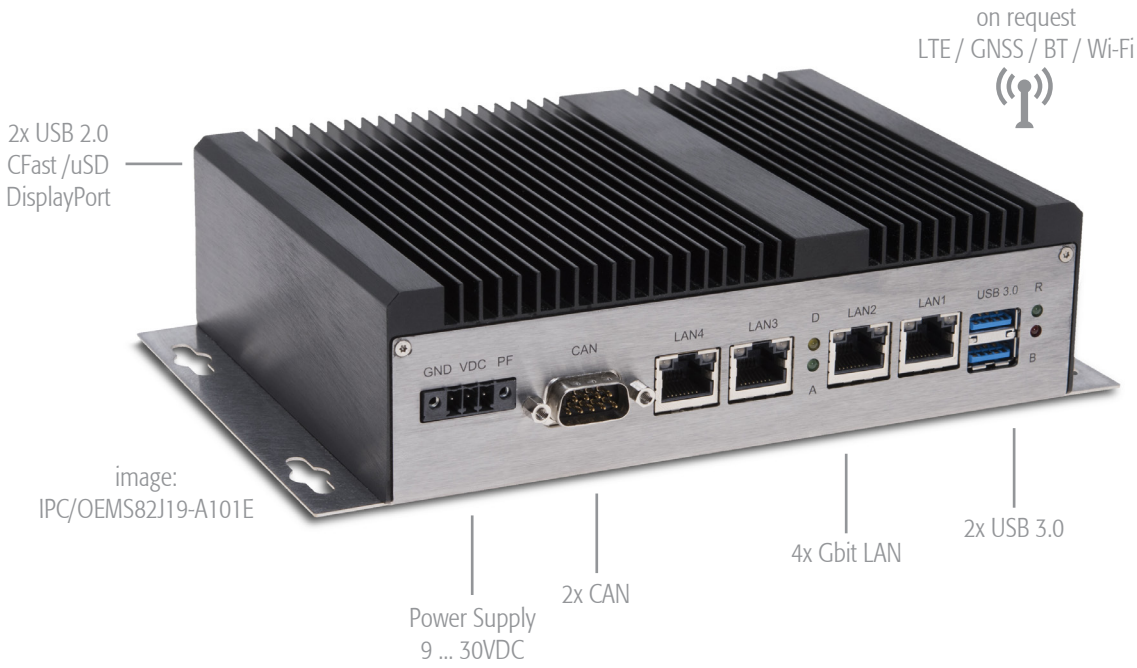
COMPACT-S OEM Series

Industrial compact PC with Intel® Atom™ Elkhart Lake processor (x6000)

preliminary



IPC/COMPACT82-OEM

This fanless COMPACT82-S OEM generation is based on the Intel® Atom™ Elkhart Lake (EHL) processor technology and offers a wide range of interface options.
The robust and uncompromising industrial design allows the implementation in the most demanding applications and guarantees long term availability with Win10 IoT or Linux support.

- **Multi-core 64-bit Intel® Atom™ processor**
- **24/7 continuous operation**
- **No moving parts**
- **Product lifecycle management**
- **Long term availability with fixed BOM**

Windows IoT

Product Highlights

Hardware Watchdog
Temperature supervision
Real time clock
Trusted platform module (TPM 2.0)
UEFI Secure Boot
ESD- protection on all interfaces
Aluminum / stainless steel housing
No active cooling required
Cable- and fanless design

Product Feature

Intel® Atom™ Elkhart Lake, 4 cores
RAM soldered on board up to 16GB LPDDR4
Socket for CFast
DisplayPort, Ethernet, USB3, CAN, Mini PCIe
Up to 4K resolution

