USB-/Ethernet-Guide

NEW

USB and Ethernet Solutions for Automotive Test Applications

GOPEL electronic

Get the total Coverage!

Communication Modules

USB 3060 / basicMOST 3060

USB 3080 / basicCAR 3080

A wide range of USB and Ethernet modules supporting CAN, LIN, K-Line, MOST, FlexRay and LVDS are available for bus system communication in the automobile industry.

The modules benefit by providing micro controllers for each communication port. This architecture guarantees real-time ability for each port.

The communication modules can be utilised in applications for functional test in ECU testing. They can also be applied in complex functional test systems on USB basis.

USB 3060 / basicMOST 3060
– MOST25 Controller

MOST150 Controller *in Preparation!*

Recommended fields of application

- MOST Applications in automotive industry

Technical Data

- MOST protocol with up to 25 Mb/s
- Real-time simulation of control units via intelligent MOST interface with 32 bit microcontroller
- Transmitting and receiving of application protocols via MOST High Protocol on asynchronous channel or control channel
- Transmitting and receiving of MOST data via asynchronous channel up to 1014 data bytes
- Transmitting and receiving of MOST messages
- Diagnostic via MOST High Protocol
- Status indication of the board via LEDs
- Analogue audio inputs and audio outputs
- Unlock detection
- Bypass mode

USB 3080 / basicCAR 3080
– Multi-bus Controller

Recommended fields of application

- CAN and LIN applications and test systems in the automotive industry
- Test solutions for multi-bus systems

Technical Data

- 2 x CAN and 2 x LIN or K-Line
- Protocols for CAN:
  - KWP 2000 on TP 1.6 and TP 2.0
  - KWP 2000 on CAN-ISO-TP
  - UDS on CAN-ISO-TP
  - GMLAN
- Protocols for K-Line:
  - KWP 1281
  - KWP 2000
  - ISO-9141
- 1 x J1850 with freely configurable transceiver
- 4 x digital input
- 4 x digital output
- 2 x analogue input
- All interfaces galvanically isolated

Communication Modules *(descriptions on pages 2 to 6 / table is continued on page 3)*

Module	Interfaces	Ports	Diagnostic	Specification	Transceiver
USB/basicMOST 3060	MOST	1	optional	PS V 2.4	MOST 2 + 0
USB/basicCAR 3080	CAN, LIN, K-Line	4	optional	2.0 A / 2.0 B / 2.0 / ISO 9141	optional
basicCAR 3085	CAN, LIN, K-Line	4	optional	2.0 A / 2.0 B / 2.0 / ISO 9141	optional
basicFlexScope 3095	FlexRay	1	-	PS V 2.1	TJA1080
basicCON 4105	LVDS	1	-	ANSI/TIA EIA-644-1995	-
USB/basicCON 4110	LVDS	1	-	ANSI/TIA EIA-644-1995	-
USB/basicCON 4111	LVDS	1	-	ANSI/TIA EIA-644-1995	-

*see "Extension Modules for Series 61" on page 11

Communication Modules

basicCAR 3085

basicFlexScope 3095

basicCON 4105

basicCAR 3085 – Multi-bus Controller

Recommended fields of application

- CAN and LIN applications and test systems in the automotive industry
- Test solutions for multi-bus systems

Technical data

- See **basicCAR 3080**, additionally with
  - Configurable bus termination
  - Clamp control (Kl.15, Kl.30)
  - Disturbance functions for CAN und LIN
- And optionally with test sequencer with comprehensive library
  - Restbus simulation
  - Net management
  - Ramp functions and table functions
  - Message counter and checksums
  - Diagnostic
  - Conformity checks for CAN and LIN

basicFlexScope 3095 – FlexRay Bus Analyser

Recommended fields of application

- ECU validation (runtime performance, conformity)
- PTest of FlexRay network fault tolerance

Bus analyser

- No signal delay or change through communication controller
- Protocol: FlexRay 10 Mb/s, sample: 100 MHz
- Analyses: time stamp, Frame ID, zero frame, cycle counter, payload, CRC

Bus simulator

- Timing, format, CRC and signal value faults
- Resolution: 1/10 bit width (10 ns at 10 Mb/s)
- 100% repeatability

Oscilloscope trigger

- Signal pick-up directly on bus lane
- Trigger functions: frame ID, cycle ID, glitch, payload length, frame type, zero/sync frame
- Oscilloscope with ext. trigger input and ≥ 100 MS/s

