

WINCOR
NIXDORF

BEETLE iSPRINT POS System
Operating Manual

BEETLE
iSPRINT POS System

Operating Manual

Edition Jun 2006

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Manufacturers Certification



The device complies with the requirements of the EEC directive 89/336/EEC with regard to 'Electromagnetic compatibility" and 73/23/ECC "Low Voltage Directive".

Therefore, you will find the CE mark on the device or packaging.

Tested Safety



The POS system has been provided with the symbol for "Tested Safety".



In addition, the BEETLE has received the UL symbol and cUL symbol.

FCC-Class A Declaration

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not in-stalled and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Modifications not authorized by the manufacturer may void users authority to operate this device.

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NBM-003 du Canada.

BSMI (EMC for Taiwan)



The device complies with the requirements of the BSMI (Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs) directive CNS14348 with regard to "Electromagnetic compatibility" with the limits for a Class B product.

Note on Laser

If your device is equipped with a CD-ROM drive, the following condition applies,

The CD-ROM drive contains a light-emitting diode (LED), classified according to IEC 825-1:1993: LASER CLASS 1; it must not be opened.

Important notes

The Modular POS system BEETLE iSPRINT conforms to the current safety standards for data processing equipment.

- If this device is taken from a cold environment into the operating room, moisture condensation may form. The device must be absolutely dry before being put into service; an acclimatization period of at least two hours must therefore be observed.
- This device is equipped with a safety-tested power cable and may be connected only to a prescribed grounded-contact power socket.
- When setting up the device, ensure that the power socket on the device and the grounded-contact power socket are easily accessible.
- To disconnect the device from the supply voltage completely, switch off the device and disconnect the power plug.
- Ensure that no foreign objects (e.g. office clips) find their way into the device, as this may lead to electric shocks or short-circuits.
- Never plug in or unplug data communication lines during thunderstorms.
- Protect devices from vibrations, dust, moisture and heat.
- Always dispose of used parts, such as battery in an environmentally safe manner.
- In emergencies (e.g. damaged housing or damaged power cable, penetration by liquids or foreign bodies), the device must be switched off immediately, the power plug disconnected and the Customer Service of Wincor Nixdorf (WN) or your dealer must be notified.
- The device may only be repaired by authorized qualified personnel. Unauthorized opening of the device and inexpertly carried-out repairs may not only seriously jeopardize the safety of the user, but also cancel all the warranty and liability agreements.
- You should connect your BEETLE iSPRINT or other IT-devices to power supply systems with separately guided protective earth conductor (PE). This kind of electricity system is known as TN-S network. Do not use PEN conductors!

Replacing the Lithium Battery

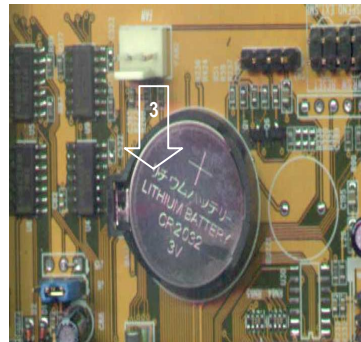
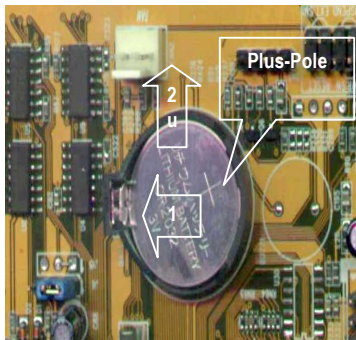
CAUTION:

Incorrect replacement of the Lithium Battery may lead to a risk of explosion

The lithium battery must be replaced by the end user only by identical batteries or types recommended by Wincor Nixdorf.

Do not throw Lithium Batteries into the trashcan. It must be disposed of in accordance with local regulations concerning special waste

Make sure that you insert the Battery the right way round. The plus pole must be on the top!



- (1) Push the Latch.
- (2) Remove the Lithium Battery from its Socket.
- (3) Insert and press a new Lithium Battery of same type in the Socket.

AC Power Cord

If the AC power cord is not provided with the device, the user has to ensure that a certified AC power cord is used as required by the Safety Regulation of the country. Please ensure that the AC power cord used is compliant with the safety approval according to the country, as listed below:

Countries	Safety Approvals
USA	UL
Canada	CSA
Germany	GS
Japan	PSE
Taiwan	BSMI
China	CCC

For other countries not mentioned in the above list, please check with the local authority.

Introduction

This manual describes the modular POS system BEETLE iSPRINT with a Pentium 4 processor.

This documentation is intended to help you work with the POS system and to serve as a reference work. The detailed table of contents helps you find the desired information quickly and easily.

The type and scope of application programs depend on the customer's own selection; therefore, software will not be discussed further in this manual.

Separate manuals are included in the scope of the connectable peripherals. For this reason, a more detailed description of these devices will not be provided here. For more information, please see the relevant manuals.

Having studied this manual, you will be able to:

- properly connect the supported peripherals to the system,
- modify basic system configuration,
- evaluate system error messages,
- properly set up and operate the system.

Symbol used in this manual



Text following this symbol representing important notes to facilitate the use of the device and help avoid operating errors.



