1. PRODUCT SPECIFICATIONS

Specifications for Wireless LAN Functions

■ Physical specifications

Power save (doze) mode	45 mA
Receive mode	250 mA
Send mode	350 mA
Power	3.3 V

■ Wireless features

The wireless features of the wireless LAN vary depending on the product you purchase and the country you are in when you purchase it.

I many cases, the wireless transmission are based on the wireless regulations of the country where it is being used. Wireless network equipment is designed to use 2.4 GHz bandwidth to operate which does not require a wireless license. However, depending on the national wireless regulations, there may be several restrictions on the use of wireless network equipment.

NOTE: • See the "Users Announcement" for information on the appropriate wireless regulations for each country.

Wireless frequency range	2.4 GHz (2400 to 2483.5 MHz)			

Modulator	Direct diffusion format
	    CCK (Forwarding rate; High, Medium)
	    DQPSK (Forwarding rate; Standard)
	    DBPSK (Forwarding rate; Low)			

Diffusion format	11 chip Barker Sequence			
Bit error rate (BER)	10^{-5} or greater			
Rated output	15 dBm			
Forwarding rate	High Speed 11 Mb/s	Medium Speed 5.5 Mb/s	Standard Speed 2 Mb/s	Low Speed 1 Mb/s
Reception speed	–83 dBm	–87 dBm	–91 dBm	–94 dBm
Diffusion delay (FER 1% or less)	65 ns	225 ns	400 ns	500 ns

There is a correlation function of transmission range and forwarding rate for wireless equipment. The lower the wireless transmission forwarding rate the broader the transmission range.

TIPS: • Metal surfaces or dense solid bodies that are placed close to the antenna will exert an effect on the transmission range of the wireless device.

• Also, if something that absorbs or reflects the wireless signal is in the path of the wireless signal, the transmission range will be effected.

■ Supported frequency bands

The 2.4 GHz channels that the wireless LAN supports, vary depending on the applicable national wireless regulations (See the "Wireless IEEE802.11" chart).
See the "Users Announcement" for information on the appropriate wireless regulations for each country.

Wireless IEEE802.11 Channel Set

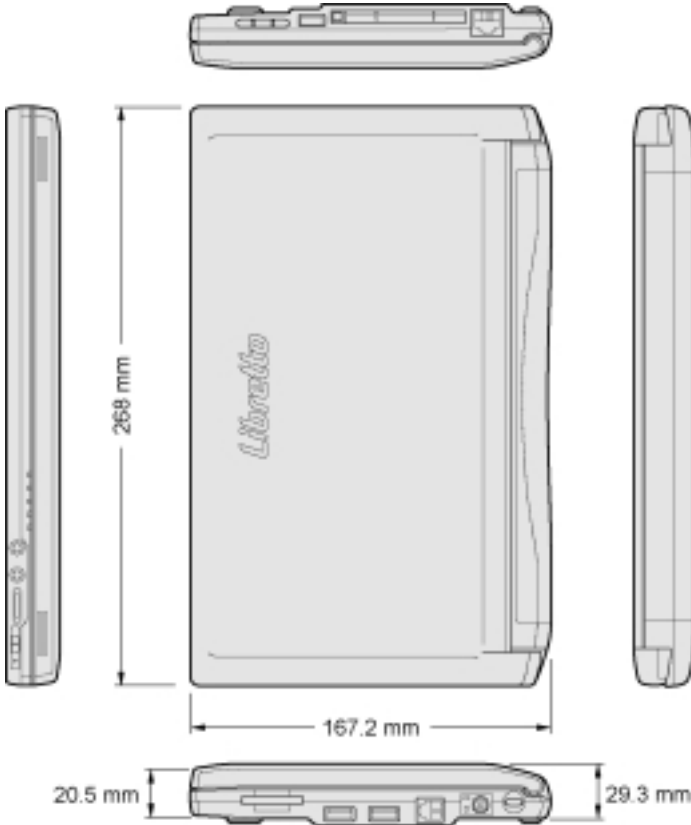| Frequency band	2400 to 2483.5 MHz [1]
Channel ID	
1	2412
2	2417
3	2422
4	2427
5	2432
6	2437
7	2442
8	2447
9	2452
10	2457 [1]
11	2462

