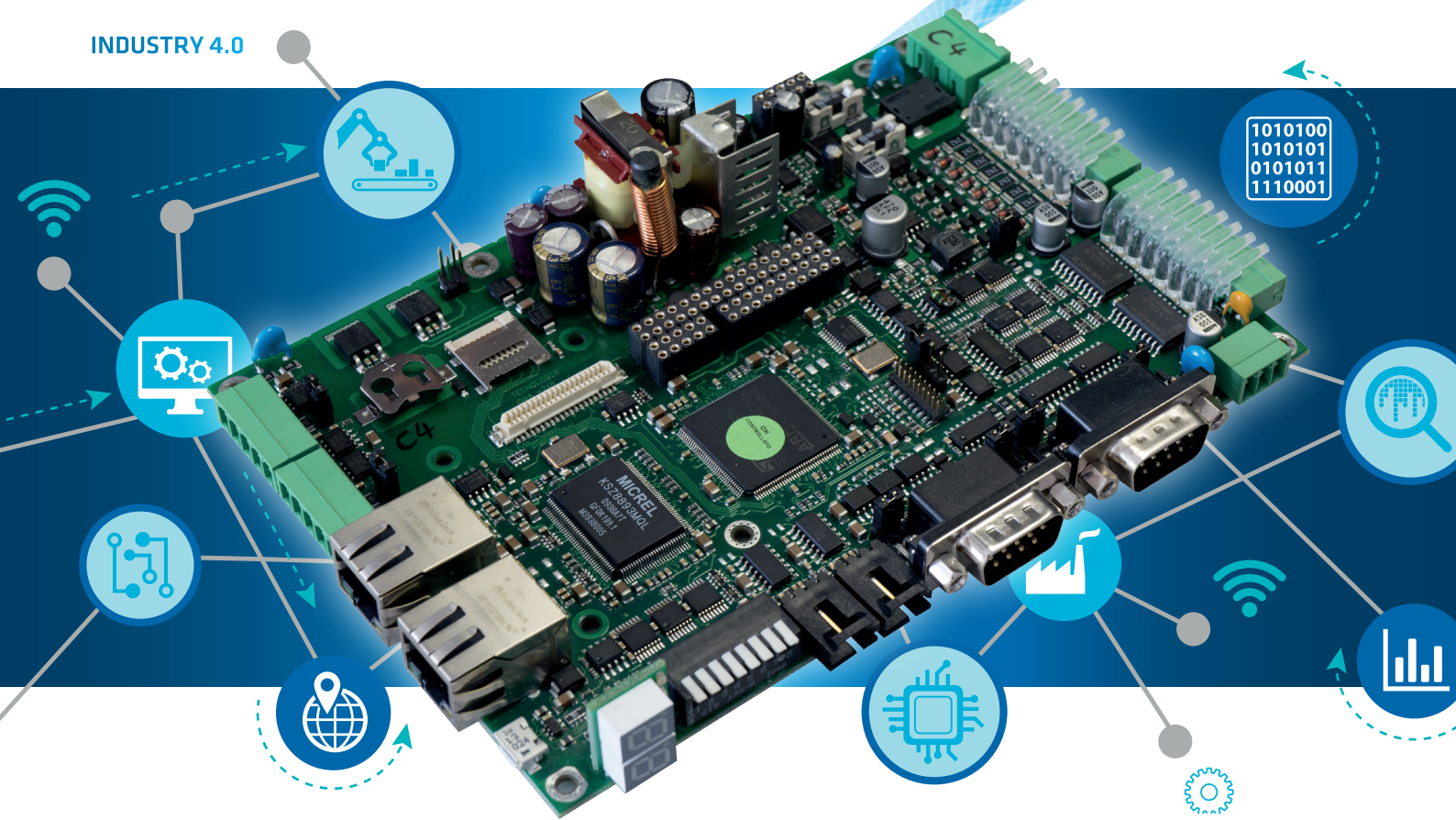


TECNOLOGIX GaIA

Gateway and Industrial Automation Controller with IoT and Fieldbus connectivity

INDUSTRY 4.0



Tecnologix GaIA is a multifunction Industrial Automation system, conceived to operate as a programmable I/O device and as a communication gateway to industrial fieldbuses and Cloud.

