



# MSM800XEL/XEV, MSM900XEV

## Description

The MICROSPACE® MSM800XEL/XEV has all of the standard PC interfaces plus ethernet LAN and a sound controller (XEV). The 256MB memory is permanently soldered, adding increased robustness. In the XEV version a PCI to ISA bridge is onboard which supports the ISA bus. The PC/104-Plus bus (ISA & PCI) and 4 USB interfaces are available as functional extensions. The 8W power consumption permits passive cooling within a very broad ambient temperature range. The XEL version is a low-cost variant without battery, sound codec or ISA bus.

## Applications

- \_ Used in cars and airplanes
- \_ Information terminals
- \_ Play systems with music output
- \_ Measuring instruments
- \_ Telecommunication devices

## Ordering information

| Option/accessories | No.    | Description                             |
|--------------------|--------|---|
| Option -L+         | 807006 | PC/104-Plus, long connector             |
| Option -P+         | 807005 | PC/104-Plus, short connector            |
| Option -CF         | 807007 | CompactFlash socket (without Option -L) |
| MSM800-CKCON       | 803035 | MSM800 PC/104-cable kit                 |
| MSFLOPPY           | 891001 | 3.5" Micro-Floppy drive (26pin)         |
| MSFDCK             | 802600 | Micro-Floppy cable (26pin)              |
| MSM800-LANCON      | 803046 | LAN cable with PCB connector            |
| MSM800-DVICON      | 803042 | DVI-D interface                         |
| MSM800-LVDSCON     | 803044 | LVDS interface                          |
| Small cooler       | 807041 | for -25°C to +70°C*                     |
| Large cooler       | 807042 | for -40°C to +70°C* with E47            |
| Thermojunction     | 807043 | for -40°C to +85°C* with E48            |

\*Photos on page 56.



ISA

PCI

LX900

600MHz

max. 1GB RAM

1x LAN



## Technical data

| Type   | MSM800XEL                     | MSM800XEV                     | MSM900XEV                     |
|--|-------------------------------|-------------------------------|-------------------------------|
| CPU  | AMD Geode™ LX800              | AMD Geode™ LX800              | AMD Geode™ LX900              |
| ISA-BUS  | PC/104-8/16-Bit               | PC/104-8/16-Bit               | PC/104-8/16-Bit               |
| PCI-BUS (option 807006 or 807005)                | Option (2slot)                | Option (2slot)                | Option (2slot)                |
| PCI Express-BUS                                  | -                             | -                             | -                             |
| 2 <sup>nd</sup> Level cache (kB)                 | 128                           | 128                           | 128                           |
| Performance (MHz)                                | 500                           | 500                           | 600                           |
| DRAM Min-Max (MB)                                | soldered 256MB                | soldered 256MB                | soldered 256MB                |
| CompactFlash socket (option 807007)              | Option type II                | Option type II                | Option type II                |
| Keyboard, mouse (PS/2)                           | yes                           | yes                           | yes                           |
| Boot drive                                       | FD, HD, LAN, CF, USB          | FD, HD, LAN, CF, USB          | FD, HD, LAN, CF, USB          |
| Floppy interface                                 | yes                           | yes                           | yes                           |
| IDE interface P-ATA                              | 1x                            | 1x                            | 1x                            |
| IDE interface S-ATA                              | -                             | -                             | -                             |
| COM1   | RS232C                        | RS232C                        | RS232C                        |
| COM2   | RS232C                        | RS232C                        | RS232C                        |
| COM3   | -                             | -                             | -                             |
| COM4   | -                             | -                             | -                             |
| LPT1   | 1x                            | 1x                            | 1x                            |
| USB (2.0)  | 4x                            | 4x                            | 4x                            |
| LAN port 1 incl. transformer                     | 10/100BASE-T                  | 10/100BASE-T                  | 10/100BASE-T                  |
| LAN port 2                                       | -                             | -                             | -                             |
| Audio  | -                             | AC97                          | AC97                          |
| Video controller                                 | LX800                         | LX800                         | LX900                         |
| Video memory (MB)                                | 16 (UMA)                      | 16 (UMA)                      | 16 (UMA)                      |
| LCD interface                                    | 24Bit, 240x 320 to 1600x 1200 | 24Bit, 240x 320 to 1600x 1200 | 24Bit, 240x 320 to 1600x 1200 |
| DVI interface                                    | -                             | Option 803042                 | Option 803042                 |
| CRT interface                                    | yes                           | yes                           | yes                           |
| Video input                                      | -                             | -                             | -                             |
| Watchdog   | yes                           | yes                           | yes                           |
| Power normal                                     | 5V/8W                         | 5V/8W                         | 5V/9W                         |
| Power suspend                                    | -                             | -                             | -                             |
| Power management                                 | yes                           | yes                           | yes                           |
| RTC battery onboard                              | external                      | 400mAh                        | 400mAh                        |
| Cooling type                                     | order separatly               | order separatly               | order separatly               |
| Operating temperature without cooler             | 0°C to +60°C                  | 0°C to +60°C                  | 0°C to +60°C                  |
| Operating temperature with 807041                | -25°C to +70°C                | -25°C to +70°C                | -25°C to +70°C                |
| Extended operating temperature with 807042 + E47 | -40°C to +70°C                | -40°C to +70°C                | -40°C to +70°C                |
| Extended operating temperature with 807043 + E48 | -40°C to +85°C                | -40°C to +85°C                | -40°C to +85°C                |
| Size (W x L in mm)                               | 90 x 96/99                    | 90 x 96/99                    | 90 x 96/99                    |
| Weight   | 105 g                         | 115 g                         | 115 g                         |
| MTBF   | >300'000h                     | >300'000                      | >300'000                      |
| Special features 1                               | soldered RAM                  | soldered RAM                  | soldered RAM                  |
| Special features 2                               | -                             | LVDS-option 803044            | LVDS-option 803044            |
| Special features 3                               | -                             | -                             | -                             |
| Part no. (without cooler, incl. RAM)             | 802125                        | 802120                        | 802170                        |