PROTON-VGRAB

Hybrid Data Recorder/Player

Analog Video   CAN x5
FPD-Link II LVDS

Applications

Car spotlight control unit development/verification

Infotainment system development/verification

CAN bus networks   **Hardware in the Loop element**

LVDS raw data analysis/debugging

PROTON-VGRAB is a hybrid data recorder/player easily integrable in rough field automotive and industrial applications using CAN bus networks and FPD-Link II LVDS channels where optical supervision is needed for data analisys and system behaviour verification.
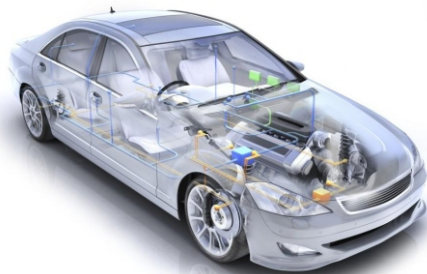
In the field

Powered by a nominal 12VDC, logs continously or on trigger event 5 different CAN bus channels, 1 Analog video input and a National Semiconductor LVDS 1Gbps datastream into a 320GB solid state storage module. Measurement session configuration files are stored in the embedded non volatile memory so the user can recall/select different setups without the need of an extra portable computer. It includes visualisation functionality on user interface display of analog video input signal.

In the lab

PROTON-VGRAB integrates a player functionality that allows to reproduce the same field environment in the laboratory by means of driving all 5 CAN channels and the FPD-Link II LVDS transmitter with their corresponding recorded data stream, and the DVI out with the recorded analog video along with statistics on the CAN bus activity and graphical representation (monochrome icons) of user defined CAN signals.

It can be used as a stand alone visualisation and verification tool connected to a DVI monitor, or linked to common PC applications for more complex data analysis.

PROTON-VGRAB Hybrid Data Recorder/Player

*"PROTON-VGRAB is a variant of **PROTONV2-3M07**, a powerful and versatile digital signal processing platform that is a perfect starting point for developing customer specific applications"*

Features

- 5 Channel CAN Data logger. Default configuration 3 high speed channels + 2 low speed channels.
- LVDS raw-data logger, 24 bits per LVDS clock.
- During recording sessions LVDS is configured in transparent mode, TX drives same clock and data as in RX input channel.
- Analog video logger (Luminance from Composite or components)
- 1us resolution time stamping on logging channels.
- CAN data player (Bus-Simulation).
- Raw-data LVDS player.
- Trigger-controlled data recording with configurable pre and post-trigger.
- Embedded GUI.
- Integrated flash-based mass storage modules with 1Gb/s R/W data rate with 320GBytes capacity.
- S-Video/Composite analog camera connection.
- Output of S-Video analog signal on the RGB or DVI standard outputs.
- Three types of trigger signals : USB mouse right click, user interface push button and CAN message.
- Up to ten different/parallel user programmable FPGA-based CAN signal decoder blocks.
- Monochrome 100x100 pixel ICON assigned to every CAN signal allows easy recognition of CAN bus events during data playing and recording.

APIX Module Available

Specifications

Architecture
32bit ARM processor + 2xFPGA

CAN
5 CAN channels, CAN bus 2.0A/B interface.

Ethernet
10/100 Base-T, Shielded RJ-45 1,5kV isolation transformer Ethernet IEEE 802-3, 802-2

USB
1.1 Full speed host

LVDS
Fully programmable NATIONAL Semiconductors LVDS channels DS90UR241/DS90UR124 with digitally controlled pre-emphasis set up.

DVI
Up to 1280x1024 24bpp output

Analog video
Composite, component and S-Video integrated decoder (PAL/NTSC/SECAM) 10 bit resolution @86 Mhz sampling rate

NonVolatile Memory
320GB Solid State storage

Pretrigger Memory
900MB SDRAM

User Interface
Embedded 320x240 TFT display and rotary encoders

Power Supply
8-24VDC, MAX 20W.

Dimensions
90mmx170mmx180mm.

Contact