## Old Company Name in Catalogs and Other Documents

On April 1<sup>st</sup>, 2010, NEC Electronics Corporation merged with Renesas Technology Corporation, and Renesas Electronics Corporation took over all the business of both companies. Therefore, although the old company name remains in this document, it is a valid Renesas Electronics document. We appreciate your understanding.

Renesas Electronics website: http://www.renesas.com

April 1<sup>st</sup>, 2010 Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (http://www.renesas.com)

Send any inquiries to http://www.renesas.com/inquiry.



#### Notice

- 1. All information included in this document is current as of the date this document is issued. Such information, however, is subject to change without any prior notice. Before purchasing or using any Renesas Electronics products listed herein, please confirm the latest product information with a Renesas Electronics sales office. Also, please pay regular and careful attention to additional and different information to be disclosed by Renesas Electronics such as that disclosed through our website.
- 2. Renesas Electronics does not assume any liability for infringement of patents, copyrights, or other intellectual property rights of third parties by or arising from the use of Renesas Electronics products or technical information described in this document. No license, express, implied or otherwise, is granted hereby under any patents, copyrights or other intellectual property rights of Renesas Electronics or others.
- 3. You should not alter, modify, copy, or otherwise misappropriate any Renesas Electronics product, whether in whole or in part.
- 4. Descriptions of circuits, software and other related information in this document are provided only to illustrate the operation of semiconductor products and application examples. You are fully responsible for the incorporation of these circuits, software, and information in the design of your equipment. Renesas Electronics assumes no responsibility for any losses incurred by you or third parties arising from the use of these circuits, software, or information.
- 5. When exporting the products or technology described in this document, you should comply with the applicable export control laws and regulations and follow the procedures required by such laws and regulations. You should not use Renesas Electronics products or the technology described in this document for any purpose relating to military applications or use by the military, including but not limited to the development of weapons of mass destruction. Renesas Electronics products and technology may not be used for or incorporated into any products or systems whose manufacture, use, or sale is prohibited under any applicable domestic or foreign laws or regulations.
- 6. Renesas Electronics has used reasonable care in preparing the information included in this document, but Renesas Electronics does not warrant that such information is error free. Renesas Electronics assumes no liability whatsoever for any damages incurred by you resulting from errors in or omissions from the information included herein.
- 7. Renesas Electronics products are classified according to the following three quality grades: "Standard", "High Quality", and "Specific". The recommended applications for each Renesas Electronics product depends on the product's quality grade, as indicated below. You must check the quality grade of each Renesas Electronics product before using it in a particular application. You may not use any Renesas Electronics product for any application categorized as "Specific" without the prior written consent of Renesas Electronics. Further, you may not use any Renesas Electronics product for any application for which it is not intended without the prior written consent of Renesas Electronics Renesas Electronics shall not be in any way liable for any damages or losses incurred by you or third parties arising from the use of any Renesas Electronics product for an application categorized as "Specific" or for which the product is not intended where you have failed to obtain the prior written consent of Renesas Electronics. The quality grade of each Renesas Electronics product is "Standard" unless otherwise expressly specified in a Renesas Electronics data sheets or data books, etc.
  - "Standard": Computers; office equipment; communications equipment; test and measurement equipment; audio and visual equipment; home electronic appliances; machine tools; personal electronic equipment; and industrial robots.
  - "High Quality": Transportation equipment (automobiles, trains, ships, etc.); traffic control systems; anti-disaster systems; anticrime systems; safety equipment; and medical equipment not specifically designed for life support.
  - "Specific": Aircraft; aerospace equipment; submersible repeaters; nuclear reactor control systems; medical equipment or systems for life support (e.g. artificial life support devices or systems), surgical implantations, or healthcare intervention (e.g. excision, etc.), and any other applications or purposes that pose a direct threat to human life.
- 8. You should use the Renesas Electronics products described in this document within the range specified by Renesas Electronics, especially with respect to the maximum rating, operating supply voltage range, movement power voltage range, heat radiation characteristics, installation and other product characteristics. Renesas Electronics shall have no liability for malfunctions or damages arising out of the use of Renesas Electronics products beyond such specified ranges.
- 9. Although Renesas Electronics endeavors to improve the quality and reliability of its products, semiconductor products have specific characteristics such as the occurrence of failure at a certain rate and malfunctions under certain use conditions. Further, Renesas Electronics products are not subject to radiation resistance design. Please be sure to implement safety measures to guard them against the possibility of physical injury, and injury or damage caused by fire in the event of the failure of a Renesas Electronics product, such as safety design for hardware and software including but not limited to redundancy, fire control and malfunction prevention, appropriate treatment for aging degradation or any other appropriate measures. Because the evaluation of microcomputer software alone is very difficult, please evaluate the safety of the final products or system manufactured by you.
- 10. Please contact a Renesas Electronics sales office for details as to environmental matters such as the environmental compatibility of each Renesas Electronics product. Please use Renesas Electronics products in compliance with all applicable laws and regulations that regulate the inclusion or use of controlled substances, including without limitation, the EU RoHS Directive. Renesas Electronics assumes no liability for damages or losses occurring as a result of your noncompliance with applicable laws and regulations.
- 11. This document may not be reproduced or duplicated, in any form, in whole or in part, without prior written consent of Renesas Electronics
- 12. Please contact a Renesas Electronics sales office if you have any questions regarding the information contained in this document or Renesas Electronics products, or if you have any other inquiries.
- (Note 1) "Renesas Electronics" as used in this document means Renesas Electronics Corporation and also includes its majorityowned subsidiaries.
- (Note 2) "Renesas Electronics product(s)" means any product developed or manufactured by or for Renesas Electronics.