Fault simulator

- Injection of predefined fault frames
- Frame, bit, timing and logic faults can be simulated
- Resolution: 1/10 bit width (10 ns at 10 Mb/s)

basicCON 4105 – LVDS Splitter

- 1:8 Splitter for LVDS signals up to 1.5 Gb/s with nine connectors
- Distribution of LVDS signals compliant with ANSI/TIA EIA-644-1995 at eight outputs simultaneously
- Signal repeater
- Cascadable

Splitting

Communication Modules *(descriptions on pages 2 to 6 / continuation of table from page 3)*

Module	Interfaces	Ports	Diagnostic	Specification	Transceiver
basicCON 4115	LVDS	1	-	ANSI/TIA EIA-644-1995	-
USB/basicCON 4120	LVDS	1	-	ANSI/TIA EIA-644-1995	-
basicCAN 61 Plus	CAN (LIN, K-Line, FlexRay)	2–6	optional	2.0 A / 2.0 B	optional*
USB/basicCAN 6153	CAN (LIN, K-Line, FlexRay)	2–6	optional	2.0 A / 2.0 B	optional*
USB/basicLIN 6173	LIN, K-Line (CAN, FlexRay)	2–6	optional	2.0 / ISO 9141	optional*
USB/basicCAR 6181	CAN, LIN, K-Line (FlexRay)	2–6	optional	2.0 A / 2.0 B / 2.0 / ISO 9141	optional*
USB/basicFLEX 6191	FlexRay (CAN, LIN, K-Line)	2–6	-	PS V 2.1	optional*

*see "Extension Modules for Series 61" on page 11

Communication Modules

USB 4110 / basicCON 4110

USB 4111 / basicCON 4111

basicCON 4115

USB 4110 / basicCON 4110 – LVDS Multiplexer

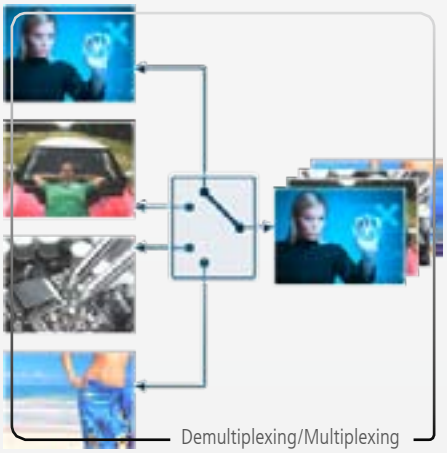
- 1:4 multiplexer for LVDS signals up to 1.5 Gb/s with 5 connectors
- For distributing LVDS signals according to ANSI/TIA EIA-644-1995
- Signal repeater
- Cascadable

USB 4111 / basicCON 4111 – LVDS Splitter

- 4:1 splitter for LVDS signals up to 1.5 Gb/s with 5 connectors
- For distributing LVDS signals according to ANSI/TIA EIA-644-1995
- Signal repeater
- Cascadable

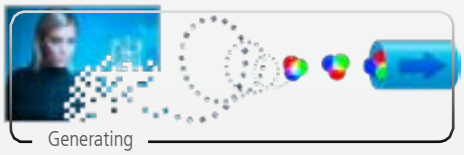
basicCON 4115 – LVDS Frame Generator

- USB 2.0 interface
- Generates 20 bitmaps/s at 800 x 480 px and 24 bit colour depth
- 32 MB onboard image memory
- Onboard micro controller enables to interlace two single images to one overall picture (for DualView and split screens)
- For generating LVDS signals according to ANSI/TIA EIA-644-1995
- Exchangeable serialiser modules
  - **MAX9247** (18 bit colour, 3 bit control)
  - **MAX9209** (18 bit colour, 3 bit control)
  - Customised modules are provided or developed



Demultiplexing/Multiplexing

Splitting



Generating

LVDS Modules: PXI, USB, Ethernet – right when you need them!

The LVDS interface is applied where displays visualise important information for the driver.
GOEPEL electronic provides the following devices for testing LVDS. Please find additional information about our LVDS solutions in the separate leaflet.

		PXI	Stand-Alone	USB
Splitter	1:8	-	basicCON 4105	-
	1:4	PXI 4111	basicCON 4111	USB 4111
Multiplexer	4:1	PXI 4110	basicCON 4110	USB 4110
Frame Generator		-	basicCON 4115	-
Frame Grabber		-	basicCON 4120	USB 4120

Communication Modules

USB 4120 / basicCON 4120

basicCAN 61 PLUS

USB 6153 / basicCAN 6153

USB 4120 / basicCON 4120 – LVDS Frame Grabber

- 2 x 4 MB onboard image memory for reference and tapped-off pictures
- For analysing LVDS signals according to ANSI/TIA EIA-644-1995

- Exchangeable deserialiser modules

Please find on page 15 a detailed record of deserialisers!

