

Softwarebus **embedded LabMap**[®]

The increasing global competition forces manufacturers of products of all technical fields to guarantee a high product quality for the longest possible period. At the same time production costs must be minimised.

The softwarebus **LabMap**[®] is a neutral level (interface), in which the individual softwarebus participants (intelligent sensors, actors, process control units, HMI) are represented by variables. Intelligent, independently working sensors, actors as well as process control units are connected with the corresponding operating- and monitoring units (Human-Machine-Interface). All bus systems presently available on the market, network protocols, visualisation software and database systems can thus be interconnected in one system.

The implementation of the softwarebus **LabMap** on the μ -Control level creates a transparent communication infrastructure to the PC controlled automation level. With the softwarebus **embedded LabMap**[®] hardware is turned into software. Embedded systems on μ -Controller basis communicate via this μ -Controller softwarebus with PC based control software. Via the softwarebus **embedded LabMap**[®] the hardware periphery, analogue and digital in- and outputs, standard interfaces such as e.g. RS232 and CAN, but also proprietary interfaces are depicted in a transparent way on the PC controlled automation level. The specific features such as measuring ranges, limit values, units, data types, data requirement types, (cyclic, on change etc.) are configured only once during installation. The measuring- and control algorithms implemented in the μ -Controller level access underlying hardware levels via **embedded LabMap**[®]. **Embedded LabMap**[®] thus forces a modularization and structurization of the data traffic on the μ -Controller level. Hereby it is possibly to achieve a high degree of independence of the manufacturer. During the development of new successor products and new innovations a large part of the existing software can be taken over. On the physical level **embedded LabMap**[®] communicates with the PC controlled automation level with the help of LabNet e.g. via standard Ethernet.

embedded LabMap[®] means...

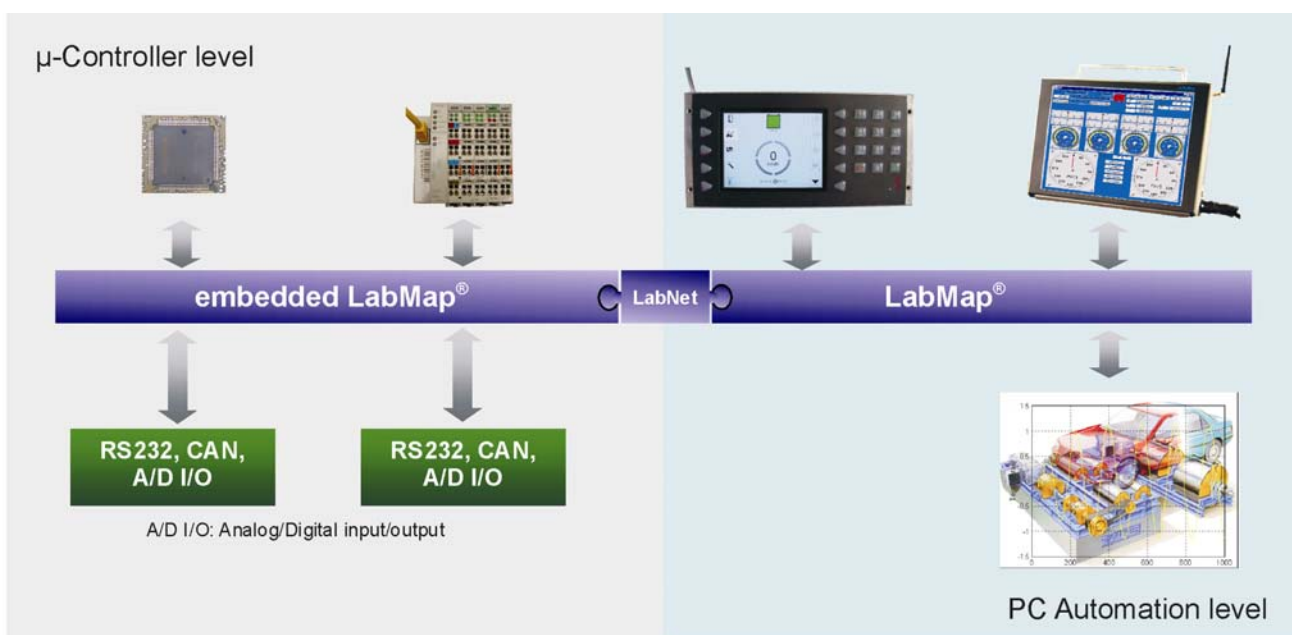
- a maximum reliability
- easy installation
- easy integration into existing systems
- low operating costs
- teleservice applicability
- fast isolation of errors on the application level through modular software architecture

With **embedded LabMap**[®] hardware is turned into software

Softwarebus embedded LabMap®

Plug & Play in embedded Systems

The direct way from μ -Controller softwarebus to PC automation with **embedded LabMap®**



embedded LabMap® offers a flexible infrastructure for distributed automation. The data can be recorded and processed independent of the manufacturer.

Additional characteristic features:

- High degree of reusable software
- Integrated support of measurement units
- Integrated time stamp
- Virtual channels
- Very short installation times
- Highly expandable
- High availability
- Low training efforts
- Easy maintenance
- High costs savings in maintenance through Internet-based operating and monitoring
- Fast isolation of errors on the application level through modular software architecture