

# SolidCard I

PC at cheque card size with LCD support

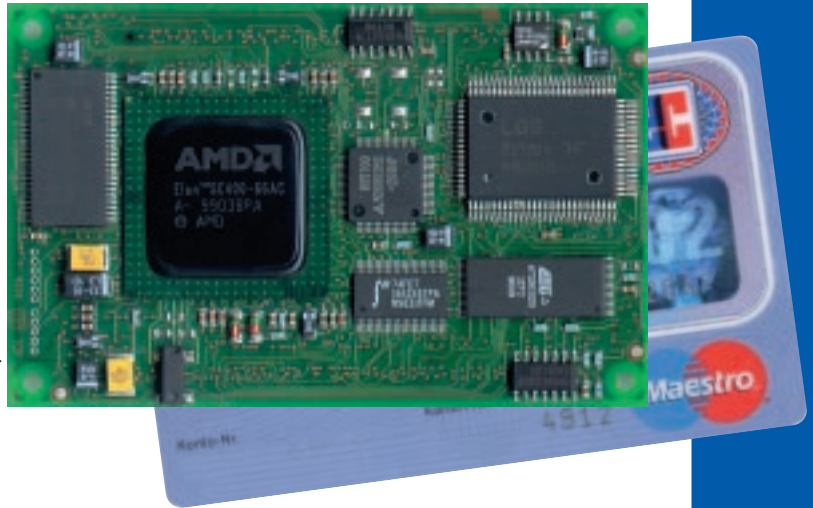
## Complete micro PC

The **SolidCard I** is a complete PC-compatible computer in the size of a cheque card (54 mm x 85 mm). It can be adapted over two 160 pin-connectors. For industrial environments and mobile applications, four drills are existing for fixing the card.

The heart of the **SolidCard I** is an Elan-SC400 CPU (486SX), that can be clocked up to 99 MHz. The processor is equipped with 8 kByte first level cache, that guarantees a high performance.

The main memory is integrated firmly on the card. It may be equipped with 2/ 4/ 8 or 16 MByte (soldered). Optional there is one 8 MByte flash disk onboard.

The **SolidCard I** contains standard PC interfaces like LPT, COMs, floppy disk and IDE port.



## Direct driving for flat screens

The **SolidCard I** can directly drives flat screens with TFT- and STN-technology. Supporting single and dual-scan STN or single-scan CSTN flat screen types. The possible solutions are 320 x 240 pixel with 16 grey scales and/or colours and 640 x 480 pixel with four colours / mono-chrome. For some usual display types, adaptations are already available.

The system-loader is placed in one 256 kByte flash, that can be updated by the user in operation.

For extensions, the **SolidCard I** makes available a 16 bit ISA bus. On this bus you get one 8 bit DMA and 5 interrupt channels.

The module is equipped with a serial EEPROM in which user-specific data can be saved constantly.

## Quick start for your development

Our basic cards in connection with our free support hotline help for a problem-free implementation of your application on members of the **SolidCard** family.

Available peripheral devices are completed by usual PC components in the development environment. Here are integrated e.g. ethernet, USB endpoint and IrDA interface as, like status indications for post code and 8 freely available I/O lines.

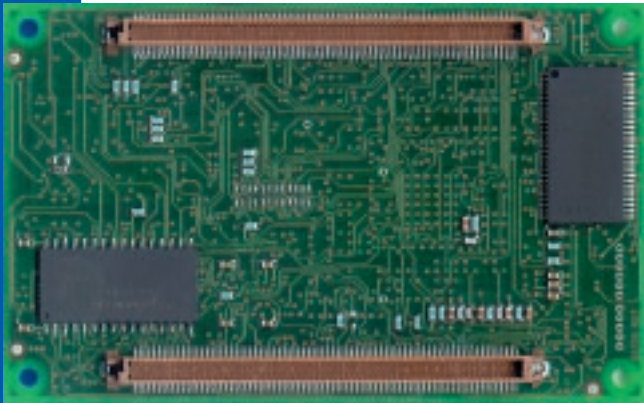
By the additionally integrated graphic controller a parallel operation of two displays is possible. Special applications with and without touch operation are more easily testable. The debugging are simplified and the development phase will be crucially shortened.

The complete evaluation kit I contains the **SolidCard I** with suitable basic card, a flat screen (quarter VGA), an IDE San disk, needed sets of cables and appropriate power pack. All interfaces are led out on standard PC plugs.

For your problem-free software implementation on the available PC system it contains size-optimizes structured embedded Linux as well as the ultra fast "HyperBoot"-loader.

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## The short way to your customized layout

The available hardware platform with processor core and various graphic / peripheral devices was already structured modular on connection diagram level.

In this way we can generate most flexible low-priced customized layouts. Normally used plug systems will be cancelled.

Constructing on this modular concept and "rapid prototyping" now for us it is the first time possible synchronously to your software development to offer you optimized customized hardware designs with immediate function warranty.

In this way the "time to market" cycle can be crucially shortened.

## Technical data

- AMD Elan SC400, compatible 486SX CPU with clock rate from 33 to 99 MHz
- 8 kByte first level cache
- 2/ 4/ 8 or 16 MByte DRAM soldered versions
- Optional 8MByte flash disk onboard
- 2 kBit (256 x 8) EEPROM
- 256 kByte flash memory for "HyperBoot"-loader, updateable during operation
- 3 serial interfaces with 5V and/or 3.3V levels, thereof one configurable as IrDA
- Port for up to two floppy disk drives
- Prepared IDE interface for up to two IDE devices (fixed disks, CD ROM)
- Parallel port (EPP 1.7 / 1.9)
- 16 bit ISA bus (3,3V signal level, 5V tolerant)
- One 8 bit DMA channel on the ISA bus
- 5 interrupt channels on the ISA bus
- External I<sup>2</sup>C-bus
- 8 free programmable I/O-signals
- Two Chip-Select outputs, free programmable in the address space
- Prepared for the connection of a user specific matrix keyboard
- Optional PS/2 compatible keyboard and mouse interface
- Real-time clock (will be buffered with external battery)
- 3.3V voltage monitoring
- Watchdogtimer (delay of 1.6 seconds)
- Board size: 85 mm to 54 mm
- Overall height with 4 mm connector (optional 6 mm) including components 11 mm (and/or 13 mm)
- Power supply:  
3.3V ± 5%, max. 800 mA,  
5.0V ± 5%, max. 200 mA
- Operating temperature range 0°C to 70°C

Reserve to technical modifications

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