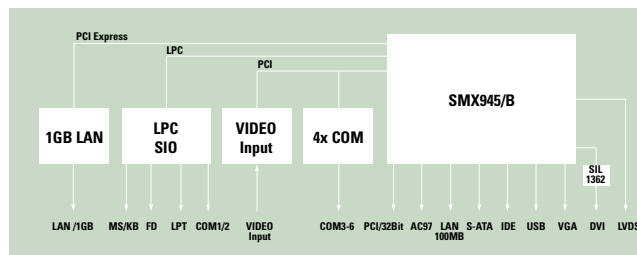


(MSEBX945-E2
incl. option 807005)



Option A2 (811350)



Option A8 DVI (811352)

MSEBX945/A/AU

Description

The MICROSPACE® EBX embedded computer board MSEBX945 has all of the standard PC interfaces plus up to 4 ethernet LANs (incl. 3x 1GB), a 3-channel input for connecting a video camera, COM3/4/5/6, SATA interface, dual screen video (2x DVI, LVDS, VGA) and an AC97-7.1 sound controller. All interfaces are connected by means of standardized plugs, enabling cost-efficient, cable-free housing integration. The PC/104 Express bus (32 bit PCI, PCI Express), the MiniPCI base and 8 USB interfaces are available as functional extensions. The power consumption (12W to 25W), the cooling method, the ambient working temperature, and performance are all directly related to the choice of smartModule945-xxxx.

Applications

- _ Image processing
- _ Dual screen multimedia information terminals
- _ Control of interactive devices

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.
MSEBX945-A2	811350	Connectorboard: Stereo -Sound I/O for E2-Boards
MSEBX945-A8DVI	811352	Connectorboard: 2nd DVI, 8channel Sound HDA
Option CF2	807007	CF Socket Type II not with Opt.-L+ (807006)
Option L+	807006	PC/104plus Con. long not with Opt.CF (807007)
Option P+	807005	PC/104plus Con. short
MSEBX945-CK	811347	Cablekit: 1xLPT, FD, 4x COM(DSub9), 2xSATA



PCI

PCIe

Core™2 Duo
Atom™

2x 1.6GHz

max.
3GB RAM

4x LAN

RoHS



Technical data

Type	MSEBX945-E2	MSEBX945A-E4	MSEBX945AU-E2
CPU	SMX945-xxx/SMX945B-xxx	SMX945-xxx/SMX945B-xxx	SMX945-xxx/SMX945B-xxx
ISA-BUS	-	-	-
PCI-BUS (Option 807005/807006)	Option (3 slot)	Option (3 slot)	Option (3 slot)
PCI Express-BUS (PCI/104-Express)	-	-	yes, on the top
2 nd Level cache (kB)	0-4096	0-4096	0-4096
Performance (MHz)	2x 1600, Atom N270	2x 1600, Atom N270	2x 1600, Atom N270
DRAM Min-Max (MB)	256-3072 (SMX945B)	256-3072 (SMX945B)	256-3072 (SMX945B)
CompactFlash socket (option 807007)	Option	Option	Option
Keyboard, mouse (PS/2)	yes	yes	yes
Boot drive	FD, HD, USB, LAN, CF	FD, HD, USB, LAN, CF	FD, HD, USB, LAN, CF
Floppy interface	yes	yes	yes
IDE interface P-ATA	1x	1x	1x
IDE interface S-ATA	2x	4x	4x
COM1	RS232C/RS422/485	RS232C/RS422/485	RS232C/RS422/485
COM2	RS232C/RS422/485	RS232C/RS422/485	RS232C/RS422/485
COM3/4	RS232C	RS232C	RS232C
COM5/6	TTL	TTL	TTL
LPT1	yes	yes	yes
USB (2.0)	8x	8x	6x + 2x on PCI/104-Express
LAN port 1 onboard transformer	10/100BASE-T	10/100BASE-T	10/100BASE-T
LAN port 2 (+3/4)	1x 1GB-LAN PCIe (82573)	3x 1GB-LAN PCIe (82574)	1x 1GB-LAN PCIe (82574)
Audio	AC97-7.1 option	AC97-7.1 option	AC97-7.1 option
Video controller	i945GME	i945GME	i945GME
Video memory (MB)	8-224	8-224	8-224
LCD interface	LVDS	LVDS	LVDS
DVI interface	yes (Option 2.DVI)	yes (Option 2.DVI)	yes (Option 2.DVI)
CRT interface	yes	yes	yes
Video input	BT878, 3 channels	BT878, 3 channels	BT878, 3 channels
Watchdog	yes	yes	yes
Power normal (Single 12Volt supply) (typ.)	8V-18V/25W	8V-30V/25W	8V-30V/25W
Power suspend (Single 12Volt supply)	0.1W	0.1W	0.1W
Power management	yes	yes	yes
RTC battery onboard	900mAh (10 years)	900mAh (10 years)	900mAh (10 years)
Cooling type	passive/active	passive/active	passive/active
Operating temperature	-25°C to +70°C ¹⁾	-25°C to +70°C ¹⁾	-25°C to +70°C ¹⁾
Extended operating temperature (E47)	see SMX945-xxx	see SMX945-xxx	see SMX945-xxx
Size (W x L in mm)	204 x 146 x 29	204 x 146 x 29	204 x 146 x 29
Weight (with smart)	460 g	480 g	465 g
MTBF	>200'000h	>200'000h	>200'000h
Special features 1	-	LPC-POD	LPC-POD
Special features 2	8bit Digital I/O	8bit Digital I/O	8bit Digital I/O
Special features 3	COM5/6 (TTL)	COM5/6 (TTL)	COM5/6 (TTL)
Part no. (without RAM, without SMX945)	811341	811372	811376

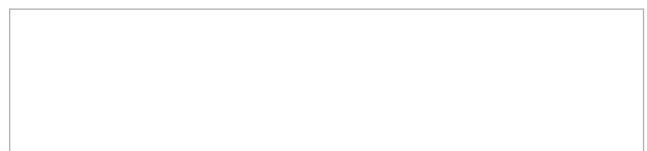
CPUs

Article	Description	No.	No.	No.
SMX945-L7400	Intel® Core™2 Duo-L7400, OMB RAM	805352	805352	805352
SMX945-L2400	Intel® Core™2 Duo-L2400, OMB RAM	805350	805350	805350
SMX945B-L2400	Intel® Core™2 Duo-L7400, 1MB RAM	805450	805450	805450
SMX945B-L7400	Intel® Core™2 Duo-L7400, 1MB RAM	805452	805452	805452
SMX945B-N270	Intel® Atom, 1MB RAM	805472	805472	805472

Manufacturer:

DIGITAL-LOGIC
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