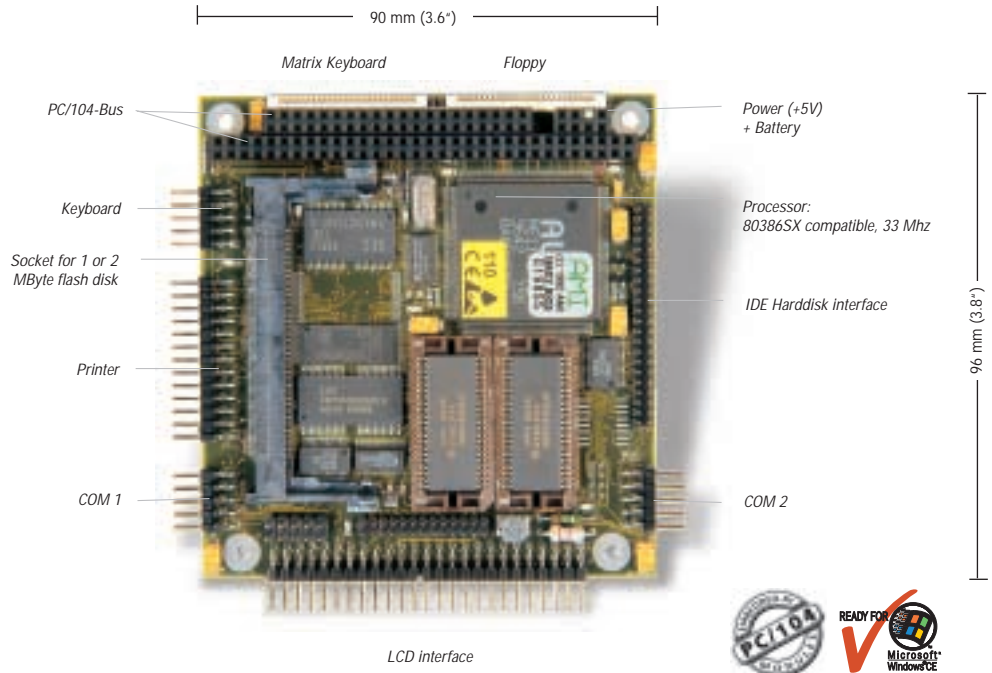# MOPS*lcd3*

Technical Data

- **PC/104** industry standard
- **CPU:** *80386SX compatible, 33 MHz*
- **DRAM:** *2 MByte (fixed soldered on) extendable to 4 and 6 MByte (via Socket)*
- **Bootable Flash Harddisk:**
  Version 1: BIOS compatible:
  1 (0,9) MByte fixed soldered extendable with DIMM-Module to 1,9 or 2,9 MByte
  Version 2: IDE-compatible:
  *with chip**DISK** expandable up to 96 MByte*

  Version 1 and 2 can operate parallel
- **VGA-Graphic** *for flat panels and CRT monitors*
- **Resolutions:**
  on CRT usage:
  320x240 256 colors out of 262k
  640x480 256 colors out of 262k
  800x600 256 colors out of 262k
  1024x768 16 colors out of 262k
  on LCD usage:
  320x240 256 colors out of 262k
  640x480 256 colors out of 262k
- **512 KByte Video-RAM**
- *Supports* **LCD, TFT** *and* **STN***-flatdisplays (color or monochrome)*
- **Automatic recognition of the connected display**
- *Backlight protector for flat panels*
- **Dark-Boot-Function** *-> suppression of the boot indication of the PC*
- **Text compression for ¼ VGA display**
- **Matrix-touch or Matrix keyboard with** *up to 8x10 Keys (with extension 16x10) connectable*
- **Floppy- and IDE harddisk** *interface*
- **Serial interfaces:** *2 x RS232C*
- **Printer port:** *LPT bidirectional*
- **AT keyboard interface**
- **Watchdog timer**
- **Ethernet,** *twisted pair (Option)*
- **Setup in flash** *(i.e. bootable without a battery)*
- **Realtime clock**
- **Dimension:** *96x90 mm (3.8x3.6")*
- **Power consumption:** *5 V, typ. 700 mA*
- *Mostly plug-compatible with MOPS/586, MOPSlcd4, MOPSplus, MOPSlcd6 and thus exchangeable with each other.*

90 mm (3.6")

Matrix Keyboard — *Floppy*

PC/104-Bus — *Power (+5V) + Battery*

Keyboard — *Processor: 80386SX compatible, 33 Mhz*

Socket for 1 or 2 MByte flash disk

IDE Harddisk interface

Printer

96 mm (3.8")

COM 1 — *COM 2*

LCD interface

Description

The **MOPS***lcd3 (Minimized Open PC System) is a highly integrated CPU card in the PC/104 format. In spite of the compact dimensions, all common PC interfaces are available including a graphics controller, as well as an Ethernet interface. The component is also able to drive a monochrome, passive color (STN) or active color (TFT) flat panel display or a normal VGA-monitor. The voltage for the contrast control is generated on board. More than 60 different display types are automatically recognized and the timing is adjusted. The flat display may be operated simultaneously to a standard-monitor (CRT). An integrated backlight protector switches off the backlight after an adjustable time, if no screen activities take place. A "dark boot mode" suppresses the typical PC boot messages during system startup, and leaves the display dark during this phase or enables the output of customer specific messages.

By special features like hardware cursor, color expansion, 16 bit memory and 16 bit I/O-access (especially under Windows), a very high graphics performance is attained. Besides the VGA-function, all other peripheral functions of a PC, like floppy- and hard disk connection are available. In addition, an interface for implementing a matrix keyboard or a matrix touch screen with up to 8 x 10 (with an additional circuit 16x10) fields is available. The integrated flash disk is bootable and can operate in a DOS environment like a "normal" hard disk. To improve reliablity an intelligent watchdog timer, a monitoring of the boot phase and a power fail circuit are integrated. By storing the setup parameters in the flash EPROM, the unit is able to run without a system battery. The **MOPS***lcd3 is the ideal unit for integrating PC functionality to compact devices for measurement, terminals and medical applications.

Ordering Information

Article	Part.-No.	Description
MOPS*lcd3*	*01020-0201-33-0*	*386SX, 33MHz, 2MB DRAM, 0,9MB Flash-Harddisk*
MOPS*lcd3*	*01020-0201-33-1*	*386SX, 33MHz, 2MB DRAM, 0,9MB Flash-Harddisk, Ethernet*

Accessories

Article	Part.-No.	Article	Part.-No.
MOPS*lcd3-DOC*	*96035-0002-00-0*	*ADA-FLOPPY-2*	*96001-0000-00-0*
DRAM-SOJ-1x16-6	*UKM416C12AJ6H4H*	*FLOPPY-3,5*	*96009-0000-00-0*
SDISK-DIMM-1M	*97002-0001-00-0*	*FLOPPY-MOPS-1*	*96010-0000-00-0*
SDISK-DIMM-2M	*97002-0002-00-0*	*KAB-FLOPPY/MOPS-1*	*96019-0000-00-0*
*chip**DISK***	*option*	*KAB-IDE-25*	*96020-0000-00-0*
KAB-MOPS-SET2	*96002-0000-00-0*	*KAB-IDE-2MM*	*96021-0000-00-0*
KAB-VGA-1	*96025-0000-00-0*	*JRC1*	*96047-0000-00-0*
KAB-KB-1	*96023-0000-00-0*	*CONV-RS485G*	*96014-0000-00-0*
KAB-DSUB25-1	*96015-0000-00-0*		
KAB-DSUB9-2	*96017-0000-00-0*		