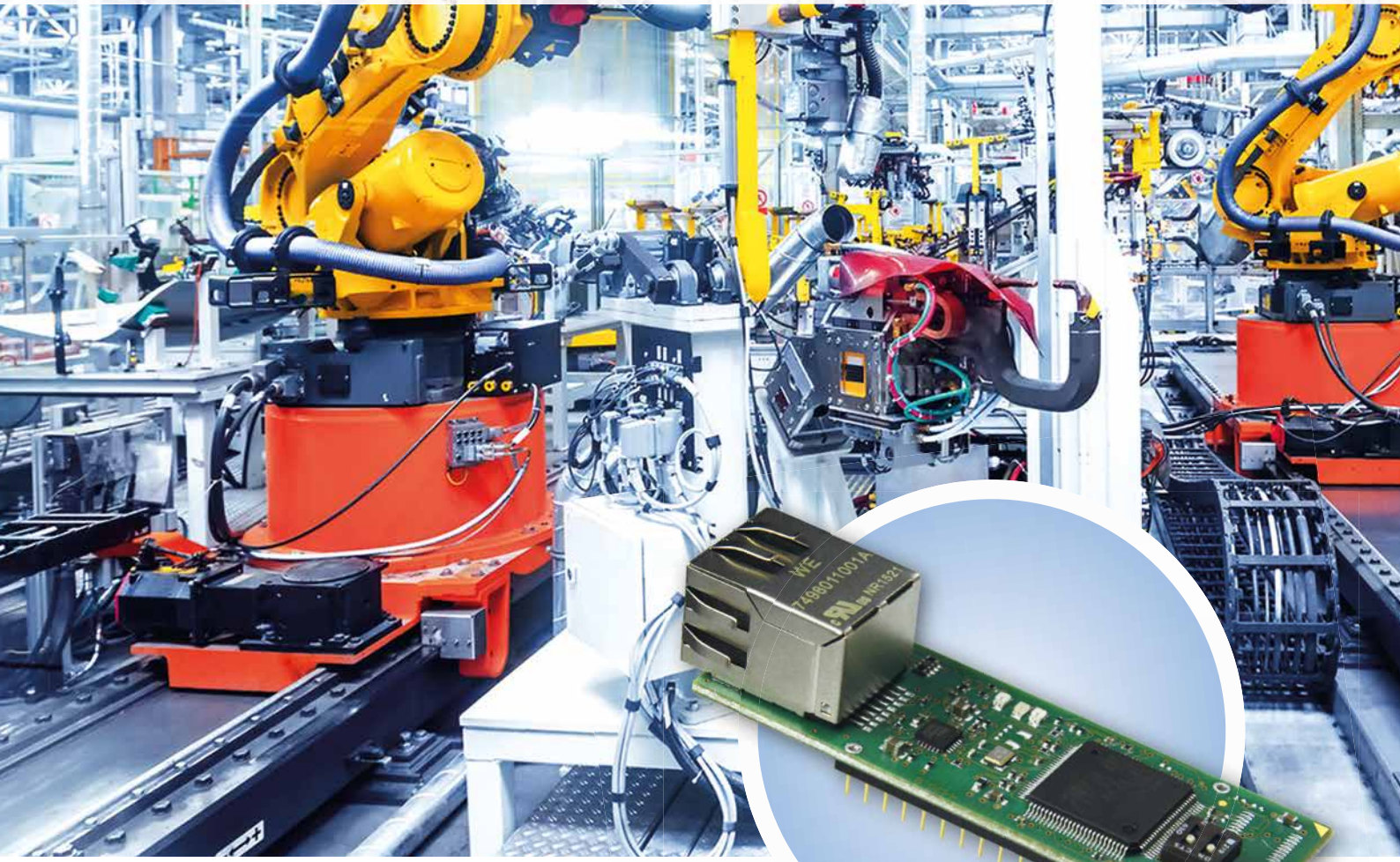


SYS TEC
ELECTRONIC



SMALL & FINE!

