 V DC |
| Operating temperature | 0° C to 70° C |
| Dimensions (W \times D \times H) | 153 x 245 x 178 mm |
| Weight | 2,64 kg (without PCIe cards) |
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