



MSM200X/XL/XP

Description

The MICROSPACE® MSM200X/XL/XP based on Intel's latest Atom processor has all of the standard PC interfaces plus Ethernet LAN and a sound controller. The permanently soldered up to 2GB memory results in added robustness. The PCI/104-Express bus (PCI + PCIe) and 4 USB interfaces are available as functional extensions. The typical 4W power consumption permits passive cooling within a very broad working temperature range. The XL version is a low-cost variation without battery or sound codec.

Applications

- _ Used in battery powered mobile computers
- _ Information terminals with video displays
- _ Game 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
MSM200-CKCON	803070	MSM200 PC/104 cable kit
MSM200-LANCON	803020	LAN cable with PCB
MSM200-LVDSCON	803074	LVDS cable
MSM200-DVICON	803072	DVI cable



PCI

PCIe

Atom

1.6GHz

max.
2GB RAM

1x LAN



Technical data

Type	MSM200XL	MSM200X	MSM200XP
CPU*	SMA200, Atom Z510/Z530	SMA200, Atom Z510/Z530	SMA200, Atom Z510/Z530
ISA-BUS	-	-	-
PCI-BUS (Option 807006 or 807005)	Option	Option	Option
PCI Express-BUS	not assembled	not assembled	assembled on the top
2nd Level cache (kB)	512	512	512
Performance (GHz)*	1.1 / 1.6GHz	1.1 / 1.6GHz	1.1 / 1.6GHz
DRAM min-max (MB)*	soldered 0.5-2GB	soldered 0.5-2GB	soldered 0.5-2GB
CompactFlash socket (option 807007)	Option type II	Option type II	Option type II
Keyboard, mouse (PS/2)	yes	yes	yes
Boot drive	HD, LAN, CF, USB, SSD	HD, LAN, CF, USB, SSD	HD, LAN, CF, USB, SSD
Solid State Disk (option SMA204)	4GB with 80582x	4GB with 80582x	4GB with 80582x
IDE interface P-ATA	CF	CF	CF
IDE interface S-ATA (SIL 3132)	2x	2x	2x
COM1	RS232C	RS232C	RS232C
COM2	RS232C	RS232C	RS232C
COM3	-	-	-
COM4	-	-	-
LPT1	1x	1x	1x
USB (2.0)	4x	4x, 1x client	4x, 1x client
LAN Port 1 incl. transformer (Intel 82574L)	1GB LAN	1GB LAN	1GB LAN
LAN Port 2	-	-	-
Audio (codec onboard)	-	HDA-AC97, 7.1 channels	HDA-AC97, 7.1 channels
Video controller	internal, max. 1024 x 1248	internal, max. 1024 x 1248	internal, max. 1024 x 1248
Video memory (MB)	128	128	128
LCD interface	-	yes, 24Bit LVDS	yes, 24Bit LVDS
DVI interface	yes, with socket	yes, with socket	yes, with socket
CRT interface	-	-	-
Video input	-	-	-
Watchdog	yes	yes	yes
Power normal	5V/4W	5V/5W	5V/5W
Power suspend	5V/0.1W	5V/0.1W	5V/0.1W
Power management	yes	yes	yes
RTC battery onboard	external	235mAh	235mAh
Cooling type	passive	passive	passive
Operating temperature	0°C to +60°C	-25°C to +70°C	-25°C to +70°C
Extended operating temperature (E48)	-	-40°C to +85°C	-40°C to +85°C
Size (B x L in mm)	90 x 96	90 x 96	90 x 96
Weight	105 g	115 g	115 g
MTBF	>100'000h	>100'000h	>100'000h
Special features 1	soldered RAM	soldered RAM	soldered RAM
Special features 2	-	-	onboard 4GB-SSD
Special features 3	-	-	-
Part no. (without SMA20x)*	802371*	802370*	802372*

*smartCore® Express modules (see also page 3 for details)

Article	Description	No.	No.	No.
SMA200-11G-1GB	Atom Z510 incl. 1GB RAM	805801	805801	805801
SMA200-16G-1GB	Atom Z530 incl. 1GB RAM	805811	805811	805811
SMA204-16G-1GB	Atom Z530 incl. 1GB RAM + 4GB SSD	805821	805821	805821
SMA200-11G-05GB	Atom Z510 incl. 0.5GB RAM	805800	805800	805800