Fast, Easy, Safe – Measure, Track, Control

sysWORXX CTR-100 – Cost-effective industry 4.0 control
with connection to the cloud for installation proximity to sensor / actuator

TECHNICAL FACTS

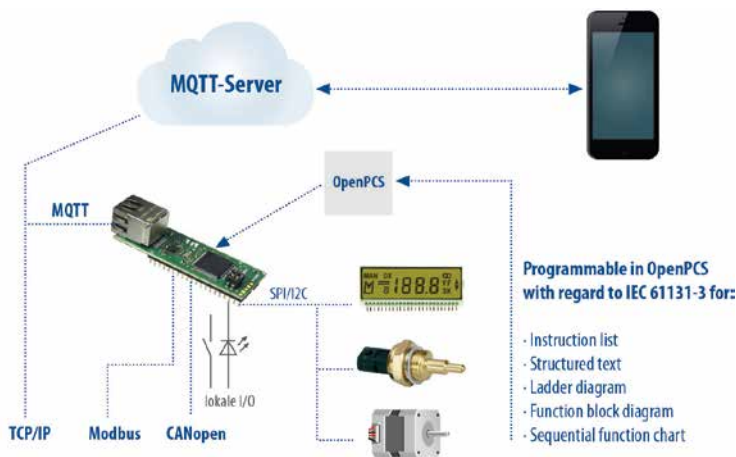
FEATURES

- Available as DIL-40 and LGA version
- STM32F767 / ARM 32-bit Cortex™-M7, 200 MHz
- 3x UART / USART, 1x CAN, 4x DO, 6x DI, 1x I²C, 1x SPI, 4x AI, 2x AO

- Connection: TCP / IP, MQTT, Modbus, CANopen
- Programmable user application according to IEC 61131-3 (128 kB application memory)

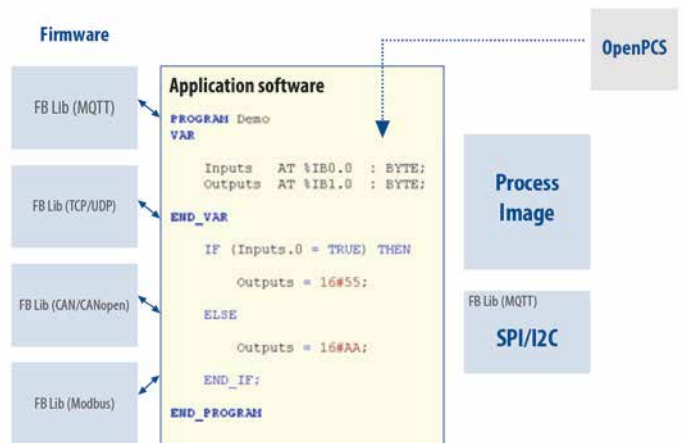
INTERFACES

with local bus (I²C, SPI)



PROGRAMMING

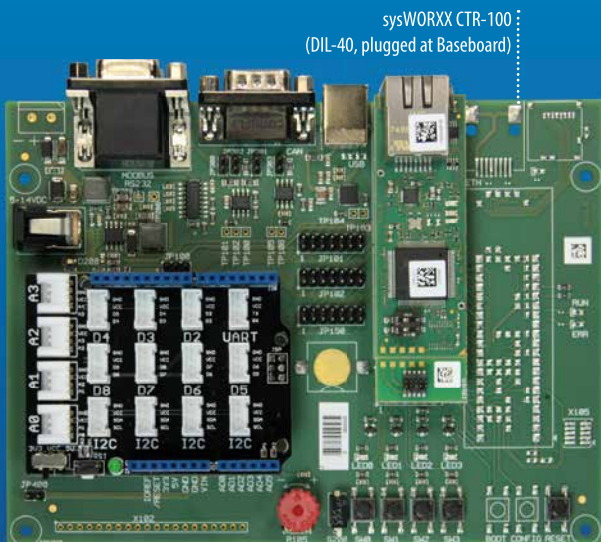
with IEC 61131-3



User program is protected in a 'sandbox'; access to firmware is only possible via fixed call gates (views of function blocks [FB] and process image).