Description Notes on Using LAN Adapter for E6000/ E6000H/E8000 Emulator (HS6000ELN01H)

Renesas Microcomputer
Development Environment
System

HS6000ELN01HE

#### Notes regarding these materials

- This document is provided for reference purposes only so that Renesas customers may select the appropriate Renesas products for their use. Renesas neither makes warranties or representations with respect to the accuracy or completeness of the information contained in this document nor grants any license to any intellectual property rights or any other rights of Renesas or any third party with respect to the information in this document.
- Renesas shall have no liability for damages or infringement of any intellectual property or other rights arising out of the use of any information in this document, including, but not limited to, product data, diagrams, charts, programs, algorithms, and application circuit examples.
- 3. You should not use the products or the technology described in this document for the purpose of military applications such as the development of weapons of mass destruction or for the purpose of any other military use. When exporting the products or technology described herein, you should follow the applicable export control laws and regulations, and procedures required by such laws and regulations.
- 4. All information included in this document such as product data, diagrams, charts, programs, algorithms, and application circuit examples, is current as of the date this document is issued. Such information, however, is subject to change without any prior notice. Before purchasing or using any Renesas products listed in this document, please confirm the latest product information with a Renesas sales office. Also, please pay regular and careful attention to additional and different information to be disclosed by Renesas such as that disclosed through our website. (http://www.renesas.com)
- Renesas has used reasonable care in compiling the information included in this document, but Renesas assumes no liability whatsoever for any damages incurred as a result of errors or omissions in the information included in this document.
- 6. When using or otherwise relying on the information in this document, you should evaluate the information in light of the total system before deciding about the applicability of such information to the intended application. Renesas makes no representations, warranties or guaranties regarding the suitability of its products for any particular application and specifically disclaims any liability arising out of the application and use of the information in this document or Renesas products.
- 7. With the exception of products specified by Renesas as suitable for automobile applications, Renesas products are not designed, manufactured or tested for applications or otherwise in systems the failure or malfunction of which may cause a direct threat to human life or create a risk of human injury or which require especially high quality and reliability such as safety systems, or equipment or systems for transportation and traffic, healthcare, combustion control, aerospace and aeronautics, nuclear power, or undersea communication transmission. If you are considering the use of our products for such purposes, please contact a Renesas sales office beforehand. Renesas shall have no liability for damages arising out of the uses set forth above.
- 8. Notwithstanding the preceding paragraph, you should not use Renesas products for the purposes listed below:
  - (1) artificial life support devices or systems
  - (2) surgical implantations
  - (3) healthcare intervention (e.g., excision, administration of medication, etc.)
  - (4) any other purposes that pose a direct threat to human life
  - Renesas shall have no liability for damages arising out of the uses set forth in the above and purchasers who elect to use Renesas products in any of the foregoing applications shall indemnify and hold harmless Renesas Technology Corp., its affiliated companies and their officers, directors, and employees against any and all damages arising out of such applications.
- 9. You should use the products described herein within the range specified by Renesas, especially with respect to the maximum rating, operating supply voltage range, movement power voltage range, heat radiation characteristics, installation and other product characteristics. Renesas shall have no liability for malfunctions or damages arising out of the use of Renesas products beyond such specified ranges.
- 10. Although Renesas endeavors to improve the quality and reliability of its products, IC products have specific characteristics such as the occurrence of failure at a certain rate and malfunctions under certain use conditions. Please be sure to implement safety measures to guard against the possibility of physical injury, and injury or damage caused by fire in the event of the failure of a Renesas product, such as safety design for hardware and software including but not limited to redundancy, fire control and malfunction prevention, appropriate treatment for aging degradation or any other applicable measures. Among others, since the evaluation of microcomputer software alone is very difficult, please evaluate the safety of the final products or system manufactured by you.
- 11. In case Renesas products listed in this document are detached from the products to which the Renesas products are attached or affixed, the risk of accident such as swallowing by infants and small children is very high. You should implement safety measures so that Renesas products may not be easily detached from your products. Renesas shall have no liability for damages arising out of such detachment.
- 12. This document may not be reproduced or duplicated, in any form, in whole or in part, without prior written approval from Renesas.
- 13. Please contact a Renesas sales office if you have any questions regarding the information contained in this document, Renesas semiconductor products, or if you have any other inquiries.