Analysing

basicCAN 61 PLUS – CAN Controller

Recommended fields of application

- CAN applications in the automotive industry

Technical data

- See **basicCAN 6153**, additionally with
  - Input opportunities of UUT power supply via two 4 mm banana jacks at the rear of the module
  - Breakout panel with separate 9-pin D-Sub connector per communication and analogue/digital I/O
  - Four 4 mm banana jacks at the front of the module (2 x Kl.30, 1 x Kl.31, 1 x Kl.15 – to be switched on/off per relay with max. 5A)
  - Nine state LEDs at the device front

Please see extension modules on page 15!

USB 6153 / basicCAN 6153 – CAN Controller

Recommended fields of application

- CAN applications in the automotive industry

Technical data

- Up to four independent full-CAN controllers
- CAN specification 2.0 A / 2.0 B conforming
- Power PC based Real-time simulation of ECUs via "intelligent" CAN interface
- Configurable transceiver for each CAN interface (high speed, low speed, single-wire)
- Output of variable CAN messages
- Supply of network management functions
- Automatic read-in of CAN database (*.dbc)
- On-board diagnostic functions for:
  - KWP 2000 on TP 1.6 and 2.0
  - KWP 2000 on CAN-ISO-TP
  - UDS on CAN-ISO-TP
  - GMLAN
- All interfaces galvanically isolated
- Acknowledge can be switched off
- On-boardfunctionsforDDP,BAP,CCPandJ1939

See pages 14 and 15 for accessories!

Series 61

At the following pages there is an overview about configuration and extension opportunities of the Series 61. Available accessories and extension modules are introduced at the double page 14/15.
Please find additional information about our intelligent programmable communication controllers in the separate leaflet!

Communication Modules

USB 6173 / basicLIN 6173

USB 6181 / basicCAR 6181

USB 6191 / basicFLEX 6191

USB 6173 / basicLIN 6173
– LIN/K-Line Controller

Recommended fields of application
- LIN and K-Line applications as well as test systems in the automotive industry

Technical data
- Up to 4 independent LIN/K-Line interfaces according to specifications 2.0/2.1
- K-Line according to ISO 9141
- Variable transceiver supply
- LIN interfaces parameterisable as Master or Slave
- Output of any LIN messages (allows restbus simulation)
- Automated read-in of the LIN database (*.ldf)
- On-board diagnostic functions for K-Line:
  - KWP 2000
  - KWP 1281
- All interfaces galvanically isolated

See pages 14 and 15 for accessories!

USB 6181 / basicCAR 6181
– Multi-bus Controller

Recommended fields of application
- CAN and LIN applications and test systems in the automotive industry
- Test solution for multi-bus systems

Technical data
- 2 x CAN and 2 x LIN or K-Line
- Protocols for CAN:
  - KWP 2000 on TP 1.6 and TP 2.0
  - KWP 2000 on CAN-ISO-TP
  - UDS on CAN-ISO-TP
  - GMLAN
- Protocols for K-Line:
  - KWP 1281
  - KWP 2000
  - ISO 9141
- All interfaces galvanically isolated

See pages 14 and 15 for accessories!

USB 6191 / basicFLEX 6191
– FlexRay Controller

Recommended fields of application
- FlexRay applications in the automotive industry
- Test systems in vehicle electronics with FlexRay

Technical data
- 2 independent FlexRay nodes with 2 channels each
- Circular and event-based transmitting of FlexRay messages
- Monitoring of bus data and events with time stamp
- FlexRay communication controller: Freescale MFR 4310
- Transceiver TJA1080
- All interfaces galvanically isolated

See pages 14 and 15 for accessories!

Configuration Overview – Expandability of Series 61 Modules

	USB/basicCAN 6153 / 61 Plus	USB/basicLIN 6173	USB/basicCAR 6181	USB/basicFLEX 6191
Port 1	CAN	LIN/K-Line	CAN	FlexRay
Port 2	CAN	LIN/K-Line	LIN/K-Line	FlexRay
Port 3	option 1	option 1	option 1	option 1
Port 4	option 1	option 1	option 1	option 1
Port 5	option 2	option 2	option 2	option 1
Port 6	option 2	option 2	option 2	option 1
Analogue/Digital I/O	option 3 / option 4	option 3 / option 4	option 3 / option 4	option 3 / option 4

