

PPC-64T

(Low Power 6.4" Touch Panel PC)

User's Manual

COPYRIGHT®

All rights reserved. The information contained in this guide has been validated and reviewed for accuracy. No patent liability is assumed with respect to the use of the information contained herein. While every precaution has been taken in the preparation of this guide, the Manufacturer assumes no responsibility for errors or omissions.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Manufacturer.

TRADEMARK™

Intel®, Celeron®, Pentium®, MMX®, Windows® are registered trademarks of Intel® Corporation.

VIA® is a registered trademark of VIA Corporation.

Microsoft® and Windows® are registered trademarks of Microsoft Corporation.

All products and company names are trademarks or registered trademarks of their respective holders.

These specifications are subject to change without notice.

CONTENTS

SECTION 1	INTRODUCTION	
1.1	INTRODUCTION	4
1.2	Pictures of PPC-64T	5
1.3	Dimensions	5
1.4	I/O Ports	5
1.5	Power Adapter and Optional Accessories	6
1.6	Main board used in PPC-64T	6
1.7	Specifications	7
SECTION 2	INSTALLATIONS	
2.1	How To Load Windows O.S.	7
SECTION 3	TOUCH DRIVER INSTALLATION	
3.1	Touch Driver Installation	8
3.2	25 Point Touch Driver Calibration	8
SECTION 4	BIOS SETUP	
4.1	BIOS Setup	9
SECTION 5	CPU CLOCK AND RATIO SETTING	
5.1	CPU Clock and Ratio Setting	9
5.2	Picture of VIA CPU	10
SECTION 6	HOW TO ORDER A PANEL PC	
6.1	Model No.	10
6.2	What is The Meaning of Each Letter and Number	10

1.1 INTRODUCTION

This Panel PC is designed to be used for all kinds of industrial, medical, commercial, banks (e.g. ATM), kiosk, vehicles, train, bus, truck, home, hotel, restaurant, airport, gas station, as well as military applications. The components chosen are industrial grade which are able to withstand higher temperature and harsh environment for many years. The total fanless design was specially designed for very dirty environments which are full of dirty, dust, chemical gas or liquid and small particles in the air that can cause damage to the computer system. Our products incorporate a variety of advanced features and anti-shock, anti-vibration designs, yet we are able to offer very cost-effective pricing and solutions. We believe that we can provide not only the best technology and advanced products, but also the lowest cost products compared to other similar products. For a complete view of our products and solutions, please discuss with our distributors or check on our web site.

This product manual contains a variety of technical information to help you to use or install the product. The manual contains the technical specification, port connectors, diagrams of the board or unit and its various areas, jumper settings, and many other useful areas. Please refer to the manual for details about each specific product. The manual also includes some general idea about special features, software options, and some basic troubleshooting ideas to help you in these areas.

The driver CD contains the various product manuals and many drivers, organized by the product, then device such as LAN, and then by operating system such as Windows XP, 2000, NT, 98 or Linux or other operating systems. Please select the product of interest first, and then select the device area such as LAN or touch screen or other. Then select the operating system of interest such as Linux, XP Embedded, Win CE, Win 98, etc. Now you will have a few choices such as install a driver, look at the driver install guide, or browse the directory. You can easily browse the directory to see related files and tips. The driver CD is designed to auto run under windows, so for best use it is better to run it on windows. However if you are installing from a Linux system for example, you can also browse the driver CD directly to go to the selected product directory, organized by product name.

This Panel PC is widely used in all kinds of applications including Kiosk, factory automation, HMI (Human-Machine-Interface), hotel, restaurant, home, banking (e.g. ATM), 7-11, POS, POI, super markets, medical, military, food, mining, airport, school, building, vehicles, telecommunications, ... and so on. Whenever the customer has any special requirement, we are very pleased to custom design for them at a much competitive pricing and within the average 4 weeks delivery time.

We are able to custom design the all-in-one or separate Panel PC from a very small 6.4", 7", 8.4", 10.4", 12.1", 15", 17", 18", 21", 23", 30", all the way up to the largest 40" as per the customer's required specifications including in the very cold weather and a higher temperature or in a very harsh environment with dirty, humid, full of particles in the air, etc. Please contact our distributors for further details.