Text following this symbol indicates the cautions to help you to avoid damaging of hardware or losing of data.



Text following this symbol indicates the conditions that, if not being observed might cause personal injury.

Care of BEETLE iSPRINT



Clean your BEETLE iSPRINT at regular intervals with a suitable plastic-surface cleaner. Make sure that the power plug is disconnected, connector cables are unplugged and no liquid finds its way into the device. The glass surface of your Touch Screen should be cleaned with a mild, commercially available glass cleaning product. All pH neutral materials (pH 6 to 8) are to be used for cleaning purposes.

Recycling of BEETLE iSPRINT



Environmental protection does not begin when time comes to dispose of the BEETLE iSprint; it begins with the manufacturer. This product was designed according to our internal norm “Environmental conscious product design and development”

The Modular BEETLE iSPRINT System is manufactured without the use of CFCs and CCHS and is produced mainly from reusable components and materials.

The processed plastics can, for the most part, be recycled. Even the precious metals can be recovered, thus saving energy and costly raw materials.

Please do not stick labels onto plastic case parts. This would help us to re-use components and material.

You can protect our environment by switching on your equipment only when it is actually needed. If possible, even avoid the stand-by-mode as this wastes energy, too. Also switch your equipment off when you take a longer break or finish your work.

There are still some parts that are not reusable. Wincor Nixdorf guarantees the environmentally safe disposal of these parts in a Recycling Center, which is certified pursuant to ISO 9001.

So don't simply throw your BEETLE iSPRINT system on the scrap heap when it has served its time, but take advantage of the environmentally smart, up-to-date recycling methods!

Please contact your competent branch office for information on how to return and re-use devices and disposable materials.

Wincor Nixdorf is always ready to answer any questions you may have about our environmental protection policies. We look forward to your message.

Warranty

Wincor Nixdorf guarantees a limited warranty engagement of 12 months beginning with the date of the delivery. This warranty engagement covers all those damages which occur despite a normal use of the product.

Damages caused by

- improper or insufficient maintenance,
- improper use of the product or unauthorized modifications of the product,
- inadequate location and surroundings

will not be covered under the warranty.

All parts of the product which are subjected to wear and tear are not included in the warranty engagement.

Please order the spare parts required from Wincor Nixdorf customer service.

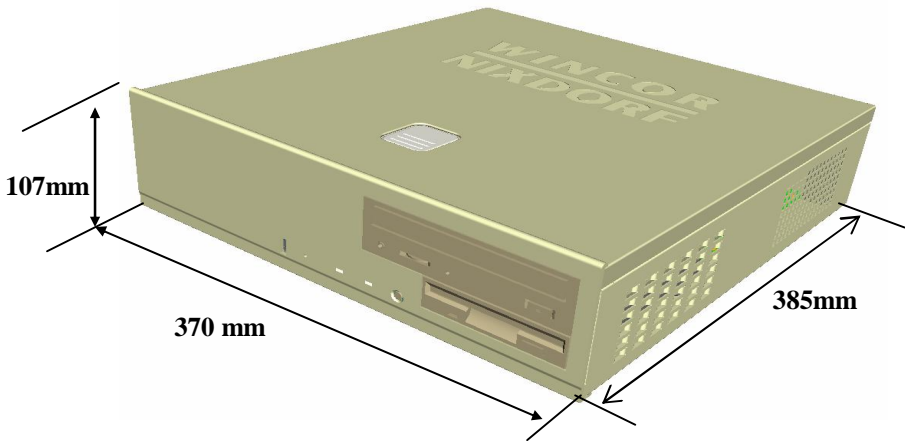
Abbreviations

AGP	Accelerated Graphics Port
AC97	Audio Codec '97
BIOS	Basic Input Output System
BPP	Bits per Inch
COM	Communication Port
CPU	Central Processing Unit
CRT	Cathode Ray Tube
cUL	Canada Underwriters Laboratories
DIMM	Dual In line Memory Module
ECP	Extended Capability Port
EPP	Enhanced Parallel Port
EPROM	Erasable Programmable Read Only Memory
FDD	Floppy Disk Drive
FC-PGA2	Flip-Chip Pin Grid Array (Socket 478)
HDD	Hard Disk Drive
IDE	Integrated Drive Electronic
ISA	Industrial Standard Architecture
ISO	International Standardization Organization
LAN	Local Area Network
LED	Light Emitting Diode
LPT	Line Printer
PCI	Peripheral Component Interconnect
PCMCIA	Personal Computer Memory Card Intern. Association
PnP	Plug and Play
RAM	Random Access Memory
ROM	Read Only Memory
SIMM	Single In Line Memory Module
TFT	Thin Film Transistor
UL	Underwriters Laboratories
USB	Universal Serial Bus

Device Overview

BEETLE iSPRINT is a modular POS system which is designed for low cost and high performance to complement the existing BEETLE product families.

BEETLE iSPRINT Dimensions



Basic Operation

Before switching on the system

This section describes the setup of the system before switching on the system.

Unpacking and checking the system

Unpack the parts and check if the delivery matches the description on the delivery note.

If damage has occurred during shipping or the package contents do not match the delivery note, promptly inform your Wincor Nixdorf sales outlet.