*1: The channel set at time of purchase

The wireless LAN channel settings is managed in the following way:

- When connected to the infrastructure with a wireless LAN, The station automatically switches to the wireless LAN access point channel. When it is roaming between different access points, the station automatically switches channels when necessary. The station switches channels between 1 and 11. It is necessary to make this the range for the wireless LAN access-point set channel.

- When connecting the wireless LAN with a "peer to peer" mode, channel 10 is used.

Exterior Dimension Diagram

* These measurements do not include protrusions.

Supported Video Mode

The regulations that determine the maximum possible number of colors and screen resolution that is controlled by the display controller is called the video mode.

All the video modes that this product supports in English mode are shown below.

Usually the mode number is used by the programmer to differentiate between the various modes. When application software specifies a mode based on the mode number, that number may not match the number in the diagram. In this case, select the original resolution, font size and number of colors.

Video Mode	Format	Resolution	Font Size	Number of colors	CRT Refresh Rate (Hz)
—	SVGA Graphics	800 × 600 dots	—	256/256K	60/75/85/100
—		1024 × 768 dots [*1]	—	256/256K	
—		1280 × 600 dots [*1]	—	256/256K	60
—		1280 × 1024 dots [*1]	—	256/256K	60/75/85/100
—		1600 × 1200 dots [*1]	—	256/256K	
—		800 × 600 dots	—	64K/64K	
—		1024 × 768 dots [*1]	—	64K/64K	
—		1280 × 600 dots	—	64K/64K	60
—		1280 × 1024 dots [*1]	—	64K/64K	60/75/85/100
—		1600 × 1200 dots [*1]	—	64K/64K	60
—		800 × 600 dots	—	16M/16M	60/75/85/100
—		1024 × 768 dots [*1]	—	16M/16M	60/75/85
—		1280 × 600 dots [*2]	—	16M/16M	60
—		1280 × 1024 dots [*2]	—	16M/16M	

*1: When the display is LCD, a semblance of the screen is displayed within the actual screen (1280 × 600).
(Caution) Some of the screen modes have different refresh rate modes that can not be used in multimonitor.

*2: When the display is a CRT, s semblance of the screen is displayed within the actual screen (1280 × 600).

Hardware Resources

You can confirm the memory map, I/O port map and resources that use IRQ and DMA in the following way.
There are modifications depending upon the environment (hardware/software) that is being used.

1. Click [Start], [All programs], [Accessories], [System tools] and [System information].

2. Double click on [Hardware resource] in the tree on the left side of the screen.

3. Click the items that you want to confirm.
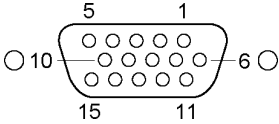
   Memory map: [Memory]
   I/O port map: [I/O]
   Resources that use IRQ: [IRQ]
   Resources that use DMA: [DMA]

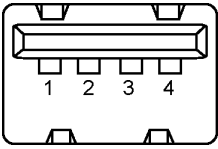# 2. INTERFACE SPECIFICATIONS

RGB Interface (Mini RGB Cable)

Pin Number	Signal name	Explanation	Signal Direction
1	CRV	Red video signal	O
2	CGV	Green video signal	O
3	CBV	Blue video signal	O
4	Reserved	Reserve	
5	GND	Signal ground	
6	GND	Signal ground	
7	GND	Signal ground	
8	GND	Signal ground	
9	Reserved	Reserve	
10	GND	Signal ground	
11	Reserved	Reserve	
12	SDA	SDA transmission signal	I/O
13	-CHSYNC	Horizontal synchronization signal	O
14	-CVSYNC	Vertical synchronization signal	O
15	SCL	SCL data clock signal	I/O
Connector diagram			

High density D-SUB 3-row 15-pin male plug

Signal name: A minus (–) is attached to signals that are negative logic values.
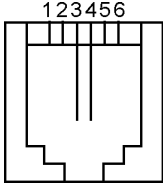Signal direction (I):   Input to the personal computer.
Signal direction (O): Output from the personal computer.

