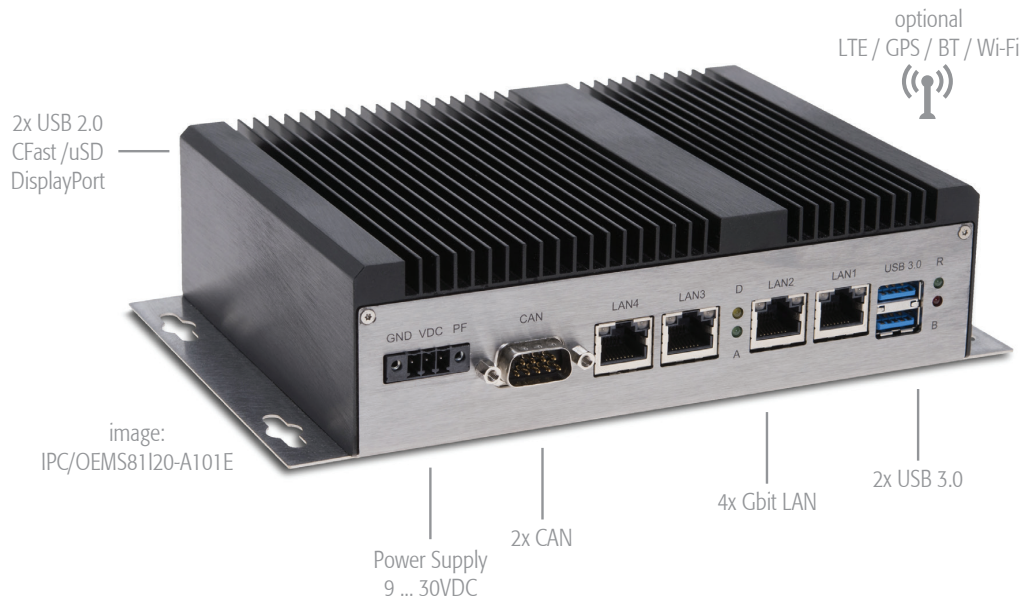


Embedded Box PCs

COMPACT-S OEM Series

Industrial compact PC with Intel® Atom™ E3900 processor | Celeron™ or Pentium® (Apollo Lake)



IPC/COMPACT81-OEM

This fanless COMPACT81-S OEM generation is based on the latest Intel® Atom™ E3900 (Apollo Lake) 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



Product Highlights

Hardware Watchdog
Temperature supervision
Real time clock
Persistent Flash BIOS
ESD- protection on all interfaces
Aluminum housing
No active cooling required
Cable- and fanless design

Product Feature

Intel® Atom™ E3900 Series
Intel® Celeron™ or Pentium®
up to 2.0GHz, up to 4 Cores
RAM soldered on board up to 8GB
Socket for CFast
DisplayPort, Ethernet, USB3, CAN, Mini PCIe
Up to 4K resolution

Industries / Applications

Industrial Automation
Traffic control
AGV (Automated Guided Vehicle)
Cleantech

	Order Code	IPC/OEMS81I20-A101E	IPC/OEMS81I20-A102E ¹	IPC/OEMS81I20-A103E
Processor / Performance				
Intel® Atom™ x5-E3930 1.80GHz (Burst) 1.3GHz Clock - Dual Core 2GB RAM		optional	optional	optional
Intel® Atom™ x5-E3940 1.80GHz (Burst) 1.6GHz Clock - Quad Core 4GB RAM		optional	optional	optional
Intel® Atom™ x7-E3950 2.00GHz (Burst) 1.6GHz Clock - Quad Core 8GB RAM		•	•	•
Intel® Celeron® N3350 2.4GHz (Burst) 1.1GHz Clock - Dual Core		on request	on request	on request
Intel® Pentium® N4200 2.5GHz (Burst) 1.1GHz Clock - Quad Core		on request	on request	on request
Memory / Storage				
L2 cache		2MB	2MB	2MB
DDR3-1867 RAM with ECC		8GB	8GB	8GB
CFast socket		1	1	1
microSD card socket		1	1	1
Features				
Real time clock (RTC) with battery backup		•	•	•
Multistage Watchdog		•	•	•
Temperature supervisor		•	•	•
TPM2.0 (Infineon SLB9665)		•	•	•
Communication Interfaces				
DisplayPort 1.2 (DDI) up to 4096x2160@60Hz (4K)		1	1	1
USB version 3.0 (front) (Type A)		2	2	2
USB version 2.0 (back) (Type A)		2	none	none
USB version 2.0 ² (shared with mPCIe)		2	none	2
Ethernet 10/100/1000 Mbit with Intel I210 (RJ45)		4	2	4
RS232 Serial Interface (RX, TX, RTS, CTS) ²		1	none	1
CAN (PEAK, SJA1000 compatible) isolated (1x DSUB9)		2	none	none
CAN (SJA1000 compatible) (1x DSUB9)		none	none	1
Mini PCIe socket with miniSIM ²		1	1	1
Technical Data				
Dimensions w174 x h50 x d127 mm (housing without mounting bracket)		•	•	•
Wall or DIN Rail mounting		•	•	•
Net weight [gram]		~950	~950	~950
Input voltage 9 ... 30VDC non-isolated		•	•	•
Current consumption typ. [mA] @ 24V without Add-Ins		625	625	625
Power consumption typ. [Watt] @ 24V without Add-Ins		15	15	15
Environmental Conditions				
Operating temperature (ambient) ³		-40°C ... +70°C	-40°C ... +70°C	-40°C ... +70°C
Storage temperature		-40°C ... +85°C	-40°C ... +85°C	-40°C ... +85°C
Protection standard		IP40	IP40	IP40
Conformal coating ⁴		optional	optional	optional
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}		•	•	•
UL / CSA certification ¹		on request	on request	on request
Optional enhancement cards				
Wireless Module (LTE / GSM / GPS / BT / WiFi) ¹		optional	optional	optional

¹Please contact factory for minimum order quantities, IPC/OEMS81I20-A102E is only produced in larger quantities

²Internal connector

³ Depending on installation situation and interface connection. Please see user documentation.

⁴ on all possible components (excl. Connectors and wireless devices)

Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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