Transport the device only in its original packaging to protect it against impact and shock.

Setting up the system

Set up the BEETLE iSPRINT system at the place where it will not be exposed to extreme environmental conditions. Protect the system from vibration, dust, moisture, heat and strong magnetic fields.



Make sure the side ventilation slots on the BEETLE iSPRINT system are not obstructed in order to ensure that the device has sufficient ventilation.

Cabling of the system

Follow the following steps when installing the cables of the system:

- Remove the cable cover, if present.
- Plug one end of the power cable into the socket of the BEETLE iSPRINT system and plug the other end of the power cable into the grounded socket at the main power supply.
- Plug in and secure all the required data cables.



Always make sure that the system is switched off when you do any cabling works.

Connecting to the main power supply

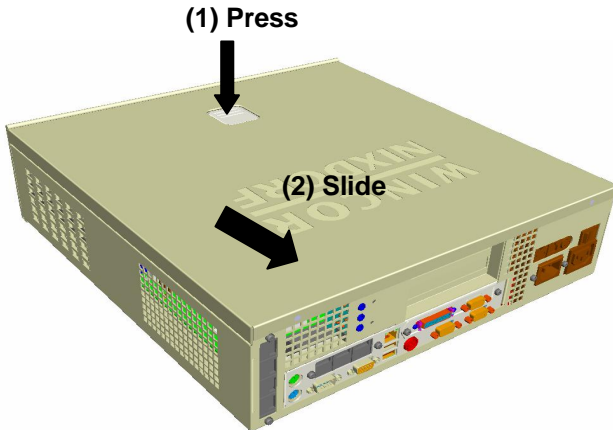
All devices belonging to the modular BEETLE iSPRINT system that have a separate power cable must be connected to the same electric circuit.

- Ensure that all data cables on the system unit and the peripherals are connected correctly.
- Plug all the power cables belonging to the BEETLE iSPRINT system and the peripherals into the grounded-contact power sockets.

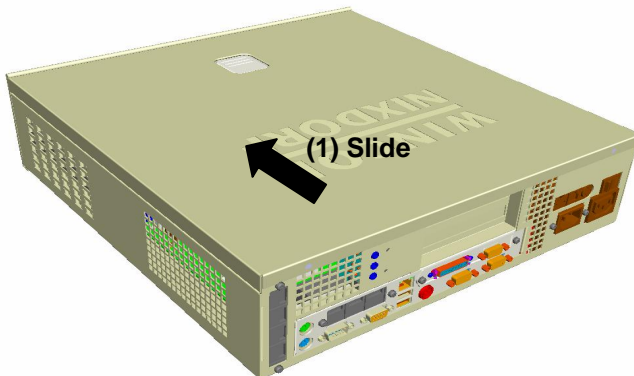
Opening / Closing the system

It is easy to open and close the system during your access to the inside of the system.

To open the system, press the lock (1) and at the same time, push and slide the cover plate towards direction (2).



To close the system, align the cover plate on the sliding slot of the system. Push towards direction (1) and make sure the cover plate is closely sealed with the system.



Switching on / off the system

To switch ON the BEETLE iSPRINT system,

- Switch on the power supply switch at the rear side.
- Push the ON/OFF button at the front of the system.

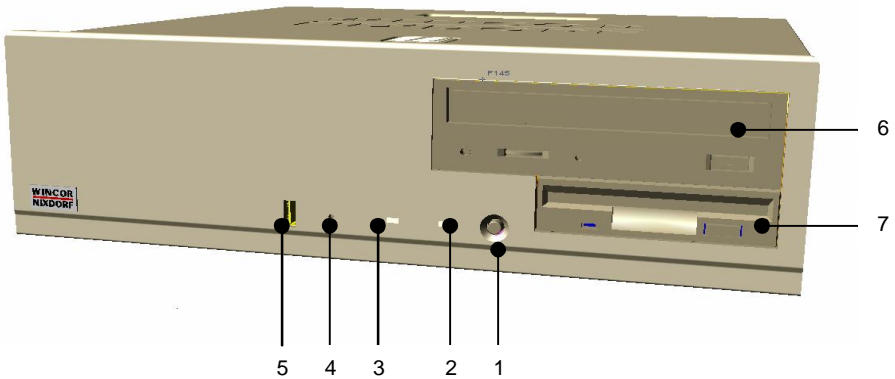
To switch OFF the BEETLE iSPRINT system,

- Push the ON/OFF button at the front of the system.
- Switch off the power supply switch at the rear side.
- Remove the AC power cord from the system.

BEETLE iSPRINT system – The components

Function & Indicators on BEETLE iSPRINT

The illustration below shows the possible components of the BEETLE iSPRINT system.



- | | |
|-----------------------------------|-------------------------|
| 1 ON/OFF Button | 5 USB Front Access Port |
| 2 POWER-ON Indicator (LED) | 6 CD-ROM Drive |
| 3 HARD-DISK DRIVE Indicator (LED) | 7 Floppy-Disk Drive |
| 4 RESET Switch | |

ON/OFF Button

This is a soft touch power button that replaces the main power switch that turns your system on and off.