USB Interface

Pin Number	Signal name	Explanation	Signal Direction
1	VCC	+5V	
2	–Data	Minus data	I/O
3	+Data	Plus data	I/O
4	GND	Signal ground	
Connector diagram			

Signal name: A minus (–) is attached to signals that are negative logic values.
Signal direction (I):   Input to the personal computer.
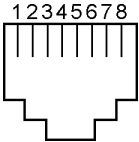Signal direction (O): Output from the personal computer.

Modem Interface

Pin Number	Signal name	Explanation	Signal Direction
1	—	No contact	
2	—	No contact	
3	TIP	Telephone circuit	I/O
4	RING	Telephone circuit	I/O
5	—	No contact	
6	—	No contact	
Connector diagram			

Signal direction (I):   Input to the personal computer.
Signal direction (O): Output from the personal computer.

LAN Interface

Pin Number	Signal name	Explanation	Signal Direction
1	TX	Transmission data (+)	O
2	–TX	Transmission data (–)	O
3	RX	Reception data (+)	I
4	Unused	Not in use	
5	Unused	Not in use	
6	–RX	Reception data (–)	I
7	Unused	Not in use	
8	Unused	Not in use	
Connector diagram			

```
     12345678
    ┌┬┬┬┬┬┬┬┬┐
    ││││││││││
    │        │
    └─┐    ┌─┘
      └────┘
```

Signal name: A minus (–) is attached to signals that are negative logic values.
Signal direction (I):   Input to the personal computer.
Signal direction (O):   Output from the personal computer.

3. TECHNICAL STANDARD COMPLIANCE

Self Regulation of Leakage Current

This equipment complies with the international standard for personal computers (PC-11-1988) determined by the Japan Electronics and Information Technology Industries Association.

Instantaneous Drop in Voltage

This equipment satisfies the guidelines for personal computer instantaneous drop in voltage countermeasures determined by the Japan Electronics and Information Technology Industries Association. However, instantaneous drops in voltage that exceed the guidelines may cause some trouble.

Self Regulation of Electronic Interference

This equipment is a class B information Technology device based on the Voluntary Control Council for Interference by Information Technology (VCCI) standard. This equipment is aimed at use in a home environment, but this equipment may cause reception interference if used in proximity to radios or televisions.

Refer to the manual for correct operating procedure.

Harmonic Guidelines

This equipment is a "Harmonic Guideline Compliant Product".

International Energy Star Program

As a corporate member of the international energy star program, this product has been determined to satisfy the standards related to the international energy star program products.

REFERENCE: See "Chapter 4.2 Power saving" for information about energy saving settings.

FCC Information

Product name   : Libretto L5/080TN
Model number   : PAL5080TN

FCC Notice "Declaration of Conformity Information"

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

❑ Reorient or relocate the receiving antenna.

❑ Increase the separation between the equipment and receiver.

❑ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

❑ Consult the dealer or an experienced radio/TV technician for help.

WARNING: Only peripherals complying with the FCC rules class B limits may be attached to this equipment. Operation with non-compliant peripherals or peripherals not recommended by TOSHIBA is likely to result in interference to radio and TV reception. Shielded cables must be used between the external devices and the computer's or external monitor port, USB port, and microphone jack. Changes or modifications made to this equipment, not expressly approved by TOSHIBA or parties authorized by TOSHIBA could void the user's authority to operate the equipment. The modular cable that comes with the computer must be used to connect a modem.