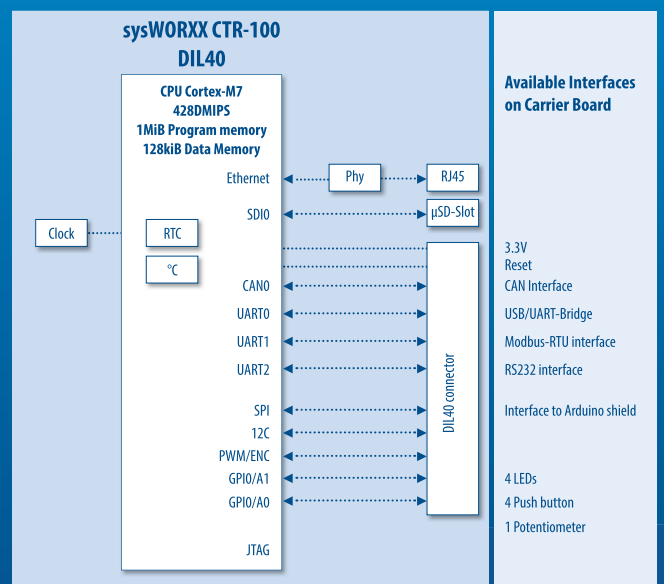
APPLICATION

Development kit consisting of baseboard and sysWORXX CTR-100



BLOCK DIAGRAM

sysWORXX CTR-100



USE CASES WITH YOUR ADDED VALUE FOR INDUSTRY 4.0

SMART DEVICES – Your digital factory 4.0



ADVANTAGES

- Easy connection to sensors & actuators
- Small size allows placement in close proximity to sensors & actuators
- Detection and processing of relevant parameters such as temperature, pressure, humidity, etc.
- Sending data to the cloud / gateways
- Control of actuators

ADDED VALUE

- Process optimization through data acquisition
- Cost savings through process optimization
- Live monitoring of relevant data (*condition monitoring*)
- Early detection of possible failures / errors (*predictive maintenance*)
- Monitoring without intervention into the machine's function (*parallel operation*)

USE CASES WITH YOUR ADDED VALUE FOR INDUSTRY 4.0

SMART ASSET TRACKING – Your digital manufacturing 4.0



ADVANTAGES

- Connection to mesh networks from different manufacturers
- Autonomous networking between thousands of sensors / actuators
- Very low battery consumption, long battery run time
- Cost-efficient
- Flexible operating modes:
 - Stand-alone solutions
 - Bridge to cloud

ADDED VALUE

- Flexibly controllable transportation ordering
- Dramatically reduces loading and unloading times
- Stock-level tracking
- Live monitoring of the flow of goods in production
- Cost savings through process optimization
- Efficient use of resources (e.g. transport vehicles)

USE CASES WITH YOUR ADDED VALUE FOR INDUSTRY 4.0

SMART FARMING – Your digital agriculture 4.0



ADVANTAGES

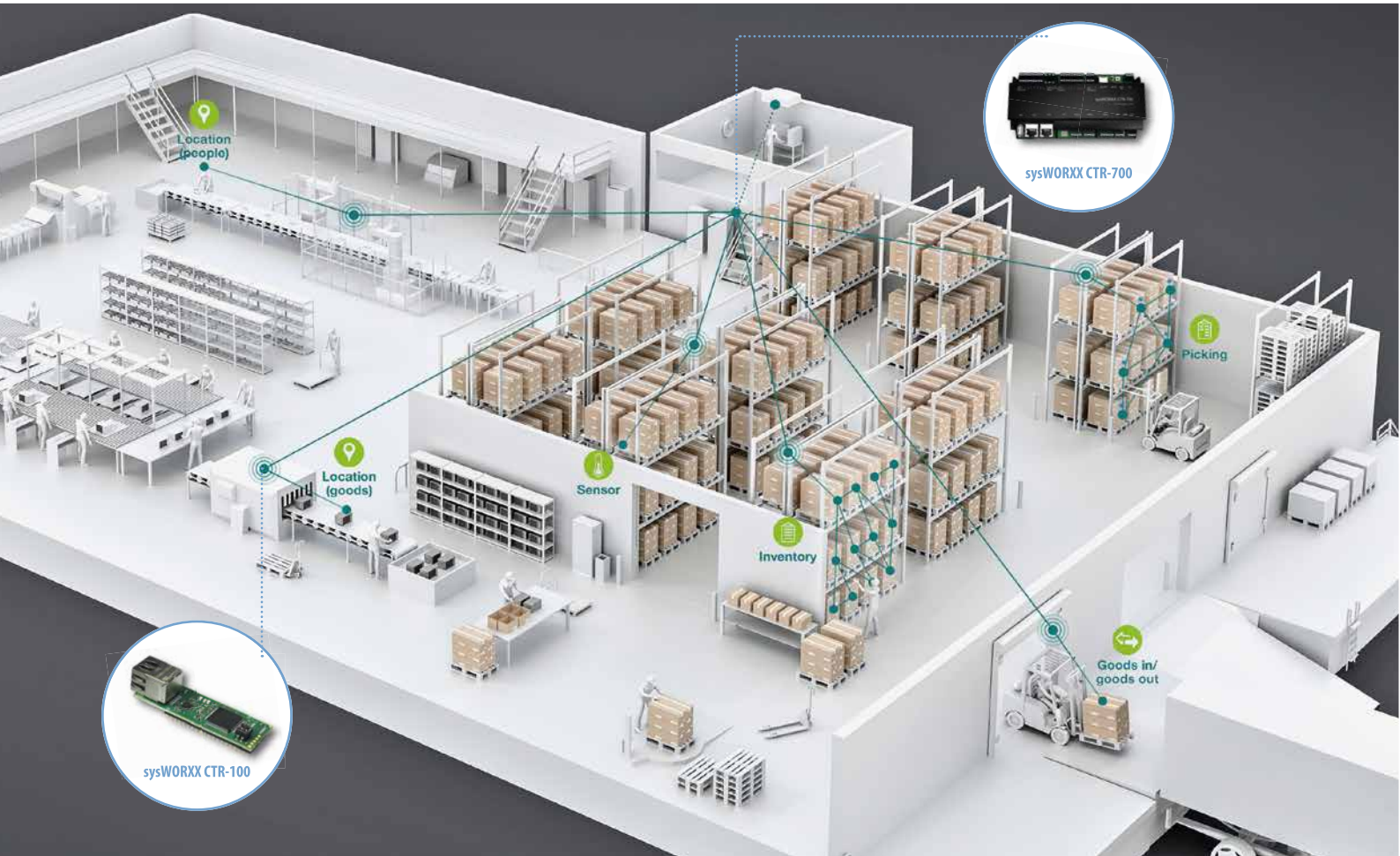
- Easy connection to sensors & actuators
- Small size allows placement in close proximity to sensors and actuators
- Measurement, control, regulation direct on chip
- Sending data to the cloud without any gateway
- Freely programmable and compatible with I2C, SPI, CANopen, MQTT, Modbus, etc.
- Flexible operating modes:
 - Stand-alone solutions
 - Bridge to cloud

ADDED VALUE

- Availability of the fertilising machine & harvester is improved
- Precise and individual fertilisation processes depending on the field and soil
- Environmentally friendly agriculture
- Cost savings through efficient material usage
- Easy connection to the controls of the fertilising machine and harvester

YOUR COMPLETE PACKAGE FOR INDUSTRY 4.0

Combination of sysWORXX CTR-100 and CTR-700



ADVANTAGES

- Both controllers are matched to hardware and software
- Professional and innovative products with over 27 years of experience

ADDED VALUE

- Monitoring, control and evaluation of complex industrial systems
- Energy-saving system due to mesh net functionality
- Easy integration and support with SYS TEC electronic
- Cost and time savings due to installation and commissioning by just one service provider – SYS TEC electronic

COMPARISON

between sysWORXX CTR-100 and -700

	sysWORXX CTR-100	sysWORXX CTR-700
CPU	STM32F767	i.MX7 dual Core
I/Os	Controller	Industrial
Programming	PLC	PLC, Linux, Node-RED
Visualisation	—	Via Node-RED
Location	Near sensor & actuator	Near machine & operator
COMING SOON		
wireless	BT-Mesh net (Add-on)	Narrowband, Mesh net