Option 1: 1 additional CAN or LIN/K-Line port / **Option 2:** 1 additional FlexRay port / **Option 3:** 4 additional digital inputs; 4 additional digital outputs; 6 analogue inputs; 6 analogue outputs / **Option 4:** 4 additional digital inputs; 4 additional digital outputs; 4 analogue inputs; 4 analogue outputs; 1 SPI interface

Switching Modules

USB 3104

USB 3108 / basicCON 3108

USB 3116

USB 3104 – 4 Single Relays

Recommended fields of application

- General test and measurement systems
- Power control panels

Technical data

- 4 relays (changeover switches)
- Max. switching current 40 A each
- Max. switching voltage 16 V
- Switching time 15 ms

USB 3108 / baciCON 3108 – 8 Single Relays

Recommended fields of application

- General test and measurement systems
- Power control panels

Technical data

- 8 relays (changeover switches)
- Max. switching current 40 A each
- Max. switching voltage 16 V
- Switching time 15 ms

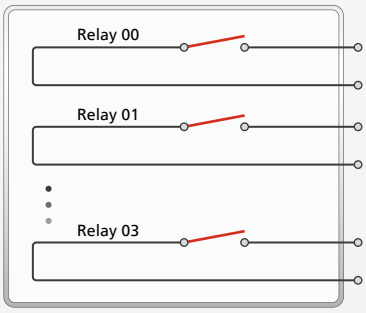
USB 3116 – 16 Switchings

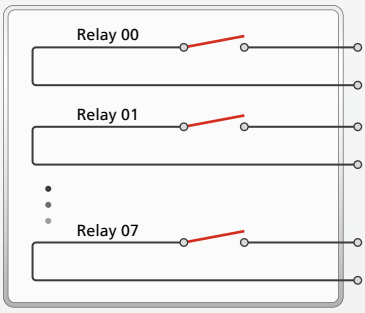
Recommended fields of application

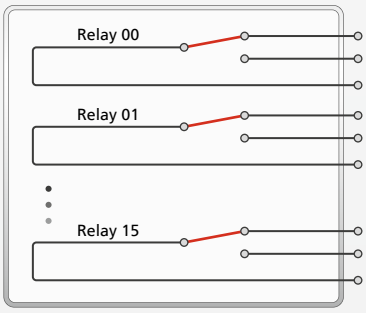
- General test and measurement systems
- Power control panels

Technical data

- 16 relays (changeover switches)
- Each relay connected to plug connector by 3 pins
- Max. DC switching current/relay 5 A at 40 V
- Max. AC switching current/relay 2 A at 230 V
- Max. switching voltage 100 VDC or 250 VAC
- Max. DC switching capacity 240 W
- Max. AC switching capacity 1000 VA
- Switching time 15 ms







Switching Modules *(description at pages 7 and 8)*

Module	Structure	Switching voltage	Switching current	Switching time
USB 3104	4 single relays	16 V	je 40 A	15 ms
USB/basicCON 3108	8 single relays	16 V	je 40 A	15 ms
USB 3116	16 changeovers	100 VDC/230 VAC	5 A	15 ms
USB 3118	16+2 single relays	100 VDC/230 VAC	5 A/10 A	15 ms
USB/basicCON 3132(-5A)	32 single relays	100 V	1 A	15 ms
USB/basicCON 31128	diverse muxers	60 V	0,4 A	15 ms

The USB and stand-alone modules cover a broad range from 5 A power relays to matrix switching systems. The relay modules can be used in functional test systems based on USB. They can also easily be integrated in individual applications where signals have to be switched or connected.

Switching Modules

USB 3118

USB 3132(-5A) / basicCON 3132(-5A)

USB 31128 / basicCON 31128

USB 3118
– 16 + 2 Einzelrelais

Recommended fields of application
- General test and measurement systems
- Power control panels
- Matrix applications

Technical data
- 18 relays (changeover)
  - 16 relays
    Max. DC switching current 5 A at 40 V
    Max. AC switching current 2 A at 230 V
  - 2 relays
    Max. switching current 16 A at 15 V

USB 3132(-5A) / basicCON 3132(-5A)
– 32 Single Relays

Recommended fields of application
- General test and measurement systems
- Measuring multiplexers NF
- Matrix NF