1.2 Pictures and Dimensions of PPC-64T

- Pictures of low power PPC-64T



IP-65, 66, 67, 68, NEMA -4
100% water proof front

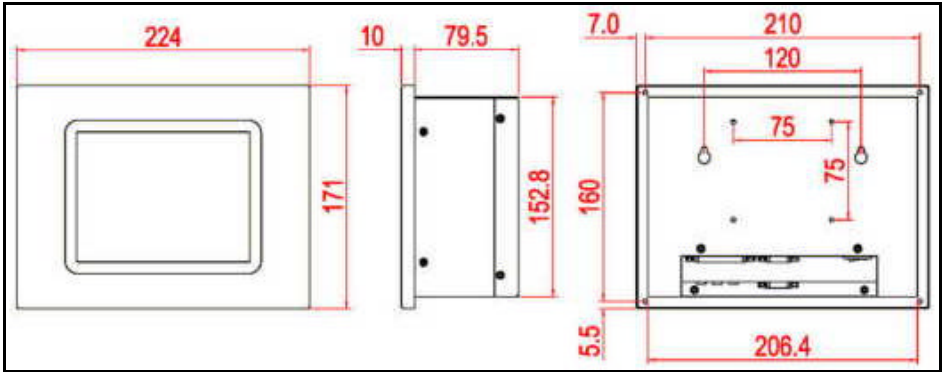


VESA-75, 100 compliant
Desktop stand is optional

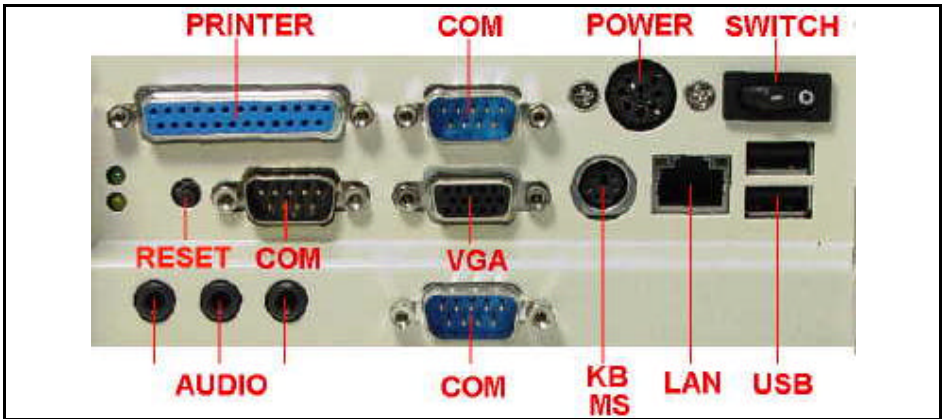


4 x USB, 4 x COM,
2 x LAN, MPEG-II

1.3 Dimensions



1.4 I/O Ports



1.5 Power Adapter and Optional Accessories



Power adapter for PPC-64T



Optional wall mount Kit

1.6 Main Board Used In PPC-64T

1.7 Main board : NASA-6820VLA



1.7 Specifications

Model No.	PPC-64T
Front bezel	8mm thick solid aluminum front bezel
Housing	Made by 1.0mm rugged steel construction
IP & NEMA	Meets 100% water-proof IP-65, 66, 67, 68, NEMA-4 on front
Color	Black color is standard. Silver color is optional at your request
Wall-mount	Meet VESA-75 wall mount standard
LCD specs.	6.4" TFT LCD, 280 cd/m2 high brightness
Touch screen	6-wire resistive touch screen, 2048 x 2048 resolution
Speaker	No speaker built inside
Processor	VIA Low Power C3 Eden 1.0 GHz CPU
System RAM	Support up to maximum 512MB SO-DIMM RAM. Standard is 128MB.
HDD	Standard is 20GB slim size anti-vibration HDD.
VGA	Support second monitor
Video Memory	Support 4, 8, 16, 32MB share memory. Default value is 32M.
LAN	1 x 100/10 Mbps Ethernet support networking
USB	2 x USB port
Serial port	4 x COM ports (3 outside, 1 inside for touch screen), 3 x RS232, 1 x RS232 / 422 / 485.
Keyboard / Mouse	1 x PS2 port to support keyboard and mouse (Y-cable is available)
Printer port	1 x LPT port for printer interface
Audio jacks	Support Line-in, Line-out, Microphone audio functions
Vibration resistance	Passed strict IEC-60068 life random vibration test from 5 – 500 Hz at 2G RMS under Windows XP Pro.
Shock resistance	Passed strict IEC-60068 life shock test from 15G for 11ms duration at 3 axis 6 directions under Windows XP Pro.
Power supply	Standard AC 100-240V power adapter. Output is 12V and 5VDC. DC 12, 24V power adapters are optional.
Dimensions (W x H x D)	See the above drawing
Operating temperature	From 0 to 45 degree C at an air ventilation area

SECTION 2 INSTALLATION

2.1 How to load Windows O.S.

There are two solutions for this :

- a) USB type external CD-ROM (see the above optional picture). Please use the legal copy of Windows XP O.S. If you choose this way, you have to enter into the BIOS menu setup, choose the USB CD-ROM as the primary boot up disk.
- b) Open up the rear cover from behind, find an IDE cable and a standard 4-pin power connector. Connecting the IDE cable and 4-pin power connector to a standard 5.25" CD-ROM that you prepare for the PPC. Enter into the BIOS menu, choose CD-ROM as the primary boot up disk. Put the Windows O.S. into the CD-ROM, start loading the Windows O.S.