- From an OFF state, you can switch the system ON by simply pressing the ON/OFF button.
- From an ON state, you can also switch the system OFF by pressing and holding the ON/OFF button for four (4) seconds.

The functions of the power button can also be altered in the Power Management section of the CMOS setup.

RESET Switch

To perform a System Reset using the RESET switch, insert a small, metal rod (an unwound paperclip for example) into the small hole.

POWER-ON Indicator

The indicator (LED) lights up Green when the system unit is switched on.

HARD-DISK DRIVE Indicator

The indicator (LED) lights up Yellow when the Hard-Disk Drive of the system unit is accessed.

Floppy-Disk Drive

The BEETLE iSPRINT system is equipped with a floppy-disk drive. The floppy-disk driver supports a 3½" driver slot for the capacities of up to 1.44 MB.

CD-ROM Drive

The BEETLE iSPRINT system is equipped with a CD-ROM drive of 52x or higher.

Hard-Disk Drive

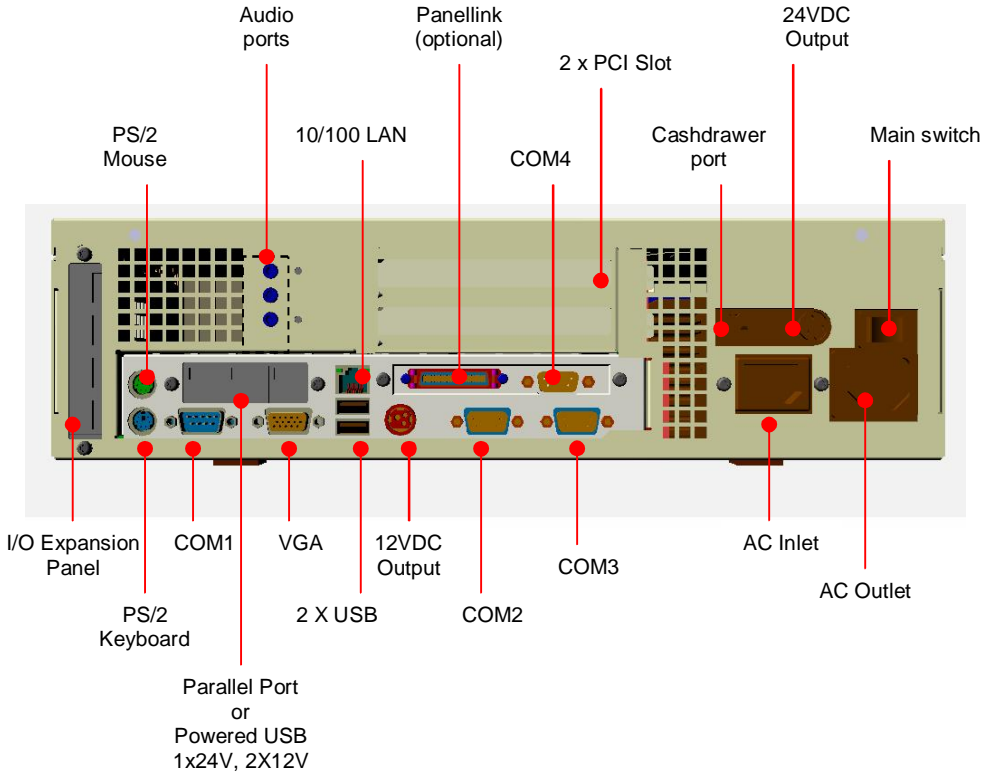
The BEETLE iSPRINT system can be equipped with a 3½" PCI-IDE hard-disk drive. The storage capacity of the hard-disk is 40 GB or higher, up to 137 GB.

USB Front Access

The BEETLE iSPRINT provides one USB port for connection of the USB device from the front side.

Rear Panel connectors on BEETLE iSPRINT

The illustration below shows parts of the rear panel of the BEETLE iSPRINT system, with the position of the connecting sockets and connectors.



12V Power Output Jack

The BEETLE iSPRINT is equipped with a 12VDC output supplying to a maximum of 2A for powering a LCD display.

24V Power Output Jack

The BEETLE iSPRINT is equipped with a 24VDC output supplying to a maximum of 3A for powering a printer.

Expansion Slots

The BEETLE iSPRINT has two PCI bus master expansion slots on board. One of the slot is designed for the Riser Card.

Power Supply Unit

The power supply unit automatically adjusts itself to the particular voltage. The total output of the power supply unit is maximum 245W.

It has a 24V output and cash drawer control interface.

VGA Connector for CRT Monitor or LCD-Display

A CRT monitor or LCD-Display could be connected to the BEETLE iSPRINT via the 15-pin D-SUB jack on the VGA connector.



Make sure that the connector is plugged firmly into the socket to prevent malfunctioning.

Keyboard Connector (PS/2)

The BEETLE iSPRINT system has a Purple 6-pin Mini-DIN Jack for connecting a keyboard using a PS/2 plug.

Mouse Connector (PS/2)

The BEETLE iSPRINT system has a Light-green 6-pin Mini-DIN Jack for connecting a standard Mouse using a PS/2 plug.

