Sontheim

ePC

Small, compact and scalable

We live electronics!

ePC

ePC is a modular embedded platform for being used in all areas of the automation sector. The design principle of bus-coupling devices allows extensions while the basic system remains untouched.

Key Features

- **Atom-CPU with passive cooling**
- **Numerous interfaces like CAN, Ethernet, IOs, CFast, DVI and USB**
- **Software tools for all tasks around the CAN bus**
- **Link2Go: Extension modules can be attached without adapting the ePC like fieldbus couplers**
- **IP20 full metal housing for optimum EMC protection**

Main technical advantages

There are several different processor types of the Atom family available. The chipset is known for a high energy efficiency and little heat waste. It has 1 to 2 GB RAM onboard for small to complex operations. Instead of a usual HDD the ePC uses CFast which is the faster successor of Compact Flash – the system can also be booted over this interface. The advantage is a data transfer speed of up to 3 Gbit/s. Of course, all CFast cards can be purchased via Sontheim. A full metal housing together with the specific memory and CPU provides optimal EMC-capabilities and passive cooling even at high temperatures.

Link2Go – Expand your PC!

Modern automation applications require efficiency and the flexibility to adapt to changing environments in an individually matching way. Link2Go is a concept of adding extension modules quickly and conveniently to the ePC. However, the basic unit remains as it is and the user can change the modules later on if necessary. The range of the planned extensions varies from touch displays and bus couplers to hard disk drives and serial interfaces. There could even customer-specific modules be created. Link2Go – your personal embedded solution for the price of standard components.

Technical Data

Chipset	Freely selectable Atom-Chipsets, e.g. 1.3 GHz / 1 GB RAM CPU boards are exchangeable, new CPU platforms thus retrofittable
RAM	1–2 GB, optional separate process data storage (Retain storage)
HDD	Slot for CFast-Card or Link2Go module, bootable
CAN	1× CAN interface acc. to ISO 11898, galv. isolated
LAN	2× Gigabit LAN (one interface is EtherCAT-capable)
WLAN	optional
Digital Inputs	4× DI, acc. to IEC 61131-2, separate supply
Digital Outputs	4× DO, acc. to IEC 61131-2, separate supply
USB	4× USB 2.0
DVI-D	1×
Connection of external peripheral components	Mouse, keyboard and other peripherals via USB 2.0 Visualization via DVI or via Link2Go module
LEDs	Power, HDD and CAN
Dimensions (l×w×h)	120 mm × 115 mm × 111 mm
Storage temperature	–20 °C up to +65 °C
Operating temperature	0 °C up to +60 °C; extended temperature range with –40 °C up to +85 °C
Humidity	5 % – 95 % non-condensing
Protection class	IP20
Power supply	24 V DC ±20 %
Total current	max. 1.2 A

Pin assignment

DVI-D

01	TDMS-data 2–
02	TDMS-data 2+
03	Shield TDMS-data 2,4
04	TDMS-data 4–
05	TDMS-data 4+
06	DDC frequency
07	DDC frequency
08	Analog: V-Sync
09	TDMS-data 1–
17	TDMS-data 0–
18	TDMS-data 0+
19	Shield TDMS-data 0,5
20	TDMS-data 5–
21	TDMS-data 5+
22	Shield TDMS-frequency
23	TDMS-data +
24	TDMS-data–
C1	NC
C2	NC
C3	NC
C4	NC
C5	NC

Digital IOs

1	24 V power supply
2	Digital input 0
3	Digital input 1
4	Digital input 2
5	Digital input 3
6	GND
7	Digital output 0
8	Digital output 1
9	Digital output 2
10	Digital output 3

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1	TXD+
2	TXD–
3	RXD+
4	BIAS1
5	BIAS1
6	RXD–
7	BIAS2
8	BIAS2

CAN

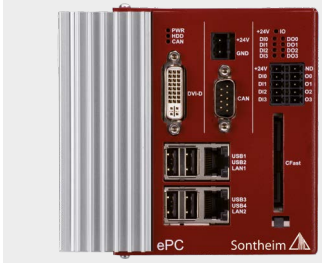
1	–
2	CAN low
3	CAN GND
4	–
5	–
6	–
7	CAN high
8	–
9	–

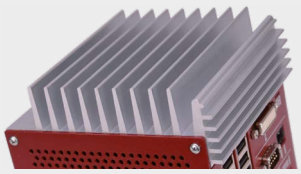
USB

1	VCC (VBUS)
2	– Data
3	+ Data
4	GND (Ground)

Interfaces

The ePC incorporates many interfaces for a maximum of flexibility already in its basic version without extensions (Link2Go). These includes CAN, Ethernet (EtherCAT capable), digital inputs and outputs, DVI and USB. In the basic configuration tasks as PLC, CAN bus master or slave, signal processing center and many more applications are possible. An integrated CFast interface like an USB stick thought for data logging and even booting the system.





Order information

V971011000	ePC

Mobile Automation

Industrial Automation

Diagnostics

Connectivity

We are looking forward to your enquiry!

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