The Gateway communicates with the most popular standard fieldbuses, as

- ⊕ CANopen, DeviceNet, J1939 (CAN based)
- ⊕ Modbus/TCP, Profinet, Ethernet PowerLink, EtherCAT (Ethernet based)
- ⊕ Modbus RTU, Profibus (RS485 based)

Ethernet, WiFi and 4G interfaces allow sharing process data with the Cloud via IoT standard protocols such as CoAP, MQTT or LWM2M.

The User can control all the digital and analog I/O interfaces by writing their own automation procedures, directly, using C/C++ language and provided libraries, or by means of LogicLab IEC-1131 SoftPLC.

CHARACTERISTICS

- ⊕ STM32H7 Dual Core
 - 32 bit Arm Cortex-M7 @480 Mhz
 - 32 bit Arm Cortex-M4 @240 Mhz
 - 2 MB Flash + 1 MB RAM
 - 12 bit A/D Converter
- ⊕ 2 x RS232/RS485 optoisolated serial interfaces
- ⊕ 1 x 10/100 Mbit/s Ethernet interface w/Single or dual Ethernet connector and high-speed switch
- ⊕ 2 x CAN/CAN-FD optoisolated interfaces
- ⊕ 1 x USB OTG Full Speed interface
- ⊕ 1 x Micro SD-CARD
- ⊕ 8 x 24V Digital Inputs w/status LEDs and encoder inputs
- ⊕ 8 x 24V Digital Outputs w/status LEDs, blow fuse and short circuit alarm
- ⊕ DIP switch, 2 x 7 seg. display + 4 status LEDs
- ⊕ 24 V insulated power supply with RF filter and Low Voltage indication alarm
- ⊕ 1 x Lithium cell for RAM backup
- ⊕ I/O Bus Expansion Connector
- ⊕ Fieldbus expansion connector for EtherCAT, Profibus, Profinet
- ⊕ Expansion connector for WiFi/Bluetooth or 4G interface

CERTIFICATIONS: CE, UL

GaIA IS SUPPORTED BY A WIDE CHOICE OF DEVELOPMENT TOOLS

arm KEIL



KEIL MDK-ARM with TÜV Qualified (*) Arm C Compiler, long term maintenance and Functional Safety Library Package | <http://www.keil.com/mdk5/>

Integrated Development Environment for STM32

C/C++ development platform with peripheral configuration, code generation, code compilation, and debug features for STM32 microcontrollers and microprocessors

Microsoft Azure

Azure RTOS ThreadX Realtime Operating System
Azure RTOS NetX Duo IPv4/IPv6 TCP/IP protocol suite w/Cloud connectors
Azure RTOS FileX FAT Filesystem
Azure RTOS USBX USB Host and Device
Azure RTOS TraceX for System Analysis

LOGIC LAB

LogicLab IEC 61131 SoftPLC from Axel s.r.l. | <http://www.axelsw.it/>

(*) Arm C/C++ Compiler is TÜV qualified for Safety Critical applications

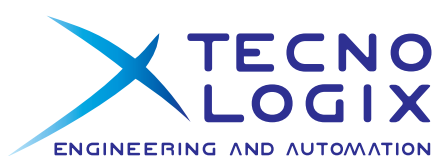


Automotive ISO26262, ASIL D | Industrial IEC61508, SIL 3 | Railway EN50128, SIL 4 | Medical IEC62304, Class C

MEMBERSHIPS



PARTNER OF **arm** Community



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DIGITAL/ANALOG I/O EXPANSION

- ⊕ 16 x 24V Digital Inputs with status LEDs
- ⊕ 16 x 24V Digital Outputs with status LEDs
- ⊕ 8 x analog inputs (0...10V, +10/-10V, 4...20mA)
- ⊕ 1 x analog input for temperature sensor PT1000
- ⊕ 1 x quadrature encoder input

DIGITAL/ANALOG I/O EXPANSION

- ⊕ 16 x 24V Digital Inputs with status LEDs
- ⊕ 16 x 24V Digital Outputs with status LEDs
- ⊕ Up to 4 stackable I/O interfaces

ANALOG I/O EXPANSION

- ⊕ 8 x analog inputs (0...10V, +10/-10V, 4...20 mA)
- ⊕ 1 x analog input for temperature sensor PT1000

INDUSTRIAL ETHERNET EXPANSION

- ⊕ EtherCAT, Profinet, Ethernet/IP, Ethernet PowerLink

WIFI/4G IOT EXPANSION

- ⊕ WiFi/Bluetooth or 4G Modem

Other expansions on request

DIMENSIONS: METAL BOX 180 X 120 X 50 MM