Parallel Port LPT1 for Modular Printer (Optional)

The parallel port LPT1 on the BEETLE iSPRINT system could be connected to a modular printer.

Standard Serial Port (COM1)

The BEETLE iSPRINT is equipped with a standard serial port, which is assigned as COM1. It is a serial interface that is used for standard PC peripherals.

Powered Serial Ports (COM2, COM3)

The BEETLE iSPRINT is equipped with two powered serial ports, which are assigned as COM2 and COM3.

Powered TTL Serial Port (COM4)

The BEETLE iSPRINT is equipped with a special powered serial port that carries the signal with TTL level. It is being assigned as COM4.

10/100LAN Socket

The BEETLE iSPRINT can be connected to a network (LAN) through the 10/100 LAN socket.

Audio Port Sockets

The BEETLE iSPRINT is equipped with a set of audio port sockets to provide the audio function for the POS system. The audio port sockets consist of Line-out socket, Line-in socket and MIC socket. The following describes the function of each audio port sockets:

- Line-in socket: allows a headphone or preferably a set of powered speakers to be connected to the system to output voices.
- Line-in socket: allows tape player or other audio sources to be recorded by the POS system or played through the Line-out socket.
- MIC socket: allows a microphone to be connected to the system to input voices.

USB Ports

The BEETLE iSPRINT is equipped with three USB ports:

- Two USB ports on the rear panel
- One USB ports on the front panel

Powered USB Ports

The BEETLE iSPRINT is equipped with three powered USB ports:

- One 24V powered USB port
- Two 12V powered USB ports

Panellink Interface (optional)

The Panellink interface on the BEETLE iSPRINT system could be connected to a Wincor Nixdorf Panellink LCD monitor.

Cash drawer port

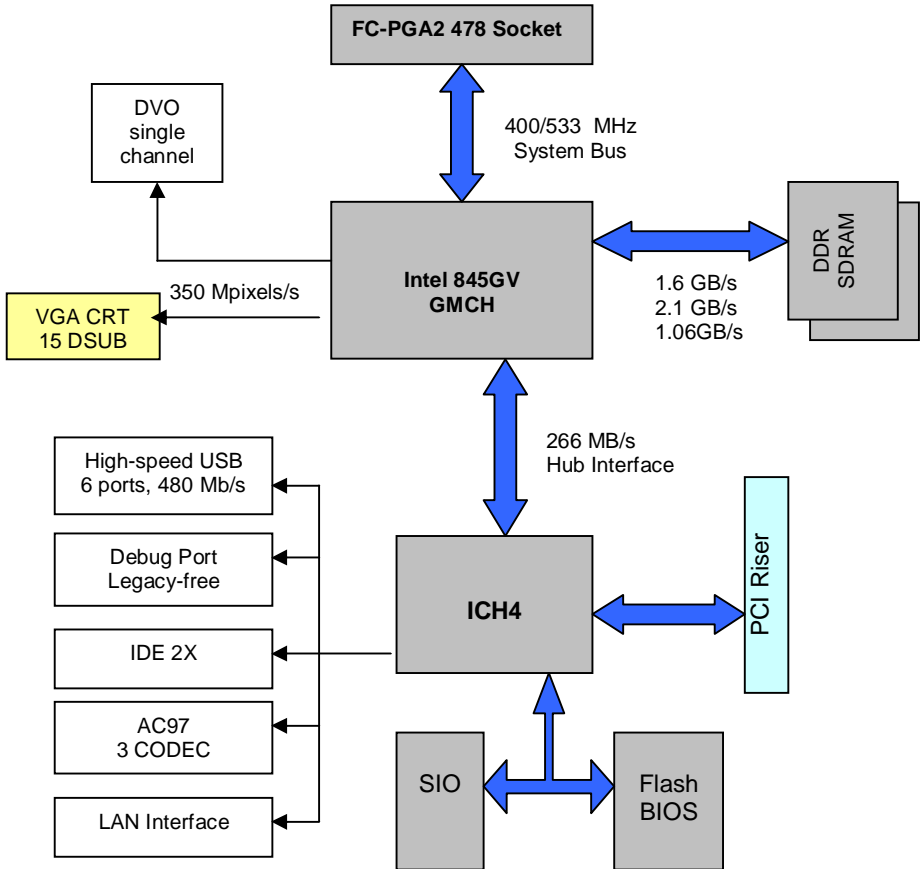
There is a cash drawer port provided, to control up to 2 cash drawer unit separately.



Do not connect telecommunication network devices to this port.

BEETLE iSPRINT Motherboard

Motherboard Block Diagram



Processor Supports

The BEETLE iSPRINT support the processor with FC-PGA2 478 socket. However, below is the list of supported processors that have been certified for the use on this motherboard with the manufacturer's standard and certification compliances:

- FC-PGA2 478 Intel Pentium 4 processor 2.0GHz
- FC-PGA2 478 Intel Pentium 4 processor 2.8GHz
- FC-PGA2 478 Intel Celeron processor 2.0GHz
- FC-PGA2 478 Intel Celeron processor 2.4GHz

Voltage Regulator Modules (VRM)

The BEETLE iSPRINT motherboard is designed with the VRM of on-board VRM9.0 IMVP-III.

