



SM855-Pentium® M

Description

The smartModule SM855 –Pxxx is based on the Intel® Pentium® M CPU with a clock speed of 1000-1800MHz. The product is characterized by the optimal thermal interface and large number of interfaces. Functional extensions are possible via the PCI bus and the 16 bit ISA bus (with a bridge). The copper core conveys, with negligible loss, the thermal output to the heat dissipator and housing. The robust, flat-ground housing protects the computer from vibrations and holds the SODIMM RAM module firmly in the base. The SM855 is the smallest Pentium® M computer and fits, for example, on a PC/104 standard board.

Applications

- _ Networked interactive multimedia applications
- _ Dual screen applications
- _ Information displays
- _ Measurement engineering
- _ Telecommunications

Ordering information (Option/accessories)

Article	No.	Description
SODIMM DDR 128MB	890669	333MHz, 200pin, noECC
SODIMM DDR 256MB	890670	333MHz, 200pin, noECC
SODIMM DDR 512MB	890671	333MHz, 200pin, noECC
SODIMM DDR 1GB	890672	333MHz, 200pin, noECC
SM855-CON7*	807107	Connector 160pin,h=7mm, 2unit needed, packsize=9
SM855-CON10	807110	Connector 160pin,h=10mm, 2unit needed, packsize=9
SM855-DK	805027	SM855 DevelopmentKit without SM855 and RAM, HD, CD, Doc's, Cables, PS, w.passive + active cooler
SM855 Cooler passive	805170	for SM855 modules
SM855 Cooler active	805171	for SM855 modules

*Alternate heights are 6mm and 9mm (MOLEX).



Technical data

Type	SM855-C140	SM855-P738	SM855-P745
CPU	Intel® Processor M	Intel® Pentium® M	Intel® Pentium® M
ISA-BUS	1) ¹⁾	1)	1)
PCI-BUS	32bit	32bit	32bit
PCI Express-BUS	-	-	-
2 nd Level cache (kB)	2048	2048	0
Performance (MHz)	1000	1400	1800
DRAM Min-Max (MB)	128-1024	128-1024	128-1024
CompactFlash socket	-	-	-
Keyboard, mouse (PS/2)	ext. SIO	ext. SIO	ext. SIO
Boot drive	FD, HD, USB, LAN	FD, HD, USB, LAN	FD, HD, USB, LAN
Floppy interface	ext. SIO	ext. SIO	ext. SIO
IDE interface P-ATA	2x	2x	2x
IDE interface S-ATA	-	-	-
COM1	ext. SIO	ext. SIO	ext. SIO
COM2	ext. SIO	ext. SIO	ext. SIO
COM3	-	-	-
COM4	-	-	-
LPT1	ext. SIO	ext. SIO	ext. SIO
USB (2.0)	6x	6x	6x
LAN port 1 (ext. transformer)	10/100BASE-T	10/100BASE-T	10/100BASE-T
LAN port 2	-	-	-
Audio	AC97-5.1	AC97-5.1	AC97-5.1
Video controller	i855GME	i855GME	i855GME
Video memory (MB)	16-64 (UMA)	16-64 (UMA)	16-64 (UMA)
LCD interface	ext. 18/24bit LVDS	ext. 18/24bit LVDS	ext. 18/24bit LVDS
DVI interface	ext. 24bit DVO to DVI bridge	ext. 24bit DVO to DVI bridge	ext. 24bit DVO to DVI bridge
CRT interface	yes	yes	yes
AMT 4.0	-	-	-
Watchdog	yes	yes	yes
Power normal (typ.)	9W (@1000MHz), 8V-30V	10W (@600MHz)-20W, 8-30V	10W (@600MHz)-26W, 8-30V
Power suspend (typ.)	0.1W	0.1W	0.1W
Power management	yes	yes, SpeedStep	yes, SpeedStep
RTC battery onboard	external	external	external
Cooling type	passive	passive/active	passive/active
Operating temperature	-25°C to +70°C	-25°C to +60°C	-25°C to +50°C
Extended operating temperature (E47)	-40°C to +70°C	-40°C to +70°C	-40°C to +50°C
Size (W x L x H in mm), h = 7mm	117 x 70 x 17	117 x 70 x 17	117 x 70 x 17
Weight	170 g	170 g	170 g
MTBF	>200'000h	>200'000h	>200'000h
Special features 1	-	-	-
Special features 2	-	-	-
Special features 3	-	-	-
Part no. (without DDR-RAM-module)	805192	805164	805168

¹⁾ External with PCI to ISA-Bridge.

Manufacturer:

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