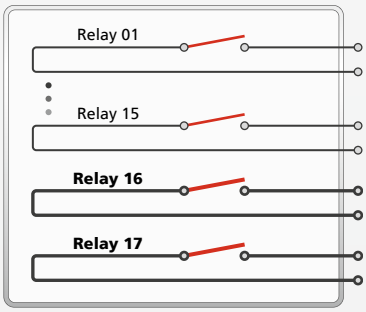
Technical data
- 32 relays (changeover switches)
- connected to the plug connector by 2 pins
- Max. DC switching current/channel 1 A at 30 V
- Switching voltage 10 mV … 100 VDC
- Max. switching capacity 30 W
- Min. switching current 10 µA
- Switching time 10 ms

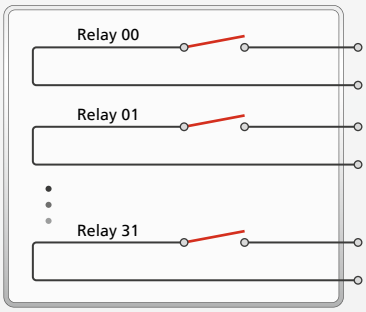
USB 31128 / basicCON 31128
– 14 Multiplexers

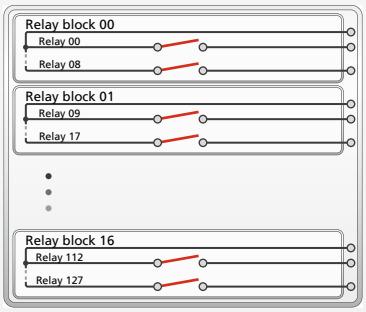
Recommended fields of application
- Switch simulation
- Measuring multiplexer

Technical data
- 64 or 128* switching relay
- 64 or 128* relay in 8 or 16 blocks (eight lines, one column)
- Max. DC switching current 400 mA at 60 V
- Max. switching voltage 60 V
- Max. switching capacity 24 W
- Switching time 10 ms

*See page 15 for add-on module!







Load Switching / Digital Input/Output

USB M-48

USB S-48

USB 3016

USB M-48 – Load Switching Controller

Recommended fields of application

- Relay control module for power relays

Technical data

- USB Master controller with 48 open collector outputs
- Up to 500 mA primary current per channel at 24 V
- Euroboard for backplane utilisation

USB S-48 – Load Switching Controller

Recommended fields of application

- Relay control module for power relays

Technical data

- For **extension** of **USB M-48** to maximum 128 outputs:
  - By utilising one USB-S 48 module, expandability by 48 additional outputs to 96 outputs possible
  - By utilising two USB-S 48 modules, expandability by 80 additional outputs to 128 outputs possible
- Euroboard for backplane utilisation

USB 3016 – Digital I/O

Recommended fields of application

- General control technologies (sensor and actor signals)

Technical data

- 40 bidirectional channels (FET outputs or optocoupler inputs)
- Switching voltage up to 30 V AC/DC
- Switching current up to 1 A AC/DC

Resistance Simulation

USB 4008 / basicCON 4008

USB 4009 / basicCON 4009

USB 4008 / basicCON 4008

– Resistance Simulator

Recommended fields of application

- General test and measurement systems
- Simulation of resistances

Technical data

- 8 resistance channels
- 4 fix resistance values per channels – customer-specific configurable
- Switching voltage 10 mV … 100 VDC
- Max. switching capacity 500 mW
- Setting time 10 ms

USB 4009 / basicCON 4009

– Resistance Simulator/Decade

Recommended fields of application

- General test and measurement systems
- Simulation of resistances, potentiometers with centre tap

Technical data

- 2 programmable resistance channels
- Range 1 Ω … 1 MΩ
- Precision ± 1 %
- Max. power dissipation 0.5 W

Simulation Modules

It is common for these applications to require very special signals. Modules that generate, influence and evaluate such signals are summarised in this section.

All of these modules can be applied in functional test systems based on USB.

Simulation

USB 4010

USB 5301

USB 5305

USB 4010 – Incremental Transmitter Simulator

Recommended fields of application

- General test and measurement systems
- Test of encoder interfaces

Technical data

- 2 ports with switchable output signals (5…25 V ground based or 5 V differential signal)each configurable as:
  - Incremental transmitter:
    - Track A, B, Index
    - Programmable counting direction
    - 200 kHz output frequency
  - SSI transmitter:
    - Mono flop time and bit-count variable
  - DIO with integrated impulse counters

USB 5301 – Load Simulation

Recommended fields of application

- Test and measurement systems for electronic assemblies
- Automotive test
- Industrial electronics
- Automation

Technical data

- Programmable potential-free resistance load
- Max. 2 A at 24 V
- Load range 6 Ohm to 2 kOhm
- On-board multiplexer for 4 load channels
- Temperature monitoring
- Integrated self-test