FCC Conditions

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

For Wireless LAN:
The radiated output power of the Toshiba Wireless LAN Mini PCI Card is far below the FCC radio frequency exposure limits. Nevertheless, the Toshiba Wireless LAN Mini PCI Card shall be used in such
A manner that the potential for human contact during normal operation is minimized. The antenna(s)
Used in this device are located at the upper edge of the LCD screen, a minimum separation distance of

5.0 cm must be maintained between the user and the antenna(s) to ensure exposure compliance.

Contact

Address :   TOSHIBA America Information Systems, Inc.

9740 Irvine Boulevard

Irvine, California 92618-1697

Telephone : (949) 583-3000

TOSHIBA

$C\mathcal{E}$

EU Declaration of Conformity

TOSHIBA declares, that the product: PAL5080TN** conforms to the following Standards:

Supplementary Information: "The product complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and the R & TTE Directive 1999/05/EEC."

This product is carrying the CE-Mark in accordance with the related European Directives. Responsible for CE-Marking is TOSHIBA Europe, Hammfelddamm 8, 41460 Neuss, Germany.

Cautions When Using the Modem

When using the internal modem in this product, take the following precautions.

The internal modem complies with the Japan Approvals Institute for Telecommunications Equipment regulation 50 item 1 for technical standard compliance.	Compliance number A00-0940JP

● Regions where the modem can be used

The internal modem in your computer can be used in the following countries and regions:

Iceland, Ireland, U.S.A, U.A.E, U.K., Israel, Italia, India, Indonesia, Egypt, Estonia, Australia, Austria, Oman, Netherlands, Canada, Korea, Greece, Kuwait, Saudi Arabia, Singapore, Switzerland, Sweden, Spain, Sri Lanka, Slovakia, Slovenia, Thailand, Taiwan, Czech, China, Denmark, Germany, Turkey, Japan, New Zealand, Norway, Pakistan, Hungary, Bangladesh, Philippines, Finland, France, Bulgaria, Belgium, Poland, Portugal, Hong Kong, Malta, Malaysia, South Africa, Morocco, Latvia, Lithuania, Luxemburg, Lebanon, Russia

As of April 2002

Because license has not been granted for operation in some other countries, be careful to not use it in those other countries.
In countries where the modem can not be used, purchase a modem that can be used in those countries.
If the line connecting the internal modem is PBX or some other, it is possible that it may not function.
It is understood that, TOSHIBA bears no responsibility for any danger or damage resulting from failure to adhere to the above precautions.

● Limits on automatic re-transmission

If the internal modem exceeds two redials, "BLACK LISTED" is returned without transmitting (If the "BLACK LISTED" response code becomes a problem, set the redial to less than two times or set the time between redials to greater than one minute).

The internal modem's automatic redial function is in accordance with the technical standard of the Electronic Communications law (Analog Telephone Terminals) "Automatic redial function is within two times (However, within three minutes of the first transmission)".

NOTES: • When thunderclouds are approaching, unplug the modular plug from the telephone modular jack. If lightning strikes the telephone line, the modem or your computer may be damaged.

• When using the internal modem, it is necessary to set it so that is complies with the region in which it is being used.

Conformity Statement

The equipment has been approved to [Commission Decision "CTR21"] for pan-European single terminal connection to the Public Switched Telephone Network (PSTN).

However, due to differences between the individual PSTNs provided in different countries/regions the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point.

In the event of problems, you should contact your equipment supplier in the first instance.

Network Compatibility Statement

This product is designed to work with, and is compatible with the following networks. It has been tested to and found to confirm with the additional requirements conditional in EG 201 121.

