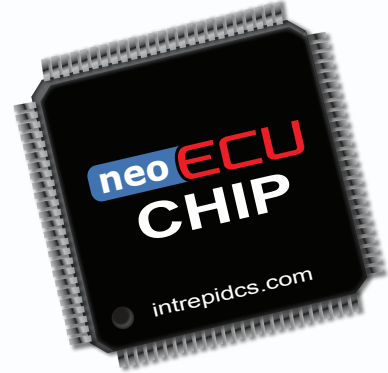


INTREPID CONTROL SYSTEMS, INC.

neoECU CHIP

Intrepid Control Systems presents the neoECU CHIP, a chip that makes it easy to design systems that integrate with CAN, LIN, or K-Line buses. The neoECU CHIP requires minimal design effort and can be reconfigured in the field. It is fully programmable using Vehicle Spy. (It actually runs an optimized version of the Vehicle Spy Core software.) The neoECU CHIP is able to transmit messages, receive messages, and run parallel function block scripts. Scripts can also interact with the IO provided on the chip for designing a complete system.

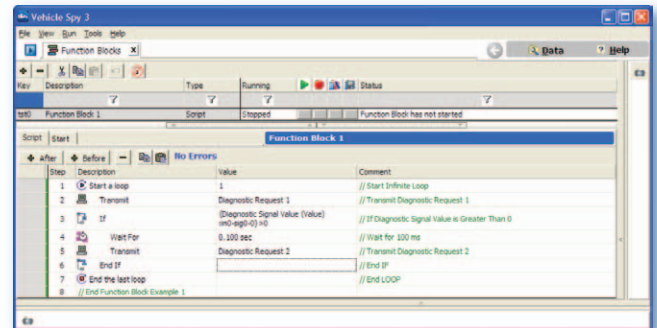


Applications

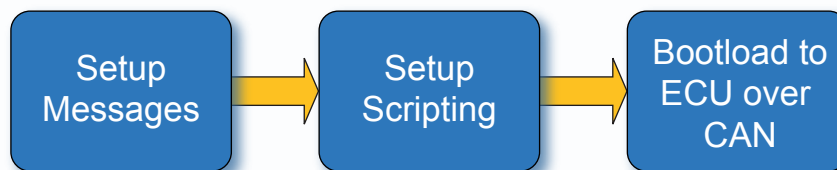
- **OBD2 Interface**
- **Custom Tuners**
- **Custom CAN Gateways**
- **ECU/Protocol Simulators**
- **Intelligent CAN Based ECU Test Boxes**
- **Plant Tools**
- **Car Alarm, Radio Mods, Disablers**
- **Message Data Substitution**

Design Like Never Before

Intrepid Control Systems' Vehicle Spy software allows you to build your application ECU in a graphical scripting environment. The software can be configured to design, transmit, and receive messages manually or you can load them from industry standard databases. After creating a message list, you can create scripts that define the interaction between messages and the automotive inputs and outputs that exist in a typical ECU. The graphical scripting engine (function blocks) in the neoECU CHIP executes all scripts in parallel and has the ability to communicate between scripts. This allows very complex logic to be defined. The neoECU CHIP has drivers for PWM/Frequency generation and measurement as well as the ability to communicate over CAN and LIN simultaneously. Analog input is also included.



Vehicle Spy 3 software creates a user friendly environment for defining your ECU. The graphical scripting environment makes rapid prototyping as simple as point and click.



Vehicle Spy 3 software allows you to gather basic ECU information from message databases combined with point and click scripting to create your device. When you've finished, click "Send to ECU" and Vehicle Spy will send your design over the CAN bus or RS232 port to the ECU.

Intrepid Control Systems, Inc.

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www.intrepidcs.com

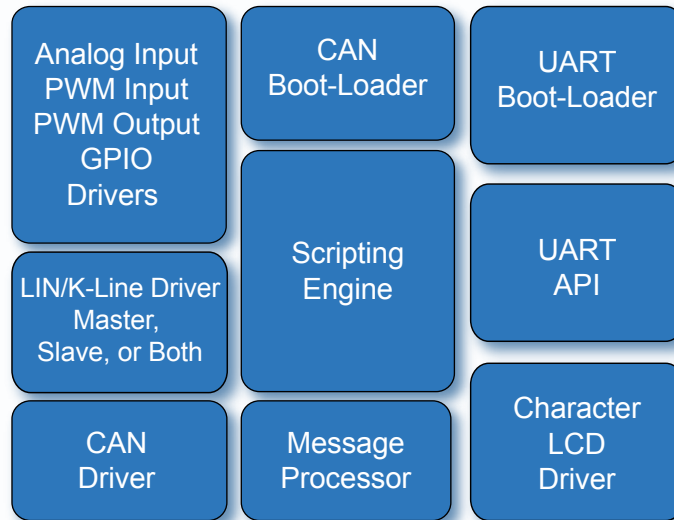
Rev.08242011

neoECU CHIP

neoECU CHIP Development Kit

Development Kit for neoECU CHIP Development Kit includes the CAN/LIN EVB (two neoECU CHIP devices on a board, CAN and LIN/K-Line Physical layers, and a UART boot loader), ValueCAN hardware, Vehicle Spy Pro software, and 10 hours of phone support. Using the board and Vehicle Spy software, you can program and debug your application. Example schematics are also included so you can integrate the chip into your design.

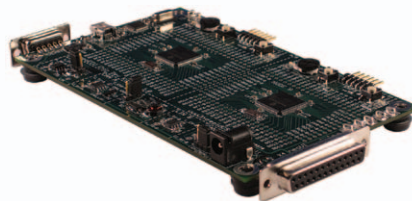
neoECU CHIP Block Diagram



Device Specifications

- 100 Pin TQFP
- 3.3V Operation with 5V Tolerant Inputs
- 20K CoreMini Script Space
- 8 0-3.3V Analog Inputs
- 8 PWM Outputs Controlled
- 4 PWM Inputs
- 4+ Button Keypad
- UART Host Port
- 2x16 LCD Display Support
- 2 CAN Channels
- 1 LIN/K-LINE Channel
- Power Management Capability

Intrepid CAN/LIN EVB TRAINING AND RESEARCH KIT



- Two neoECU CHIPS on Board
- CAN and LIN/K-Line Physical Layers
- UART Boot Loader
- Example Schematics

In combination with Vehicle Spy, the Intrepid CAN/LIN EVB Training and Research Kit includes the components necessary to begin using the neoECU CHIP.

Ordering Information:

Part Number	Description
neoECU-CHIP	neoECU CHIP
neoECU-CHIP-DK	neoECU CHIP Development Kit (incl. CAN/LIN EVB, ValueCAN, Vehicle Spy Pro, & 10 hrs. of phone support.)
CAN-LIN-EVB	Intrepid CAN/LIN EVB Training & Research Kit (Kit requires Vehicle Spy software, sold separately.)

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

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