CANminiBOX™ - Series

Fanless Intelligent Linux Controller with CANbus

Technical Description

CANminiBOX™ – based on Janz AG's **emPC-X133/1U** – is a versatile, compact embedded control system particularly suited to embedded CANbus control applications.

Using high-reliability components, a wide variety of hardware and software options are available in the tiny AMD Élan based **CANminiBOX**™.

128 MB SD-RAM is sufficient to control Linux operating systems, while 512 MB CompactFlash card storage can easily be upgraded. Power consumption is low, so reliable cooling is completely passive.

DIN-rail-mounted, **CANminiBOX**™ can be placed almost anywhere, even in the tightest locations.

With standard interfaces of 10/100BaseT Ethernet, USB, RS232, and one CANbus, this versatile controller system has remarkably small dimensions.

The widely-used and free-of-charge operating system Linux comes standard, while other choices are possible and can be selected to perfectly match customer needs.

Every **CANminiBOX**™ system is 100% tested and is customizable even in small quantities.

A wide range of operating systems is offered, with design-team hardware and software support. If required, customer-specific software can be preloaded.

For more details, please contact Saelig or Janz offices.

Features / Technical Specifications

Processor

- AMD Élan SC520 with 133 MHz (with integrated peripherals)
- 66 MHz memory bus frequency, 33 MHz PCI bus frequency
- L1 cache 16 kB unified cache (write-through or write-back)
- integrated FPU; IEEE 754 compliant

Memory

- system memory 128 MB SD-RAM
- Boot FLASH 1 MB, 3.3V
  in-circuit programmable (up to 2 MB possible)
- NVRAM 114 bytes (located in RTC) with battery backup;
  4 kB (512 bytes) located in I^2C EEPROM;
  16 bytes reserved by the system
- internal storage medium Compact Flash socket, Type I/II
- 512 MB SD-RAM CompactFlash capacity

Interfaces

- 10/100 MBit/s Ethernet on front panel
  AMD AM79C973 chipset,
  PCnet-PCI II Ethernet controller (Master Bus capable) with 12 kB SRAM FIFO
  10/100BaseT port at front panel
- 16550 compatible UART (COM1);
  on front panel; 15-pin D-SUB connectors;
  baud rate up to 115200 bps, RS232 level
- CAN ports on front panel, 9-pin D-SUB connector (according to CiA DS-102)
  SJA1000 CAN controller
- USB (v1.1), at front panel, Type A;
  USB PCI host controller, OPTi 82C861

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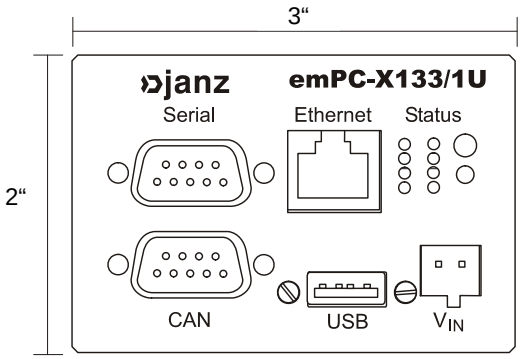

Power Supply

- input 10..28V_{DC}
  power consumption approx. 6W

Physical

- ambient operating temperature range from 0°C … 50°C
- non-operating temperature range from –20°C … 75°C
- humidity 0% ~ 80%, non-condensing
- ESD protection 2 KV (human body model)
- dimensions (w x h x d): 3” x 2” x 4.7”
- weight approx. 0.4 kg (0.9 lb)

Supported Operating Systems

Linux, QNX, VxWorks
other operating systems on request...

Options on request

- Additional I/O ports
- Additional CANbus/ RS232 ports
- Different Operating System support
- Custom specific front panel design
- Custom specific system modifications

Ordering information CANminiBOX

CANminiBOX™ KD-SAE-01002
AMD Èlan SC520 with 133 MHz and 128 MB SD-RAM
1 x CAN/CANopen port, 1 x RS232 port, 1 x USB
512 MB CompactFlash Medium
Linux pre-installed

For further information and options call **1-888-7SAELIG**.

Contact Information

Saelig Company, Inc.
1160-D2 Pittsford-Victor Rd.
Pittsford, NY 14534 USA

Phone +1 585-385-1750
Fax +1 585-385-1768
E-Mail info@saelig.com
Web www.saelig.com
www.janz.com