USB 5305 – Temperature Simulation

Recommended fields of application

- General test and measurement systems
- End-of-line test
- Automation
- Industrial electronics

Technical data

- 4 possible temperatures according to PT100
- Ambient temperature reporting for compensation adjustment

Compact Test Systems / Handheld Terminal

smartCAR

magicCAR³

smartCommander

smartCAR – Modular Communication

Fields of application

- Mobile applications
- Test systems
- Hardware interface for diagnostic applications

Supported interfaces

- Support of CAN 2.0A and 2.0B (high speed, low speed, single-wire), LIN 2.1 and K-Line according to ISO 9141

Hardware

- USB interface according to specification 2.0
- 32 bit micro controller for real-time requirements
- Physical layer (transceiver) exchangeable in the form of plug modules
- Compact housing for portable utilisation
- 110 x 75 x 27 mm (L x H x W)
- Supply via USB or application connectors

Software

- Message sending and receiving
- Manipulation of data contents
- Monitoring of bus data with time stamp
- Available onboard diagnostic protocols:
  - KW2000 at TP1.6, TP2.0 and CAN-ISO-TP
  - UDS at CAN-ISO-TP
  - GMLAN
  - K-Line: KW1281, KW2000, ISO 9141 Ford
- Firmware updates (flash of smartCAR by the user) via host interface
- User API (DLL) for convenient integration into user-specific applications
- Drivers for Windows 2000 and XP
- LabVIEW® driver available

magicCAR³ – Compact Automotive Test System

Fields of application

- Cost-efficient test environment on the development stage and quality assurance of automotive components
- Flexible structure allows for endurance run, parallel and screening test systems

Technical data

- Series 61 controllers are technical basis
- Support of, among others:
  - CAN
  - LIN
  - FlexRay
  - K-Line
  - Digital and analogue I/O
  - Transport and diagnostic protocols

Configuration

- Basic configuration
  - Kl.30 and Kl.15 (max. 10 A)
  - 4 x changeover relays (max. 2 A)
  - PWM output (e.g. as TOG signal)
  - 8 x digital output (max. 25 V)
  - 8 x digital input (max. 25 V)
  - 4 x analogue output (max. 25 V)
  - 4 x analogue input (max. 25 V)
  - 1 x serial peripheral interface
  - 2 x CAN or LIN or K-Line channels
- Optional equipment
  - Various opportunities for CAN, LIN, K-Line, FlexRay, resistance decades, current and voltage measuring modules, MOST and LVDS modules

smartCommander – Handheld-Terminal

Recommended fields of application

- Production of vehicle components
- Final vehicle assembly
- Replacement of ECUs and operating elements

Technical data

- Customer-specific adjustment of membrane keyboard with up to 12 keys and 3 state LEDs
- Interfaces:
  - CAN (high speed, low speed)
  - LIN (Master, Slave)
- Dimensions: 165 x 80 x 35 mm
- Supply: 9…25 V
- Connection: USB 2.0 (Type B)
- Operating temperature: 0…60°C
- Software: myCAR™
- Automatic generation and parameterisation of message lists from DBC and FDF data bases
- Transceiver modules for all common LIN and CAN variations available

USB Rack Systems / Impact Sound Analysis

SoundChecker™

USB 1004, USB 1008, USB 1016

SoundChecker™ – Impact Sound Analysis

Fields of application

- Cost-efficient analysis of impact and airborne sound
- Detection of mounting errors in mechanical systems via spectral analysis

Supported sensors

- Impact sound sensor with/without power supply
- Microphones with own power supply
- Position and angle sensor

Software

- Analysis of sounds throughout run-time
- Subsequent spectral analysis
- Filtering of individual frequency ranges for fault isolation
- Measurement memory for later analyses
- Up to four channels asynchronously measureable
- Remote control via serial interface
- Remote control via USB and software interface

USB 1004, USB 1008, USB 1016 – USB-Racksysteme/-Chassis

Recommended fields of application

- Measuring and control equipment
- Test systems for automotive applications (End-of-line test, parallel and endurance run test, validation, quality assurance)

Technical data

- Central USB 2.0 interface (rear side connector) to higher-level PC host system
- Integrated 230 V power pack (rear side connector)
- Active cooling with filter unit for the entire system including USB plug modules
- Usable as desktop system or as 19" rack system
- Integration opportunity of other manufacturers' USB modules (card size 160 mm x 100 mm or by means of GOEPEL electronic's Carrier Module)
- Synchronisation of USB modules via backplane possible