Chipset

The chipset used for the motherboard are namely:

- Intel 845GV North Bridge chipset
- Intel ICH4 SouthBridge chipset

System Memory

The BEETLE iSPRINT motherboard consists of two DIMM sockets that support the memory with the following features:

- 64-bits DDR (Double Data Rate) with 200/266 MHz SDRAM array.
- Memory size within the range of 32 MB to 512 MB.
- Non-ECC memory
- 3.3V memory only

The BIOS of the motherboard will automatically detect the memory type, size and speed of the memory installed.

Graphics Subsystem

The BEETLE iSPRINT motherboard is equipped with the Northbridge internal graphic accelerator to provide graphic support to the system.

This internal graphic accelerator is able to provide simultaneous video output via an on-board 15-pin DSUB and to a TFT Flat Panel LCD display through Wincor Nixdorf Panellink card.

CRT Display

The GMCH has an integrated 350MHz RAMDAC capability to drive a standard progressive scan monitor with the resolution up to 2048 x 1536 with 2-bit color at 60 Hz.

TFT Flat Panel Display

The motherboard is equipped with an on-board Digital Video Out (DVO) interface that supports the standard DVI digital flat panel display through Wincor Nixdorf Panellink card. It is able to drive the digital display up to 1600 x 1200 at 60 Hz.

Although BEETLE iSPRINT system is equipped with the maximum resolution supported for both CRT display and TFT flat panel display, the resolutions tested on BEETLE iSPRINT system are listed below:

- VGA : 600 x 480
- SVGA: 800 x 600
- XGA: 1024 x 768

Audio Subsystem

The BEETLE iSPRINT motherboard is equipped with an integrated AC97 controller which is AC 97 2.2 compliant.

Additionally, the motherboard also consists of an on-board power amplifier with an output of 4 Watt, which will be output of 2 Watt per channel. However, the jumper setting in the audio subsystem could be used to bypass the power amplifier to become Lineout.

The audio connectors available include:

- Back panel audio jacks for Speaker-out/Line-out, Line-in and Mic-in. All these audio jacks are located on a single bracket.
- Internal audio sockets for CD-in and AUX-in.

System BIOS

The system is equipped with AWARD BIOS.

The BIOS has a 2 MB flash EPROM. It could be upgraded from diskette using a utility provided.

Plug-and-Play

The BIOS is able to automatically configure the PCI devices and Plug-and-Play devices. These devices can either be on-board or in the PCI add-on slots.

The Plug-and-Play BIOS supports Plug and Play specification 1.1.

Power Management

The BIOS supports the following power management:

- Advance Power Management (APM)
- Advanced Configuration and Power Management Interface (ACPI).

On-board LAN Controller

The BEETLE iSPRINT motherboard is equipped with an integrated PCI Ethernet as its on-board LAN controller with the following features:

- 10/100MB/second.
- Supports Wake-On-LAN and Remove Wake-Up capabilities.
- Supports network activities LED indicators.

Expansion slots

The BEETLE iSPRINT motherboard is equipped with a PCI Riser slot that supports up to 2 PCI bus master.

DC Power Output

The 12 VDC output supplies to a maximum of 2A for powering a LCD display.

Non-volatile Memory

The BEETLE iSPRINT is equipped with non-volatile memory, supports up to 64 kb. Default memory size provided is 4 kb.

System BIOS

This section describes the AWARD BIOS™ Setup program built into the ROM BIOS. The Setup program allows users to modify the basic system configuration. The BIOS information is stored in a battery-backed RAM so that it retains the Setup information when the power of the system is turned off.

The BIOS reads the system information contained in the CMOS and begins the process of checking out the system and configuring it. When it finishes, the BIOS will seek the operating system on one of the disks to launch and turn the control over to the operating system.

The Setup program can be activated by pressing the [DEL] key when the following message appears at the bottom of the screen during the POST (Power On Self-Test).

Press **[DEL]** to enter SETUP.



Below is the menu displayed while entering the Setup program.





CMOS Setup Utility - Copyright (C) 1984-1998

Standard CMOS Feature	Frequency/Voltage Control
Advanced BIOS Feature	Load Fail-Safe Defaults
Advanced Chipset Feature	Load Optimized Defaults
Integrated Peripherals	Set Supervisor Password
Power Management Setup	Set User Password
PnP/PCI Configurations	Save & Exit Setup
PC Health	Exit Without Saving
Esc : Quit	
↑ ↓ ← → : Select Item	
F10 : Save & Exit Setup	
Time, Date, Hard Disk Type...	

BIOS Setup Main Menu

The following table describes the BIOS setup options available from the BIOS Setup main menu:

BIOS Setup Option	Description
Standard CMOS Features	To setup basic system configuration such as date, time, type of floppy etc.
Advanced BIOS Features	To setup the advance settings available on the system.
Advanced Chipset Features	To setup the contents of the chipset register and optimize the system's performance.
 CAUTION	It is recommended that you remain the settings here as their default unless you know what settings you are changing. Having an incorrect setting in this section may cause your system to be unstable!
Integrated Peripherals	To specify or change the settings of the integrated peripherals.
Power Management Setup	To specify the power management settings and setup various power saving features, such as system standby or suspend mode.
PnP/PCI Configuration	To allow the configuration of the plug-and-play PCI slots.
 CAUTION	It is recommended that you remain the settings here as their default unless you know what settings you are changing.
PC Health Status	To enter the hardware monitoring screen that displays the current CPU temperature, fan speeds, voltages etc. You can set the warning temperature which will trigger an alarm if the CPU exceeds the specified temperature.
Frequency/Voltage Control	To specify the settings for frequency / voltage control.
Load Fail-safe Defaults	To load the BIOS default values for the minimal / stable performance the system operation.