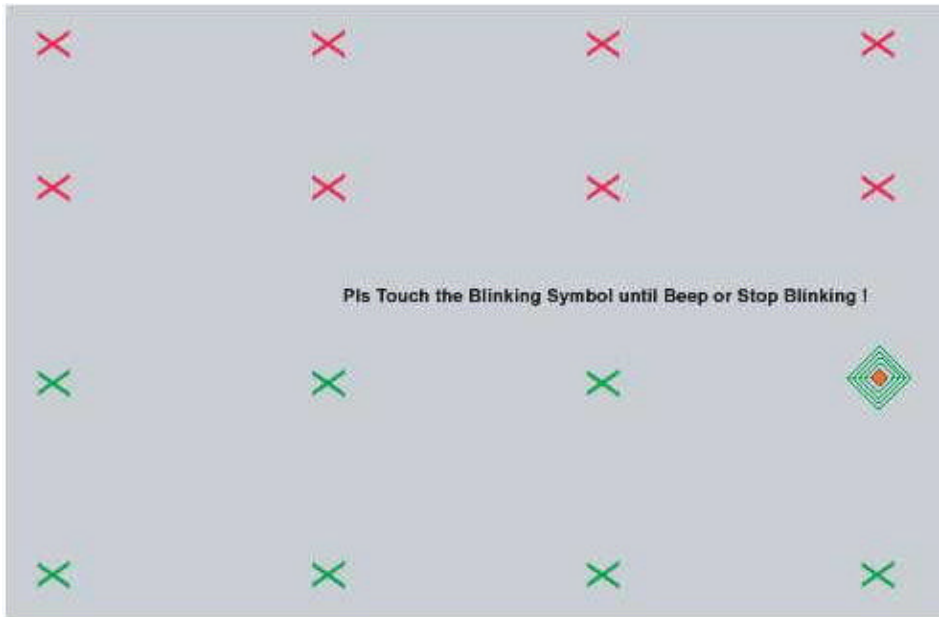
SECTION 3 TOUCH SCREEN DRIVER INSTALLATION

3.1 Touch screen driver

The touch driver was contained in the CD Disk came with the unit. There are two touch drivers. One is E-T, one is S-M. Please choose E-T touch driver to load into the PPC. After loading the E-T touch driver, you must perform a 25-point calibration on the touch. Please be sure that each touch point must be calibrated one by one. After all of the 25 touch points were calibrated. The touch driver is successfully loaded.

3.2 25-Point Calibration

Touch the center point of the blinking icon one by one until all 25 points were calibrated.



SECTION 4 BIOS SETUP

4.1 BIOS Setup

The 8" LCD built in is a Sharp TFT LCD with 640 x 480 resolution and a high brightness of 380 – 400 cd/m². Please be sure to choose the correct Display Device and Panel Type at the *Advanced Chipset Features Setup* in case you change the original BIOS setup by accident. Follow the following procedures :

- Step 1 : Enter into BIOS Setup Main menu
 - Step 2 : Choose Advanced Chipset Features Setup
 - Step 3 : Move to Display Device item, select [CRT+LCD]
 - Step 4 : Move to Panel Type item, select [00]
 - Step 5 : Save the setting and Exit the BIOS, restart the system
- Finish.

BIOS Set-Up :

BIOS Setting for Nagasaki Panel PCs

Model No.	Size	Main board	Main → Advanced Chipset Features Setup → Select Display Type	
			Display Type	LCD Resolution
PPC-64T	6.4"	NASA-6820	00	640 x 480

SECTION 5 CPU Clock and Ratio setting

The VIA Eden 1.0 GHz low power CPU was soldered on board.

SECTION 6 HOW TO ORDER A PANEL PC

6.1 Model No.

- PPC-64T

6.4 inch Panel PC with Touch screen and all standard equipments

6.2 Legend : How to understand the letter and number of a Panel PC

Letter	The meaning of the letters or numbers
PPC	Panel PC
64	6.4 inch (the size of the LCD display)
T	Touch screen, it is usually a Resistive touch screen