## IMPORTANT INFORMATION

#### **READ FIRST**

- READ this user's manual before using this emulator product.
- KEEP the user's manual handy for future reference.

Do not attempt to use the emulator product until you fully understand its mechanism.

#### **Emulator Product:**

Throughout this document, the term "emulator product" shall be defined as the following products produced only by Renesas Technology Corp. and Renesas Solutions Corp. excluding all subsidiary products.

- Emulator (including the EV-chip set)
- LAN adapter
- User system interface cables
- Optional board (including the memory board)

The user system or a host computer is not included in this definition.

#### **Purpose of the Emulator Product:**

This emulator product is a software and hardware development tool for systems employing the Renesas microcomputer. This emulator product must only be used for the above purpose.

#### **Limited Applications:**

This emulator product is not authorized for use in transportation, vehicular, medical (where human life is potentially at stake), aerospace, nuclear, or undersea repeater applications. Buyers of this emulator product must notify Renesas Technology Corporation, Renesas Solutions Corporation or an authorized Renesas Technology product distributor before planning to use the product in such applications.

#### Improvement Policy:

Renesas Technology Corp. (including its subsidiaries, hereafter collectively referred to as Renesas) pursues a policy of continuing improvement in design, performance, and safety of the emulator product. Renesas reserves the right to change, wholly or partially, the specifications, design, user's manual, and other documentation at any time without notice.

RENESAS

I

#### **Target User of the Emulator Product:**

This emulator product should only be used by those who have carefully read and thoroughly understood the information and restrictions contained in the user's manual. Do not attempt to use the emulator product until you fully understand its mechanism.

It is highly recommended that first-time users be instructed by users that are well versed in the operation of the emulator product.

Users are required to be familiar with the basic knowledge for the electric circuits, logic circuits, and microcomputers.

#### Precautions to be Taken when Using This Product:

- 1. This emulator is a development supporting unit for use in your program development and evaluation stages. In mass-producing your program you have finished developing, be sure to make a judgment on your own risk that it can be put to practical use by performing integration test, evaluation, or some experiment else.
- 2. In no event shall Renesas Solutions Corporation be liable for any consequence arising from the use of this emulator.
- 3. Renesas Solutions Corporation does not guarantee the renovation or the provision of a workaround for product malfunction.
- 4. This emulator has been developed by assuming its use for program development and evaluation in laboratories. Therefore, it does not fall under the application of Electrical Appliance and Material Safety Law and protection against electromagnetic interference when used in Japan.
- 5. This emulator does not conform to safety standards such as UL or IEC. Be careful when you take this emulator overseas.
- 6. Renesas cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this user's manual and on the emulator product are therefore not all inclusive. Therefore, you must use the emulator product safely at your own risk.



## LIMITED WARRANTY

Renesas warrants its emulator products to be manufactured in accordance with published specifications and free from defects in material and/or workmanship. Renesas, at its option, will replace any emulator products returned intact to the factory, transportation charges prepaid, which Renesas, upon inspection, shall determine to be defective in material and/or workmanship. The foregoing shall constitute the sole remedy for any breach of Renesas' warranty. See the Renesas warranty booklet for details on the warranty period. This warranty extends only to you, the original Purchaser. It is not transferable to anyone who subsequently purchases the emulator product from you. Renesas is not liable for any claim made by a third party or made by you for a third party.

## **DISCLAIMER**

RENESAS MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, ORAL OR WRITTEN, EXCEPT AS PROVIDED HEREIN, INCLUDING WITHOUT LIMITATION THEREOF, WARRANTIES AS TO MARKETABILITY, MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR USE. OR AGAINST INFRINGEMENT OF ANY PATENT. IN NO EVENT SHALL RENESAS BE LIABLE FOR ANY DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM ANY DEFECTIVE EMULATOR PRODUCT, THE USE OF ANY EMULATOR PRODUCT, OR ITS DOCUMENTATION, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. EXCEPT AS EXPRESSLY STATED OTHERWISE IN THIS WARRANTY. THIS EMULATOR PRODUCT IS SOLD "AS IS ", AND YOU MUST ASSUME ALL RISK FOR THE USE AND RESULTS OBTAINED FROM THE EMULATOR PRODUCT.

#### State Law:

Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights which may vary from state to state.

#### The Warranty is Void in the Following Cases:

Renesas shall have no liability or legal responsibility for any problems caused by misuse, abuse, misapplication, neglect, improper handling, installation, repair or modifications of the emulator product without Renesas' prior written consent or any problems caused by the user system.

#### All Rights Reserved:

- Circuitry and other examples described herein are meant merely to indicate the characteristics
  and performance of Renesas' semiconductor products. Renesas assumes no responsibility for
  any intellectual property claims or other problems that may result from applications based on
  the examples described herein.
- 2. No license is granted by implication or otherwise under any patents or other rights of any third party or Renesas.
- 3. This user's manual and emulator product are copyrighted and all rights are reserved by Renesas. No part of this user's manual, all or part, may be reproduced or duplicated in any form, in hard-copy or machine-readable form, by any means available without Renesas' prior written consent.

#### Figures:

Some figures in this user's manual may show items different from your actual system.



## **SAFETY PAGE**

#### **READ FIRST**

- READ this user's manual before using this emulator product.
- KEEP the user's manual handy for future reference.

Do not attempt to use the emulator product until you fully understand its mechanism.

#### **DEFINITION OF SIGNAL WORDS**

Either in the user's manual or on the product, several icons are used to insure proper handling of this product and also to prevent injuries to you or other persons, or damage to your properties. Their graphic images and meanings are given in this safety page. Be sure to read this chapter before using the product.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



**DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



**WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



**CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

## CAUTION

**CAUTION** used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

**NOTE** emphasizes essential information.

# **WARNING**

Observe the precautions listed below. Failure to do so will result in a FIRE HAZARD and will damage the user system and the emulator product or will result in PERSONAL INJURY. The USER PROGRAM will be LOST.

- 1. Do not repair or remodel the emulator product by yourself for electric shock prevention and quality assurance.
- 2. Always switch OFF the emulator and the host computer before connecting or disconnecting the LAN adapter or any CABLES.
- 3. Supply power according to the power specifications and do not apply an incorrect power voltage. Use only the provided power cable.

## **Preface**

The LAN adapter for the E6000 / E6000H / E8000 emulators is described in this description notes. Read this notes and the user's manuals for the E6000, E6000H, and E8000 emulators.

This LAN adapter provides LAN connection of the E6000/E6000H/E8000 emulator to a personal computer incorporating Windows® with the LAN interface, enabling program debugging through an HDI or the High-performance Embedded Workshop.

Notes: 1. Microsoft<sup>®</sup> and Windows<sup>®</sup> are registered trademarks of Microsoft Corporation in the United States and/or in other countries.

Microsoft<sup>®</sup> Windows<sup>®</sup> 98 Second Edition operating system is referred to as Windows<sup>®</sup> 98SE in this description notes.

Microsoft<sup>®</sup> Windows<sup>®</sup> Millennium Edition operating system is referred to as Windows<sup>®</sup> Me in this description notes.

Microsoft<sup>®</sup> Windows NT<sup>®</sup> operating system is referred to as Windows NT<sup>®</sup> in this description notes.

Microsoft<sup>®</sup> Windows<sup>®</sup> 2000 operating system is referred to as Windows<sup>®</sup> 2000 in this description notes.

Microsoft<sup>®</sup> Windows<sup>®</sup> XP operating system is referred to as Windows<sup>®</sup> XP in this description notes.