Germany	- ATAAB AN005,AN006,AN007,AN009,AN010 and DE03,04,05,08,09,12,14,17
Greece	- ATAAB AN005,AN006 and GR01,02,03,04
Portugal	- ATAAB AN001,005,006,007,011 and P03,04,08,10
Spain	- ATAAB AN005,007,012, and ES01
Switzerland	- ATAAB AN002
All other countries/regions	- ATAAB AN003,004

Specific switch settings or software setup are required for each network, please refer to the relevant sections of the user guide for more details.

The hookflash (timed break register recall) function is subject to separate national type approvals. If has not been tested for conformity to national type regulations, and no guarantee of successful operation of that specific function on specific national networks can be given.

Pursuant to FCC CFR 47, Part 68:

When you are ready to install or use the modem, call your local telephone company and give them the following information:

- The telephone number of the line to which you will connect the modem

- The registration number that is located on the device

The FCC registration number of the modem will be found on either the device which is to be installed, or, if already installed, on the bottom of the computer outside of the main system label.

- The Ringer Equivalence Number (REN) of the modem, which can vary.
  For the REN of your modem, refer to your modem's label.

The modem connects to the telephone line by means of a standard jack called the USOC RJ11C.

Type of Service

Your modem is designed to be used on standard-device telephone lines.
Connection to telephone company-provided coin service (central office implemented systems) is prohibited. Connection to party lines service is subject to state tariffs. If you have any questions about your telephone line, such as how many pieces of equipment you can connect to it, the telephone company will provide this information upon request.

Telephone Company Procedures

The goal of the telephone company is to provide you with the best service it can.
In order to do this, it may occasionally be necessary for them to make changes in their equipment, operations, or procedures. If these changes might affect your service or the operation of your equipment, the telephone company will give you notice in writing to allow you to make any changes necessary to maintain uninterrupted service.

If Problems Arise

If any of your telephone equipment is not operating properly, you should immediately remove it from your telephone line, as it may cause harm to the telephone network. If the telephone company notes a problem, they may temporarily discontinue service. When practical, they will notify you in advance of this disconnection. If advance notice is not feasible, you will be notified as soon as possible. When you are notified, you will be given the opportunity to correct the problem and informed of your right to file a complaint with the FCC.
In the event repairs are ever needed on your modem, they should be performed by TOSHIBA Corporation or an authorized representative of TOSHIBA Corporation.

Disconnection

If you should ever decide to permanently disconnect your modem from its present line, please call the telephone company and let them know of this change.

Fax Branding

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via a telephone fax machine unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business, other entity or individual sending the message and the telephone number of the sending machine or such business, other entity or individual.

In order to program this information into your fax modem, you should complete the setup of your fax software before sending messages.

Instructions for IC CS-03 Certified Equipment

1. NOTICE: The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

   Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection.

   The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

   Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

   Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

   Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

2. The user manual of analog equipment must contain the equipment's Ringer Equivalence Number (REN) and an explanation notice similar to the following:

   The Ringer Equivalence Number (REN) of the modem, which can vary.
   For the REN of your modem, refer to your modem's label.

NOTE: *The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.*

3. The standard connecting arrangement (telephone jack type) for this equipment is jack type(s): USOC RJ11C.
   The IC registration number of the modem is shown below.

   CANADA: 1353 11026A

Notes for Users in Australia and New Zealand

Modem Warning Notice for Australia

Modems connected to the Australian telecoms network must have a valid Austel permit. This modem has been designed to specifically configure to ensure compliance with Austel standards when the country/region selection is set to Australia.

The use of other country/region setting while the modem is attached to the Australian PSTN would result in you modem being operated in a non-compliant manner.

To verify that the country/region is correctly set, enter the command ATI which displays the currently active setting.

To set the country/region permanently to Australia, enter the following command sequence:

AT%TE = 1
ATS133 = 1
AT&F
AT&W
AT%TE = 0
ATZ

Failure to set the modem to the Australia region setting as shown above will result in the modem being operated in a non-compliant manner. Consequently, there would be no permit in force for this equipment and the Telecoms Act 1991 prescribes a penalty of $12,000 for the connection of non-permitted equipment.