Available Accessories / Extension Modules

Breakout Module for USB 3080 / basicCAR 3080/3085

Breakout Module for Series 61

Connector Assembly for Series 61

Breakout Module for USB 3080, basicCAR 3080 and basicCAR 3085

Fields of application

- Network tests, connection tests, adaption of interfaces and measuring resources

Technical data

- To be utilised with communication controller type 3080/3085 and 31128 relay module (CAN and/or LIN)
- Switchable transceiver supply
- Combinable wiring matrix for max. 3 LIN, 4 CAN and 6 measurement devices

Breakout Module for Series 61

- Simple interface/measurement resources adaption

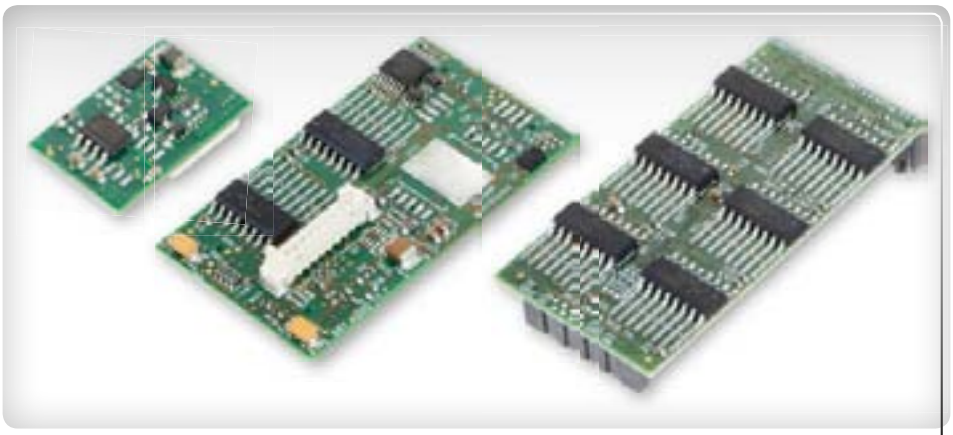
Technical data

- CAN, LIN, K-Line and FlexRay at 9-pin D-Sub, analogue and digital I/O at 15-pin D-Sub
- Zero-power central connector for all signals of Series 61
- Relays Kl.30 and Kl.15 (max. 10 A)
- 4 x changeover relays (max. 2 A)

Connector Assembly for Series 61

- 68-pin connector kit
- For customising customer-specific connection cables

Available Accessories / Extension Modules



Extension Modules for Serie 61

Add-on Module for USB 31128 / basicCON 31128

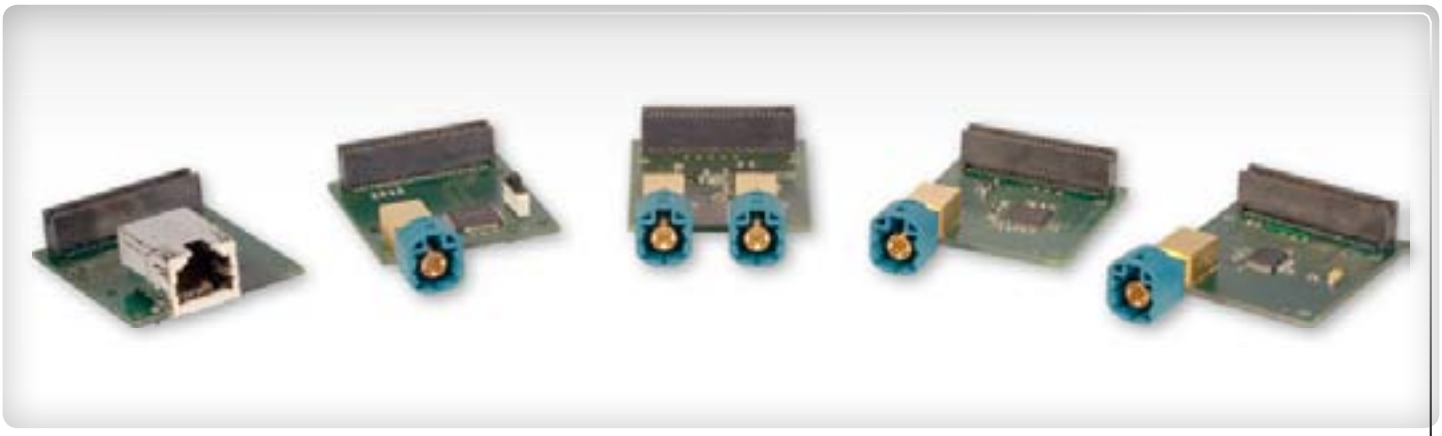
Extension Modules for Series 61

- CAN transceiver modules:
  - **TJA1041A** – high speed CAN
  - **TJA1054** – low speed CAN
  - **AU5790** – single-wire CAN
  - **B10011S** – truck and trailer
- LIN transceiver module **TJA1020**
- K-Line transceiver module **L9637**
- FlexRay transceiver module **TJA1080**
- Analogue/digital I/O module with several voltage ranges

Further models available on request!