	To load the BIOS default, from the dialog box, choose 'Y' followed by [ENTER] key. To exit this section without loading the BIOS default, from the dialog box, choose 'N' followed by the [ENTER] key.
Load Optimized Default	To load the BIOS default values that are factory settings for optimal performance system operations. While AWARD has designed the custom BIOS to maximize performance, the factory has the right to change these defaults to meet their needs.
 NOTE	To load the BIOS optimized default, from the dialog box, choose 'Y' followed by [ENTER] key. To exit this section without loading the BIOS optimized default, from the dialog box, choose 'N' followed by the [ENTER] key.
Supervisor/User Password	To set supervisor / user password.
 NOTE	Make sure you don't forget the password or else you can not access the BIOS. If you forgot about the password, the only way you can access the BIOS is by resetting it using the reset jumper on the motherboard.
Save & Exit Setup	To save CMOS value changes to CMOS and exit setup.
 NOTE	From the dialog box, choose 'Y' followed by [ENTER] key.
Exit Without Saving	To abandon all CMOS value changes and exit setup.
 NOTE	From the dialog box, choose 'Y' followed by [ENTER] key.

POST Messages

During the Power On Self-Test (POST), if the BIOS detects an error requiring you to do something to fix, it will either sound a beep code or display a message.

If a message is displayed, it will be accompanied by:

PRESS F1 TO CONTINUE, CTRL-ALT-ESC OR DEL TO ENTER SETUP

POST Beep

Currently there are two kinds of beep codes in BIOS. This code indicates that a video error has occurred and the BIOS cannot initialize the video screen to display any additional information. This beep code consists of a single long beep followed by two short beeps. The other code indicates that your DRAM error has occurred. This beep code consists of a single long beep repeatedly.

Error Messages

One or more of the following messages may be displayed if the BIOS detects an error during the POST. This list includes messages for both the ISA and the EISA BIOS.

CMOS BATTERY HAS FAILED

CMOS battery is no longer functional. It should be replaced.

CMOS CHECKSUM ERROR

Checksum of CMOS is incorrect. This can indicate that CMOS has become corrupt. This error may have been caused by a weak battery. Check the battery and replace if necessary.

DISK BOOT FAILURE, INSERT SYSTEM DISK AND PRESS ENTER

No boot device was found. This could mean that either a boot drive was not detected or the drive does not contain proper system boot files. Insert

a system disk into Drive A: and press [Enter]. If you assumed the system would boot from the hard drive, make sure the controller is inserted correctly and all cables are properly attached. Also be sure the disk is formatted as a boot device. Then reboot the system.

DISKETTE DRIVES OR TYPES MISMATCH ERROR - RUN SETUP

Type of diskette drive installed in the system is different from the CMOS definition. Run Setup to reconfigure the drive type correctly.

DISPLAY SWITCH IS SET INCORRECTLY

Display switch on the motherboard can be set to either monochrome or color. This indicates the switch is set to a different setting than indicated in Setup. Determine which setting is correct, and then either turn off the system and change the jumper, or enter Setup and change the VIDEO selection.

DISPLAY TYPE HAS CHANGED SINCE LAST BOOT

Since last powering off the system, the display adapter has been changed. You must configure the system for the new display type.

EISA Configuration Checksum Error PLEASE RUN EISA CONFIGURATION UTILITY

The EISA non-volatile RAM checksum is incorrect or cannot correctly read the EISA slot. This can indicate either the EISA non-volatile memory has become corrupt or the slot has been configured incorrectly. Also ensure that the card is installed firmly in the slot.

EISA Configuration Is Not Complete PLEASE RUN EISA CONFIGURATION UTILITY

The slot configuration information stored in the EISA non-volatile memory is incomplete.

Note: When either of these errors appeared, the system will boot in ISA mode, which allows you to run the EISA Configuration Utility.

ERROR ENCOUNTERED INITIALIZING HARD DRIVE

Hard drive cannot be initialized. Ensure that the adapter is installed correctly and all cables are correctly and firmly attached. Also ensure that the correct hard drive type is selected in Setup.

ERROR INITIALIZING HARD DISK CONTROLLER

Cannot initialize the controller. Make sure that the cord is correctly and firmly installed in the bus. Ensure that the correct hard drive type is selected in Setup. Also check if any jumper needs to be set correctly on the hard drive.

FLOPPY DISK CNTRLR ERROR OR NO CNTRLR PRESENT

Cannot find or initialize the floppy drive controller. Ensure that the controller is installed correctly and firmly. If there are no floppy drives installed, ensure that the Diskette Drive selection in Setup is set to NONE.