Notes for Use of this Device in New Zealand

- The grant of a Telepermit for a device in no way indicates Telecom acceptance of responsibility for the correct operation of that device under all operating conditions. In particular the higher speeds at which this modem is capable of operating depend on a specific network implementation which is only one of many ways of delivering high quality voice telephony to customers. Failure to operate should not be reported as a fault to Telecom

- In addition to satisfactory line conditions a modem can only work properly if:

  a/   it is compatible with the modem at the other end of the call and
  b/   the application using the modem is compatible with the application at the other end of the call - e.g., accessing the Internet requires suitable software in addition to a modem.

- This equipment shall not be used in any manner which could constitute a nuisance to other Telecom customers.

- Some parameters required for compliance with Telecom's PTC
  Specifications are dependent on the equipment (PC) associated with this modem. The associated equipment shall be set to operate within the following limits for compliance with Telecom Specifications:

  a/   There shall be no more than 10 call attempts to the same number within any 30 minute period for any single manual call initiation, and
  b/   The equipment shall go on-hook for a period of not less than 30 seconds between the end of one attempt and the beginning of the next.
  c/   Automatic calls to different numbers shall be not less than 5 seconds apart.

- Immediately disconnect this equipment should it become physically damaged, and arrange for its disposal or repair.

- The correct settings for use with this modem in New Zealand are as follows:

  ATB0 (CCITT operation)
  AT&G2 (1800 Hz guard tone)
  AT&P1 (Decadic dialing make-break ratio =33%/67%)
  ATS0 = 0 (not auto answer)
  ATS6 = 4 (Blind dial delay)
  ATS7 = less than 90 (Time to wait to carrier after dialing)
  ATS10 = less than 150 (loss of carrier to hangup delay, factory default of 15 recommended)
  ATS11 = 90 (DTMF dialing on/off duration = 90 ms)
  ATX2 (Dial tone detect, but not (U.S.A.) call progress detect)

- When used in the Auto Answer mode, the S0 register must be set with a value 3 or 4. This ensures:

(a) A person calling your modem will hear a short burst of ringing before the modem answers. This confirms that the call has been successfully switched through the network.

(b) Caller identification information (which occurs between the first and second ring cadences) is not destroyed.

- The preferred method of dialing is to use DTMF tones (ATDT...) as this is faster and more reliable than pulse (decadic) dialing. If for some reason you must use decadic dialing, your communications program must be set up to record numbers using the following translation table as this modem does not implement the New Zealand "Reverse Dialing" standard.

  Number to be dialed: 0 1 2 3 4 5 6 7 8 9

  Number to program into computer: 0 9 8 7 6 5 4 3 2 1

  Note that where DTMF dialing is used, the numbers should be entered normally.

- The transmit level from this device is set at a fixed level and because of this there may be circumstances where the performance is less than optimal.
Before reporting such occurrences as faults, please check the line with a standard Telepermitted telephone, and only report a fault if the phone performance is impaired.

- It is recommended that this equipment be disconnected from the Telecom line during electrical storms.

- When relocating the equipment, always disconnect the Telecom line connection before the power connection, and reconnect the power first.

- This equipment may not be compatible with Telecom Distinctive Alert cadences and services such as FaxAbility.

Note That Fault Callouts Caused By Any Of The Above Causes May Incur A Charge From Telecom

General Conditions

As required by PTC 100, please ensure that this office is advised of any changes to the specifications of these products which might affect compliance with the relevant PTC Specifications.

The grant of this Telepermit is specific to the above products with the marketing description as stated on the Telepermit label artwork. The Telepermit may not be assigned to other parties or other products without Telecom approval.

A Telepermit artwork for each device is included from which you may prepare any number of Telepermit labels subject to the general instructions on format, size and colour on the attached sheet.

