Flexible Automotive Multibus Controllers

- Multibus controllers for CAN/CAN FD/FlexRay/Automotive Ethernet/LIN
- Available as standalone boxes in different performance classes and as PCIe/PXIe cards
- Up to 16 independent and freely configurable bus interfaces
- Additional digital and analog I/O channels as well as SENT Tx/Rx interfaces
- Execution of user programs directly on the hardware under a real-time operating system
- Restbus simulations and test of complex control units
- Support of transport and diagnostic protocols, network management, XCP, SecOC etc. directly on the hardware
- Use for performant Flash programming of control units
### Performance
- Use of cutting-edge technologies (Xilinx MPSoC)
- IP based communication controllers
- Real-time operating system
- Low latencies

### Restbus Simulation
- Unique time base for different busses
- Gateway function
- Execution of onboard programs in a real-time operating system

### Application
- Gateway test
- Development
- Restbus simulation for complex control units
- Test stands
- Run-in systems
- Flash applications

### Modularity
- Highly with regard to individual channel configuration
- Extendable, scalable
- Slot for industry bus modules

### Industrial Suitability
- Robust metal housing
- Central connector
- Passive, fanless cooling concept

### Software
- LabVIEW
- G API for Windows and Linux
- Net2Run as configuration tool for restbus simulation

### Stand-alone-Box
- **G CAR 6282**

<table>
<thead>
<tr>
<th>Interfaces</th>
<th>Automotive BUS interfaces basic device</th>
<th>CAN FD/LIN/K-Line</th>
<th>overall max. 12</th>
<th>max. 12</th>
<th>max. 4</th>
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<tbody>
<tr>
<td></td>
<td><strong>max. 2</strong></td>
<td><strong>FlexRay</strong></td>
<td>overall max. 2*</td>
<td><strong>100/1000Base-T1</strong></td>
<td>overall max. 2</td>
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<thead>
<tr>
<th>Conventional signals basic device</th>
<th>max. 4</th>
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<tbody>
<tr>
<td>Digital In/SENT Rx</td>
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<td>SENT Rx</td>
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<td>SENT Tx</td>
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<td>Digital Out</td>
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<td>Analog In</td>
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<tr>
<td>Analog Out</td>
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### Interfaces Ethernet extension board
- overall max. 3
- overall max. 12
- overall max. 4
- overall max. 3
- 100/1000Base-T1

### Interfaces I/O extension board
- overall max. 48
- overall max. 16
- overall max. 16
- overall max. 8
- overall max. 8

*Each FlexRay interface supports channel A and B*