Add-on Module for USB 31128 and basicCON 31128

- Extension by 64 additional to max. 128 channels for USB 31128 and basicCON 31128



Deserialiser for USB 4120 / basicCON 4120

Deserialisers for USB 4120 / basicCON 4120

- The following **Deserialisers** are currently supported:
  - **DS90CF364** (18 bit colour depth, 3 bit control)
  - **DS90UR124** (21 bit colour depth, 3 bit control)
  - **DS90UR906** (18 bit colour depth, 9 bit control)
  - **INAP125R24/APIX** (24 bit colour depth, 3 bit control)
  - **MAX9248** (18 bit colour depth, 9 bit control)
  - **GXB1458R/GVIF** (24 bit colour depth, 3 bit control)

We are constantly working on the support of additional modules. Thereby, we focus in particular on special customer request and develop specific solutions.

Recommended Software

myCAR™ – Modular Software Suite for ECU Test

myCAR™ is a compact and easy to use software suite for the fast and uncomplicated handling of ECUs.
The interactive software is determined by existing interface modules and can be equipped with various communication modules.

PROGRESS – Test Sequencer Software

PROGRESS is a hardware independent test sequencer software for the fast generation of function test runs in the test environment (e. g. in end-of-line or run-in systems).
It is characterised by easy handling, arbitrary expandability and open interfaces.

G-API – GOEPEL electronic Application Programming Interface

The G-API is a C based software interface which supports various GOEPEL electronic hardware products.
It allows the user to include them into his own applications. Additional VIs for LabVIEW™ integration are available.

Program Generator – Test Sequencer Software

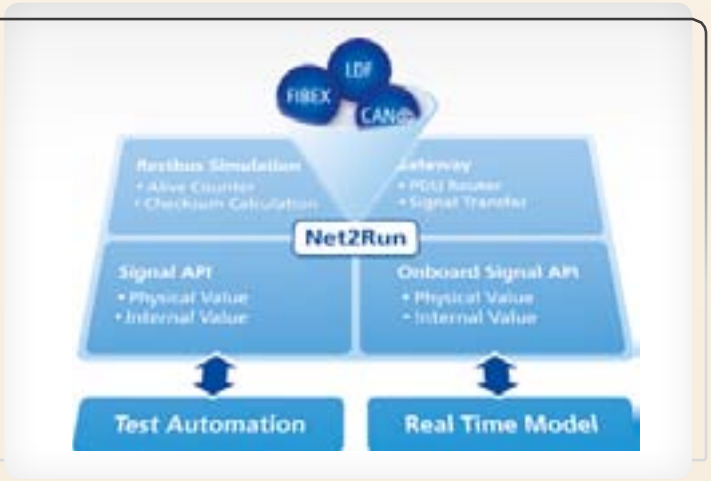
The Program Generator is a software for the generation of test runs applying pre-assembled test steps of a macro library. Each macro can be operated by a graphical interface.
Extensive automation functions (scripting, XSLT, SQL) simplify the programming tasks and allow the flexible design of test runs and test protocols.

Net2Run – Restbus Simulation and Gateway

Net2Run provides an efficient solution for the generation of complex signal based restbus simulations for heterogeneous vehicle networks.

For this purpose Net2Run ist fully compliant with the AUTOSAR approach of a consistent signal access as well as the PDU concept for the CAN, LIN and FlexRay buses. In addition to conventional restbus simulaion, Gateways can be implemented on signal level and PDU level.

The Net2Run Configurator enables the configuration based on CAN, LIN or FIBEX signal libraries (*.dbc, *.ldf, *.xml).



Further Reading

magicCAR³ – Compact Automotive Tester

magicCAR³ (see page 12) perfectly suits as cost-efficient test environment on the development stage and quality assurance. Based on Series 61 and optionally equipped with MOST, LVDS, relays and resistance modules, magicCAR³ provides an ideal balance between our Automotive Test Solutions and customer requirements.

PXI/PCI Guide

This leaflets provides a detailed overview about all PXI and PCI products/solutions for automotive applications.

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