The Telepermit label must be displayed on the product at all times as proof to purchasers and service personnel that the product is able to be legitimately connected to the Telecom network.

The Telepermit label may also be shown on the packaging of the product and in the sales literature, as required in PTC 100.

The charge for a Telepermit assessment is $337.50. An additional charge of $337.50 is payable where an assessment is based on reports against non-Telecom New Zealand Specifications. $112.50 is charged for each variation when submitted at the same time as the original.

An invoice for $NZ1237.50 will be sent under separate cover.

TROUBLE CHECKLIST

Contact Toshiba PC Dial for information about operating your personal computer.

TOSHIBA PC DIAL

Technical questions can be answered on the telephone.
    * Hours: 9:00 to 19:00 (except for holidays and from December 31 to January 3)

Navi-Dial
National Common Telephone Number **0570-00-3100**
[Be careful to dial the correct telephone number to avoid making mistakes.]

Customer inquiries are automatically connected to the nearest of six locations throughout the country (Chiba, Osaka, Nagoya, Fukuoka, Sendai and Sapporo).

In Navi-Dial, an announcement about calling costs is made after dialing. This is the regular rate for telephone calls to the location nearest to the customer; it is not a fee for technical support (there is no technical support fee).

You should understand that Navi-Dial automatically uses NTT lines, even if you have contracted with a different carrier or My-Line-Plus.

The following calls will not connect with the above telephone system. Customers that fall into this category should use 043-298-8780 (direct line).

- Calls from overseas

- Mobile phones and PHS

- Connections made through telephone companies other than NTT such as 0088 or 0077.

- General use contract lines for industry

- Telephones that have been set to not use the "0570" by industry PBX

TIPS:
- Telephones that use the α-LCR/Super-LCR among others, can use "0570-00-3100" by disabling the settings, see the "manual attached to the telephone" for the disabling procedure.

- You can also receive product information, Q & A and other information by Fax (G3 standard) from "Toshiba PC FAX Information Service".

- One on one consultation is available (technical consultation and labor are fee-based) at "Toshiba PC Techno-Center" (in Tokyo and Osaka).

REFERENCE: *For details see the "Guide to Toshiba PC Support".*

Trouble Checklist

For smoother response, check the following details before contacting Toshiba.
If Toshiba PC Dial asks you for information other than the following, such as the operating system version and the type of CPU, check this information by clicking the [Basic Information Display] button in [PC Diagnostic Tool].

**[Regarding the environment you are using
(the personal computer environment that you are currently using).]**

Q . 1   What is the name (model name) of the personal computer that you are using?
(See the computer itself or the operator's manual)

Name of device:

Enquiry will be made about the following information.
(Production number: , Placeof Purchase: , Date of Purchase: , etc.)

Q . 2   What software environment are you using?

Explain what system and application you are using, such as Windows® XP Home.
OS (System name):

Others:

Q . 3   What symptoms have occurred?

Symptoms:

Q . 4   After what operations did these symptoms occur?

Details of operations:

Q . 5   Did error messages or other things appear?

Details of displays:

Q . 6　　How frequently do the symptoms occur?

☐ They occurred only once and did not occur again.

☐ They occur until the power is cut, but do not occur when restarting after cutting the power.

☐ They always occur when restarting after cutting the power.

☐ Others:

Q . 7　　Do the symptoms occur after a particular operation?

☐ They occur after a specific operation.

☐ They occur after any operation.

☐ Others:

Q . 8　　For consultation about the Internet and transmissions.

Name of your provider:

Name of the modem you are using:

Type of line you are using:

☐ Transmission from an extension phone　　　　☐ My line contract
☐ ISDN　　　　　　☐ Mobile phone　　　　☐ DSL/Cable television

Q . 9　　If the inquiry is about a peripheral device, what is the name of the peripheral device?

Name of the device: (Product name)

Name of the manufacturer: