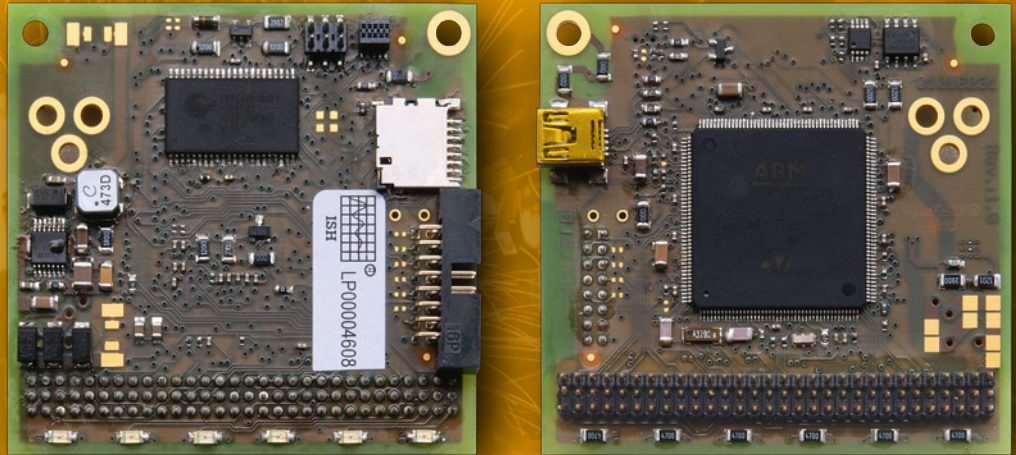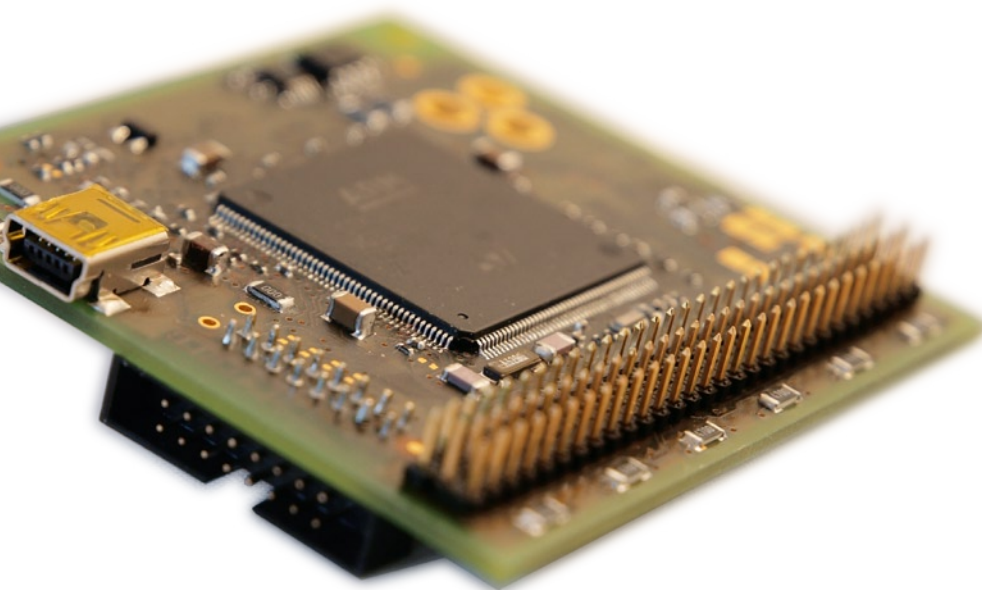# SPS on Chip

Flexible, reliable, cost-efficient

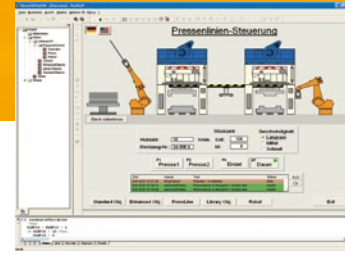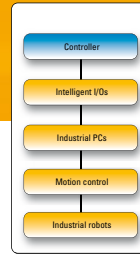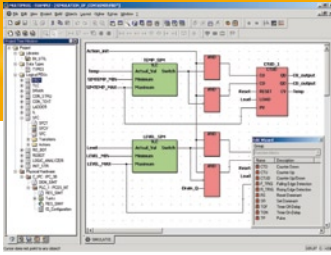The new micro-control of ISH

ISH µPLC iSOC300P

Plugin module for integration into your hardware:

- Very compact form factor
  65 x 60 mm incl. connectors
- cost-efficient
- flexible
- easy to integrate
- easy to program
- easy to extend
- immediately usable

micro-control ISH *µ*PLC iSOC300P ▪

Plug-in module for integration into existing electronics

CPU core Cortex M4 168 MHz

1 Mbyte FLASH as program memory

192 KByte SRAM integrated as variable memory

OS FreeRTOS

For high performance applications, extension is possible up to 1 Mbyte SRAM in order to operate the PLC program with the faster memory.

The following options an be provided:

1 Mbyte SRAM extension

Real-time clock

temperature sensor

SD card slot

Capacity:
- 100,000 logical operations (bool, byte, int, DInt) approximately 3.3 ms
- 100,000 real operations approximately 94.5 ms

Interface:
connector 3 x 30 with the following available signals:

Operating voltage 9-75 VDC

11 analog inputs

2 analog outputs *

1 SPI interface, * an alternative to one of the two analog outputs

27 digital inputs or outputs, configurable via software

1 encoder interface (AB)

1 PWM generator

2 counter inputs

3 PWM inputs

1 UART interface (TTL)

1 USB interface

1 CAN 2.0 Interface

1 Ethernet interface (without PHY)

1 backup battery for real- time clock

5 Status LED outputs

1 Reset

Furthermore there are additional ports on the board provided to program the CPU via the integrated serial interface.

The programming of the PLC is possible by way of the serial interface, via USB as well as by an adapter via Ethernet. As a programming interface Multiprog or Multiprog Express is used.

The module is also usable for ATEX applications (group 1)

Subject to change; errors and omissions excepted.