Industries / Applications

AGV (Automated Guided Vehicle)
Industrial Automation
Traffic control
Cleantech

Order Code		IPC/OEMS82J19-A101E[1]	IPC/OEMS82H15-A102E[1]	IPC/OEMS82J19-A103E[1]
Processor / Performance				
Intel® Atom™ x6425RE - Quad core 1.9GHz clock | 16GB RAM		•	on request	•
Intel® Atom™ x6414RE - Quad core 1.5GHz clock | 4GB RAM		on request	•	on request
Memory / Storage				
L2 cache		1.5MB	1.5MB	1.5MB
LPDDR4x (3200 MT/s) RAM		16GB	4GB	16GB
CFast socket		1	1	1
MicroSD card socket[2]		1	1	1
Features				
Real time clock (RTC) with battery backup		•	•	•
Multistage Watchdog		•	•	•
Temperature supervisor		•	•	•
TPM 2.0 according to ISO/IEC11889		•	•	•
Communication Interfaces				
DisplayPort 1.2 (DDI) up to 4096×2160@60Hz (4K)		1	1	1
USB version 3.1 (front)	(Type A)	2	2	2
USB version 2.0 (back)	(Type A)	2	none	none
USB version 2.0 [3] (shared one with mPCIE)		2	none	2
Ethernet 10/100/1000 BASE-T (1x Intel® GbE | 3x Intel® I210-IT)	(RJ45)	4	2	4
RS232 Serial Interface (RX, TX, RTS, CTS) [3]		1	none	1
CAN (PEAK, SJA1000 compatible) isolated	(1x DSUB9)	2	none	none
Intel CAN-FD	(1x DSUB9)	none	none	1
Mini PCIe socket with miniSIM [3]		1	1	1
Technical Data				
Dimensions w174 x h52 x d127 mm (housing without mounting bracket)		•	•	•
Wall mounting (Accessories for DIN Rail Mounting not included in delivery. E.g. IPC/MKITCP-2G41 or IPC/MKITCP-2H)		•	•	•
Net weight [gram]		~950	~950	~950
Input voltage 9 ... 30VDC [4] non-isolated Fused and reverse polarity protected		•	•	•
Power consumption typ. [Watt] @ 24V without Add-Ins		tbd	tbd	tbd
Shield and internal ground are separated (only capacitive connection)		•	•	•
Isolation between Electronics and Shield (U = 50VDC)		R ≥50kOhm	R ≥50kOhm	R ≥50kOhm
Environmental Conditions				
Operating temperature (ambient) [5]		-40°C ... +70°C	-40°C ... +70°C	-40°C ... +70°C
Non operating temperature (Recommended storage temperature 20°C .. 25°C)		-40°C ... +85°C	-40°C ... +85°C	-40°C ... +85°C
Protection standard		IP40	IP40	IP40
Conformal coating [6]		on request	on request	on request
Shock: designed to meet EN60068-2-27		•	•	•
Vibration: designed to meet EN60068-2-6		•	•	•
EMC according to EN-55032/55035		•	•	•
Safety designed to meet IEC/EN62368		•	•	•
Radio and Telecommunication: Designed to meet RED		•	•	•
MTBF ~550 000h @ 25°C ambient acc. to Telcordia SR-332, Environment GB, excluding battery		tbd	tbd	tbd
Optional enhancement cards				
Wireless Module (5G, LTE / GNSS / BT / WiFi) [1]		on request	on request	on request

[1] Please contact factory for minimum order quantities
[2] The Intel processor chipset contains several issues in SD and SDIO Hostcontroller. Please check Intel ERRATA for additional information
[3] Internal connector
[4] mating type Weidmüller BCZ 3.81/03/180F SN BK BX (1792960000) - included in scope of delivery
[5] Maximum ambient temperature is highly dependent on installation situation, air flow, interface connection and CPU/GPU load. Please see user documentation.
[6] on all possible components (excl. Connectors and wireless devices)

Syslogic Datentechnik AG
Täfernstrasse 28
CH-5405 Baden Dättwil

Version 0.5 | February 2023

For further information and support:
info@syslogic.com
support@syslogic.com
www.syslogic.com

+41 56 200 90 40 **Switzerland (Headquarters)**
+49 7741 967 14 20 **Germany and Austria**

syslogic
industrial computing