NEN PPC-153T/123T

Pentium[®] III/Celeron[™] based Panel PC with 15" /12.1" Color TFT LCD & Optional Touchscreen



Introduction

The PPC-153T/123T is a Pentium®III Socket 370 based Panel PC with 15.0"/12.1" TFT color LCD (resolution up to 1024 x 768/800 x 600). It features multimedia devices, various connectors, and can be installed in virtually any application. In addition, its user-friendly interface serves as the best host for information appliances.

Protection

To meet the requirements of a public environment, the PPC-153T/123T complies with the IP 65/NEMA 4 protection standard. Furthermore, the watchdog timer and power management features make the system secure and stable. The on-board hardware monitoring feature provides automatic protection function, which prevents the CPU from being overheated.

Networking

Four serial ports and a 10/100Base-T Ethernet controller give the PPC-153T/123T advanced networking capabilities and provide the best solution for versatile applications.

Expansion

To extend functionality, the PPC-153T/123T is designed with one expansion slot for PCI/ISA cards, two USB (Universal Serial Bus) ports, and one PCMCIA card bus (Type II x 2). With these expansion capabilities, the PPC-153T/123T does not only function as an HMI, but also as a computing center around which to build your application.

Easy Maintenance (PPC-153T only)

Maintaining and replacing the LCD and touchscreen are made easier through the PPC-153T's modular design. In order to replace a defective LCD or touchscreen, one merely needs to remove the front cover and LCD bracket instead of disassembling the whole system.

Touchscreen Options

The customer can choose out of three types of touch-screen options: resistive, capacitive and SAW (Surface Acoustic Wave, only for PPC-153T). All of three kind of touchscreens are standard, customers can easily order upon their request. Multiple touchscreen options make the PPC-153T/123T a more user-friendly interface for integration systems in different environments.

LCD Display

Model	PPC-153T	PPC-123T	
Display type	TFT color LCD	TFT color LCD	
Size (Diagonal)	15"	12.1"	
Max. resolution	1024 x 768 800 x 600		
Max. colors or grayscales	256 K or 16 M	256 K	
Pixel pitch (mm)	0.297 x 0.297	0.31 x 0.31	
Luminance (cd/m2)	200	250	
Viewing angle	100°	100°	
Temperature	0 ~ 50°	0 ~ 50°	
VR controls	Brightness Brightness		
Simultaneous mode	Yes Yes		
LCD MTBF	50,000 hrs.	50,000 hrs.	
Backlight MTBF	25,000 hrs. 25,000 hrs.		





Specifications

- CPU: Supports Socket 370 based Pentium®III / Celeron™ CPU, up to 850 MHz
- Disk drive housing: Room for one 2.5" HDD
- Dimensions: 420 x 323 x 106 mm (16.54" x 12.72" x 4.17")/ 375 x 285.5 x 104.4 mm (14.76" x 11.24" X 4.11")
- Weight: 6.5 kg (14.3 lbs)/5.2kg (11.5 lbs)
- Front panel protection: IP 65/NEMA 4 compliant (not for SAW model)
- HDD: IDE HDD interface (2.5" HDD bay)
- CD-ROM drive: Compact 24X or above
- DVD-ROM drive: Optional 6X or above
- Memory: Supports up to 256 MB SDRAM (168-pin)
- FDD: Supports 720 KB / 1.44 MB FDD
- Network (LAN): 10/100Base-T Ethernet interface
- I/O ports:
 - 4 serial ports: RS-232 x 3, RS-232/422/485 x 1
 - 1 parallel port, 2 USB ports
 - PCMCIA Type II x 2
 - 1 PS/2 mouse and keyboard interface
 - Mic-in, Line-in, Line-out, and game port
- Bus expansion: One expansion slot for half-size PCI/ISA card

Power Supply

- Output rating: 80 W (max.)
- Input voltage: 100 ~ 250 V_{AC}, auto-switching @ 50 ~ 60 Hz
- Output voltage: +5 V @ 12 A, +12 V @ 1 A
- MTBF: 50,000 hrs
- · Safety: Meets UL, CSA, CE
- EMI/EMS: Meets FCC/CE Class B

Environmental

- Operating temperature: 0 ~ 45° C (32 ~ 113° F)
- Relative humidity: 10 ~ 95% @ 40° C, non-condensing
- Shock: 10 G peak acceleration (11 msec. duration)
- EMI/EMS: Meets FCC/CE Class B
- Safety: Meets UL/CSA/CE

Touchscreen (Optional)

Types	Analog Resistive	Capacitive	Surface Acoustic Wave	
Resolution	Continuous	1024 x 1024	4096 x 4096	
Light transmission	75%	85%	91%	
Controller	RS-232 interface (uses COM4)	RS-232 interface (uses COM4)	RS-232 interface (uses COM4)	
Power consumption	+5 V @ 200 mA	+5 V @ 100 mA	+5 V @ 150 mA	
Software driver	Supports both DOS and Windows			
Durability (Touches lifetime)	30 million	20 million	50 million	

Ordering Information

□ PPC-153T/123T (Bare BOM: PPC-153T/123T-ABAR)
Panel PC with 15"/12.1" TFT LCD display

(resolution: 1024 x 768/800 x 600)

- □ PPC-153T/123T-RT (Bare BOM: PPC-153T/123T-ABAR-T)
 PPC-153T/123T with resistive touchscreen
- □ PPC-153T/123T-CT (Bare BOM: PPC-153T/123T-ABAR-C)

PPC-153T/123T with capacitive touchscreen

☐ PPC-153T-ST (Bare BOM: PPC-153T-ABAR-S)

PPC-153T with SAW touchscreen

* Intel Pentium[®]III and Celeron[™] CPU, SDRAM and 2.5" HDD are available as optional items.

