ValueLOG

Affordable Vehicle Interface & Data Logger

The ValueLOG is the next-generation, low-cost, high-performance data logging device for CAN FD and LIN networks. The ValueLOG includes Ethernet (DoIP), four channels of CAN FD (Including SW CAN) and LIN in one tool. All channels run simultaneously and are time-stamped in hardware.

Applications

- Standalone data logger
- Standalone ECU or vehicle simulator
- In-vehicle data acquisition system
- Captive test fleet data collection
- Fleet management
- Vehicle interface with J2534 and RP1210

Features

- Up to 4x CAN FD
- Up to 1x SW CAN
- Up to 1x LIN / K-Line
- Up to 1x Ethernet (100BASE-T1 for DoIP, switchable for 2x CAN FD network)
- 32GB eMMC storage
- External GPS antenna support for collecting locations during data logging sessions
- General purpose engineering tool for OBDII, enabling a wide array of applications such as data logging, simulation and gatewaying
- Optional Unique configurable OBD II pinout through neoVI Universal Connector (NUC) architecture (optional)
- 9-axis Inertial Measurement Unit
- RTC with battery
- Optional 9-axis Inertial Measurement Unit
- Optional RTC with battery

Stand-Alone Logging, Scripting, Reflashing and Simulation

In addition to working as a PC interface, the ValueLOG can log vehicle data in stand-alone mode. It can run real-time scripts, log data to internal flash memory, and simulate ECUs and gateways. These features also make it possible to run a script to reflash ECUs using data from flash memory.

Vehicle Spy Application Software

Intrepid's Vehicle Spy software fully supports the ValueLOG. With Vehicle Spy, users can monitor and transmit on all ValueLOG networks simultaneously. Vehicle Spy is required to configure stand-alone scripts and data logging. Users can take advantage of the powerful interface to load databases and to write and debug scripts before downloading them to the device.

The Power of Scripting – CoreMini

If you need to support a proprietary protocol, set up a simulation to run in parallel with the data logger, or any other custom action, the system offers a scripting environment for you to expand the base functionality to fit your unique needs. This makes the entire system very flexible and adaptable.

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Device Specifications

- Low power consumption
- Power supply: 4.5-40V operation
- Four full-color status LEDs
- Temperature range: -40°C to +85°C
- Vehicle connectors: 16-pin OBD 2 male
- One-year limited warranty
- Field-upgradeable flash firmware
- Microsoft-certified USB drivers
- High speed (480 Mbits/sec) USB interface
- Stand-alone mode support, including scripting, receive messages, transmit messages, expressions, I/O and transport layers
- J2534 and RP1210 A/B compatible for CAN/ISO15765-2:2016 (CAN FD)
- On board 32 GB flash storage
- Battery-backed real time clock (RTC)

Timing Specifications

- 64-bit timestamping to an accuracy of 25 nanoseconds on CAN FD networks and 10 microseconds on LIN networks with no overflow
- Accuracy of 0.5 microseconds possible if using only one network
- Simultaneous operation on all CAN/LIN networks
- Transmit message double-buffering on all networks, allowing back-to-back message transmission

Network Specifications – CAN

- 4x ISO CAN FD channels implemented using the industry standard Bosch MCAN CAN FD core
- CAN 2.0B compatible for all CAN networks
- 4 dedicated ISO11898-2:2015 Dual Wire CAN FD physical layers (MCP2562FD)
- 1 dedicated Single Wire CAN physical layer GMW3089 / SAEJ2411 (MC33897)
- Up to 1 Mb/s software-selectable baud rate for arbitration phase (auto baud capable)
- Up to 8 Mb/s software-selectable baud rate for data phase (auto baud capable)
- Listen-only mode support
- Single Wire High Speed Mode, Test Tool Resistor, and High Voltage Wakeup support

Network Specifications – LIN

- Up to 1x LIN (Local Interconnect Network)
- Full support for LIN 1.X, 2.X and J2602
- LIN J2602 / 2.X compatible physical layer
- Software-enabled 1K LIN Master Resistor per channel
- LIN Bus Monitor Mode identifies errors: Sync Break Error State and Length, Sync Wave Error, Message ID parity, TFrameMax/Slave Not Responding, Checksum Error and Transmit Bit Errors
- LIN Bus Master Mode operates at same time as LIN Bus Monitor
- LIN Bus Slave simulation, with or without an LDF file
- LIN Bus hardware schedule table with support for LIN diagnostics
- Initialization Waveforms, including Fast Init, Five Baud, and Custom
- Software-selectable baud rate
- DoIP / XCP / Automotive Ethernet 10/100 Ethernet PHY with low-power mode Compatible with 100BASE-T1 / BroadR-Reach® using Intrepid RAD-Moon media converter accessory Software-controlled DoIP activation line

* Specifications subject to change. Please contact Intrepid for the latest information.

Ordering Information

Part Number	Description
ValueLOG	ValueLOG device

INTREPID
CONTROL SYSTEMS
www.intrepidcs.com

1850 Research Drive
Troy, MI 48083 USA
Phone: +1 (586) 731-7950
Fax: +1 (586) 731-2274

automotive engineering tool alliance

www.aeta-rice.com