

MSM945/P

Description

The MICROSPACE® MSM945 has all of the standard PC interfaces plus ethernet LAN, optional DVI and LVDS interfaces (dual screen) and a sound controller. Equipped with the CPU Intel® Core™2 Duo L7400 in the DIGITAL-LOGIC smartModule SMX945 with COMexpress, this product has the highest performance on the PC/104 form factor. The optional PCI/104-Express bus (PCI & PCI Express) and 6 USB interfaces are available as functional extensions. By means of a PC/104-Plus ISA bridge card, an 8 bit ISA bus can be emulated from the 32 bit PCI bus. Power consumption, cooling method, ambient working temperature and performance are directly dependent on the smartModule945-xxxx.

Applications

- _ Video streaming for HD videos
- _ Dual screen applications
- _ Image processing, video monitoring
- _ Calculation-intensive data processing

Ordering information (Option/accessories)

Article	No.	Description
SODIMM DDR2 256MB	890674	200pin, 533MHz, noECC
SODIMM DDR2 512MB	890675	200pin, 533MHz, noECC
SODIMM DDR2 1GB	890676	200pin, 533MHz, noECC
SODIMM DDR2 2GB	890677	200pin, 533MHz, noECC
SMX9/G45 passive cooler	805370	incl. assemblymat.
SMX9/G45 active cooler	805371	incl. assemblymat.
MSM9/G45-LANCON	803220	LAN-Cable with RJ45 on a print with 900mAh Bat.
MSM945-MMexp	803240	Multimedia converter, PCI/104ex board w. SPDIF, USB, Sound,DVI connectors (needs a MSM945P board)
MSM945CKCON	803230	Cablekit with connector- print for USB, 1LAN, Sound, Cables: FD, COM, LPT, PWR, PS2 extern 900mAh BackupBat.
Option CF1	807008	CF Socket Typ I



PCI

PCIe

Core™2 Duo
Atom™

2x 1.6GHz

max.
2/3GB RAM

1x LAN



Technical data

Type	MSM945	MSM945P
CPU	SMX945-xxx/SMX945B-xxx	SMX945-xxx/SMX945B-xxx
ISA-BUS (PCI/104)	-	-
PCI-BUS (option 807006 or 807005)	Option	Option
PCI Express-BUS (PCI/104-Express)	-	yes, on the bottom
2 nd Level cache (kB)	1024-4096	1024-4096
Performance (MHz)	2x 1600, Atom N270	2x 1600, Atom N270
DRAM Min-Max (MB)	256-3072	512-3072
CompactFlash socket (807008)	option	option
Keyboard, mouse (PS/2)	yes	yes
Boot drive	FD, HD, CF, LAN, USB	FD, HD, CF, LAN, USB
Floppy interface	-	-
IDE interface P-ATA	1x	1x
IDE interface S-ATA	2x	2x
COM1	RS232C	RS232C
COM2	RS232C	RS232C
COM3	-	-
COM4	-	-
LPT1	yes	yes
USB (2.0)	4x	4x + 2x on PCI/104-Express
LAN port 1 onboard transformer	10/100BASE-T	10/100BASE-T
LAN port 2	-	-
Audio	AC97-7.1, HDA	AC97-7.1, HDA
Video controller	i945GME	i945GME
Video memory (MB)	8-224	8-224
LCD interface	SDVO	SDVO
DVI interface (option 803240)	Option	Option
CRT interface	yes	yes
Video input	-	-
Watchdog	yes	yes
Power normal (Vin = 5V) (typ.)	10-30W	10-30W
Power suspend	0.1W	0.1W
Power management	yes	yes
RTC battery onboard	80mAh ¹⁾ (or ext. 900mAh) ²⁾	80mAh ¹⁾ (or ext. 900mAh) ²⁾
Cooling type	active	active
Operating temperature	see SMX945/B	see SMX945/B
Extended operating temperature (E47)	see SMX945/B	see SMX945/B
Size (W x L in mm)	90/117 x 96/99	90/117 x 96/99
Weight	265 g	270 g
MTBF	>200'000h	>200'000h
Special features 1	TV-output	TV-output
Special features 2	-	-
Special features 3	-	-
Part no. (without SMX945)	803200**	803204**

**CPUs

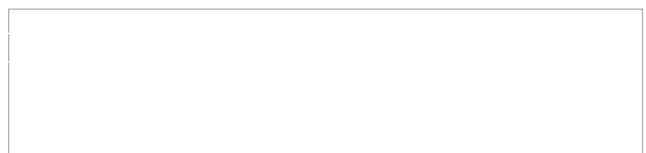
Article	Description	No.	No.
SMX945-L7400	Intel® Core™2 Duo-L7400, OMB RAM	805352	805352
SMX945-L2400	Intel® Core™2 Duo-L2400, OMB RAM	805350	805350
SMX945-C423	Intel® Celeron® M 423, OMB RAM	805360	805360
SMX945B-L7400	Intel® Core™2 Duo-L7400, 1MB RAM	805452	805452
SMX945B-N270	Intel® Atom, 1MB RAM	805472	805472

Manufacturer:

¹⁾ Typical service life of 1 year, ²⁾ Typical service life of 10 years.

DIGITAL-LOGIC
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