Invalid EISA Configuration

PLEASE RUN EISA CONFIGURATION UTILITY

The non-volatile memory containing EISA configuration information was programmed incorrectly or has become corrupt. Re-run EISA configuration utility to correctly program the memory.

NOTE: When this error appears, the system will boot in ISA mode, which allows you to run the EISA Configuration Utility.

KEYBOARD ERROR OR NO KEYBOARD PRESENT

Cannot initialize the keyboard. Make sure that the keyboard is attached correctly and no keys are being pressed during the boot.

If you are purposely configuring the system without a keyboard, set the error halt condition in Setup to 'HALT ON ALL, BUT KEYBOARD'. This will cause the BIOS to ignore the missing keyboard and continue the boot.

Memory Address Error at ...

Indicates the memory address error at a specific location. You can use this location along with the memory map for your system to find and replace the bad memory chips.

Memory parity Error at ...

Indicates the memory parity error at a specific location. You can use this location along with the memory map for your system to find and replace the bad memory chips.

MEMORY SIZE HAS CHANGED SINCE LAST BOOT

Memory has been added or removed since the last boot. In EISA mode use Configuration Utility to reconfigure the memory configuration. In ISA mode enter Setup and enter the new memory size in the memory fields.

Memory Verify Error at ...

Indicates an error verifying a value already written to memory. Use the location along with your system's memory map to locate the bad chip.

OFFENDING ADDRESS NOT FOUND

This message is used in conjunction with the I/O CHANNEL CHECK and RAM PARITY ERROR messages when the segment that has caused the problem cannot be isolated.

OFFENDING SEGMENT:

This message is used in conjunction with the I/O CHANNEL CHECK and RAM PARITY ERROR messages when the segment that has caused the problem has been isolated.

PRESS A KEY TO REBOOT

This will be displayed at the bottom screen when an error occurs that requires you to reboot. Press any key and the system will reboot.

PRESS F1 TO DISABLE NMI, F2 TO REBOOT

When BIOS detects a Non-maskable Interrupt condition during boot, this will allow you to disable the NMI and continue to boot, or you can reboot the system with the NMI enabled.

RAM PARITY ERROR - CHECKING FOR SEGMENT ...

Indicates a parity error in Random Access Memory.

Should Be Empty But EISA Board Found
PLEASE RUN EISA CONFIGURATION UTILITY

A valid board ID was found in a slot that was configured as having no board ID.

NOTE: When this error appears, the system will boot in ISA mode, which allows you to run the EISA Configuration Utility.

Should Have EISA Board But Not Found
PLEASE RUN EISA CONFIGURATION UTILITY

The board installed is not responding to the ID request, or no board ID has been found in the indicated slot.

NOTE: When this error appears, the system will boot in ISA mode, which allows you to run the EISA Configuration Utility.

Slot Not Empty

Indicates that a slot designated as empty by the EISA Configuration Utility actually contains a board.

NOTE: When this error appears, the system will boot in ISA mode, which allows you to run the EISA Configuration Utility.

SYSTEM HALTED, (CTRL-ALT-DEL) TO REBOOT ...

Indicates the present boot attempt has been aborted and the system must be rebooted. Press and hold down the CTRL and ALT keys and press DEL.

Wrong Board In Slot
PLEASE RUN EISA CONFIGURATION UTILITY

The board ID does not match the ID stored in the EISA non-volatile memory.

NOTE: When this error appears, the system will boot in ISA mode, which allows you to run the EISA Configuration Utility.

FLOPPY DISK(S) fail (80) → Unable to reset floppy subsystem.

FLOPPY DISK(S) fail (40) → Floppy Type mismatch.

Hard Disk(s) fail (80) → HDD reset failed

Hard Disk(s) fail (40) → HDD controller diagnostics failed.

Hard Disk(s) fail (20) → HDD initialization error.

Hard Disk(s) fail (10) → Unable to recalibrate fixed disk.

Hard Disk(s) fail (08) → Sector Verify failed.

Keyboard is locked out - Unlock the key.

BIOS detect the keyboard is locked. P17 of keyboard controller is pulled low.

Keyboard error or no keyboard present.

Cannot initialize the keyboard. Make sure that the keyboard is attached correctly and no keys are being pressed during the boot.

Manufacturing POST loop.

System will repeat POST procedure infinitely while the P15 of keyboard controller is pull low. This is also used for M/B burn in test.

BIOS ROM checksum error - System halted.

The checksum of ROM address F0000H-FFFFFFH is bad.

Memory test fail.

BIOS reports the memory test fail if the onboard memory is tested error.

Appendix

Technical Data

Installation Specifications

BEETLE iSPRINT System	
Width	372 mm
Depth	385 mm
Height	105 mm
Weight	approx. 11 kg

Environmental Conditions

Operating	IEC 721-3-3	Class 3K3	+5°C to +40°C
Transport	IEC 721-3-3	Class 3K3	-25°C to +40°C
Storage	IEC 721-3-3	Class 3K3	+5°C to +40°C
Input voltage	100 - 120 VAC 200 - 240 VAC		
Max. power consumption	5A / 3A		
Frequency of system voltage	50 / 60 Hz		

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