

BARTH® ELEKTRONIK GMBH

- 25 years BARTH®, owner-managed since 1993
- 25 years of PLC Engineering Know-How
- Manufacturer of popular lococube® Products
- Production of customer-tailored PLCs
- In-House Engineering and Production
- High Automation Grade / Robotics
- Honored with the RS Global Supplier Award
- Internal Quality and Document Management
- Own Test Lab for Climate, Temperature and Vibration
- KBA certified (ECE R10)
- UL certified (cULus)
- Export Rate above 55%

















OUR MAIN PRODUCT - LOCOCUBE®

- SPS (German) = Speicherprogrammierbare Steuerung
- PLC (English) = Programmable Logic Controller
- lococube® = Logic Controller Cube













- lococube® is a full-featured Open Source PLC Range
- The totally potted design leads to encanced Ruggedness
- It's Core is powered by a 32 Bit ARM® Cortex® CPU
- lococube® supports graphical, ,C' and Arduino® Programming
- The low Power Consumption allows battery-powered Applications
- Features well-established CAN and CANopen® Interfaces
- Resists Operating Temperatures from -40 up to +70 °C
- Directly drives Loads with it's rugged Solid-State Outputs
- **Integrates Protection Circuits for all I/Os**

LOCOCUBE® APPLICATIONS

- Automation & IoT: Automate and control your Product sharing operational Data via CAN(open)® and WLAN
- Motion & Control:
 Realize Stepper, BLDC and Servo Driver Applications featuring CAN/CANopen® Connectivity
- Automotive and Marine Technology:
 ECUs and OEM Solutions basing on lococube®
 Technology for Engine and Convenience/Body Control via CAN and J1939 Interfaces
- Lab and Test Engineering: PLC-aided Product Test and Quality assurance
- Collaborative Robotics: adaptive Gripper Solutions using CAN(open)®
- Mobile Applications / E-Mobility: The ultra-low Current Consumption allows Integration in battery-powered Appliations

















COMPARISON

	Standard PLC	BARTH® lococube®	
Programming	graphical or structured Text	graphical, ,C', Arduino®, structured Text, Open Source	Elektronik GmbH
Open Source Concept	no	yes	
Software	charged / free	free	A ESTA BOOK ONLY TO
Online-Mode	not available	available	SIG-810 Eagle Co. Sir
Online-Visualization	not or limited	available	O REAL PROPERTY OF THE PROPERT
Housing	Plastic with inserted PCB	rugged composite Housing with fully-potted PCB	OSET MODE IN BERTUUT
Operation Voltage	fixed 12 or 24 VDC	wide Range from 7 to 32 VDC	Paus Po
Current Consumption	high to moderate	extremly low	
Battery-powered	no or limited	yes	The state of the s
Operation			LAN LAN LAN SAN SAN SAN SAN SAN SAN SAN
Dimensions	medium to big	ultra-compact	
Shock Resistance	low	high	
Potting	no	yes, proprietary PU Resin	FALL 1990 LSPO PGO S/S1 STOR LSPI PGI X0 X2 X4 X0 X2 X4 X5 X5 X5 X5 X5 X5 X5
peration Temperature	limited	wide Range -40 up to +70°C	DOGO LSNO PGO+ STARTI DOGS CO
Solid-State Outputs	some Models	all Models	BAT, LOW X READY/ERROR
HMI, Motion & Control	some Models	all Models	→ γ READY/ERROR
Interfaces	different	CAN 2.0A/B, CANopen®, MODBUS, TTL-232, USB, J1939, NMEA2000	Xaxis start stor LSP LSN 10 11 12 13 000 GLR FP RP POD 81 88 14 15 18 17
OEM-Solutions	rarely available	available within 8 Weeks	START STOP LSP LSM TO THE TELE
		AO+ BO+ AI+ BI+ C AO- BO- AI- BI-	TRO+ CLRI+ FPO+ RPO+ FPI+ RPI+ YO YI Y2 Y3 Y4 Y6 CLRO- CLRI- FPO- RPO- FPI- RPI- CO CI C2 C3 Y5

WHY BARTH® LOCOCUBE®

- One of the smallest PLC worldwide
- Tough, rugged and potted
- Powerful 32 Bit ARM® Cortex® CPU
- Industrial and automotive Use
- Suitable for harsh Environments
- Shortest Time-to-Market
- Free Software and Tools
- Long Term Availability
- Worldwide available via RS and Allied
- 25 Years of Technology Experience
- Engineered and manufactured in Germany

















OUR CUSTOMERS

- **■** Process Industries
- Building and Construction
- **Electronic Manufacturing**
- OEM's and Manufacturing Services
- Automotive and Marine
- Metals and Metal Production
- Prototyping
- **■** Facilities Management
- Intralogistics
- Communications
- Transportation
- Mining and Quarring

























LINKS AND SUPPORT

- Distributor worldwide: www.rs-online.com
- Distributor USA/Kanada: www.alliedelec.com
- DesignSpark: <u>www.rs-online.com/designspark</u>
- Support Forum: <u>www.micon-l.de</u>
- Manufacturer Hardware: www.barth-elektronik.de
- Manufacturer Software: <u>www.pro-sign.de</u>
- Programming Partner: www.barth.jasys.de
- Videos and Tutorials: www.youtube.de