- 2. Displays in this notes are examples at using the Windows® 2000.
- 3. Pentium® is a registered trademark of Intel.

# Contents

Sec	tion 1	Overview	1
1.1	Syster	n Configuration	1
1.2	Opera	ting Environments	2
1.3	Enviro	onmental Conditions	2
Sec	tion 2	Components	5
2.1	LAN	Adapter	6
Sec	tion 3	Preparation before Use	9
3.1	Power	Supply	9
	3.1.1	AC Power-Supply Adapter	9
	3.1.2	Polarity	9
3.2	Conne	ecting LAN Cable to LAN Adapter	10
3.3	Conne	ecting LAN Adapter to E6000 Emulator	11
3.4	Conne	ecting USB Adapter to E6000H Emulator	12
3.5	Conne	ecting LAN Adapter to E8000 Emulator	13
Sec	tion 4	Setting up the LAN Adapter	15
4.1		dures	
4.2	Select	ing the LAN Driver	16
4.3	Setting	g the IP Address of the LAN Adapter	16
Sec	tion 5	Troubleshooting	19
Sec	tion 6	External Dimensions of the LAN Adapter	21

## Section 1 Overview

This section describes the system configuration at LAN connection and the LAN adapter.

## 1.1 System Configuration

Figure 1.1 shows the system configuration when connecting the E6000 emulator and the LAN adapter. The E6000H and E8000 emulators can be connected in the same way. Refer to figures 3.4 and 3.5 when connecting the E6000H and E8000 emulators and the LAN adapter, respectively.

The host computer containing Windows  $^{\otimes}$  and the LAN adapter are connected via LAN (10BASE-T/100BASE-TX).

The LAN adapter and the E6000/E6000H/E8000 emulator are connected through the PC interface cable.

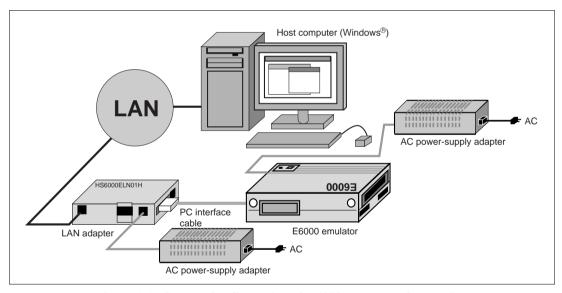


Figure 1.1 System Configuration of E6000 Emulator Connection

#### 1.2 Operating Environments

**Table 1.1 Operating Environments** 

Item	Description
Host computer	Built-in Pentium® or higher-performance CPU (600 MHz or higher recommended); personal computer incorporating Windows® with the LAN interface
	Memory capacity: 128 Mbytes (double or more file size of the load module)
	Hard disk capacity: 50 Mbytes or more (Prepare an area at least double the memory capacity (four-times or more recommended) as the swap area.)
Basic software	Microsoft® Windows® 98SE, Microsoft® Windows® Me, Microsoft® Windows NT®, Microsoft® Windows® 2000, or Microsoft® Windows® XP
LAN type	10BASE-T/100BASE-TX based on IEEE 802.3
Protocol	TCP/IP (when using the LAN adapter configuration, UDP)

#### 1.3 Environmental Conditions

# **CAUTION**

Observe the conditions listed in table 1.2 when using the LAN adapter. Failure to do so will damage the LAN adapter, the emulator product, and the user system.

**Table 1.2 Environmental Conditions** 

No.	Item	Specification
1	Temperature	Operating: +10°C to +35°C Storage: -10°C to +50°C
2	Humidity	Operating: 35% RH to 80% RH, no condensation Storage: 35% RH to 80% RH, no condensation
3	Vibration	Operating: 2.45 m/s² max. Storage: 4.9 m/s² max. Transportation: 14.7 m/s² max.
4	AC-input power supply	Voltage: AC 100 V to 240 V Frequency: 50/60 Hz Current: 61 VA to 70 VA
5	Ambient gases	There must be no corrosive gasses present.



# Section 2 Components

Table 2.1 lists the components of the LAN adapter.

**Table 2.1 Components** 

Item	Product Name	Configuration	Quantity	Remarks
Hardware	LAN adapter	посохонно п	1	Number of printed circuit boards mounted:
	PC interface cable		1	Cable length: 1.5 m (provided with a ferrite core as a countermeasure for EMI* noise)
	AC power-supply adapter		1	Cable length: 1.8 m
	AC power-supply cable		1	Cable length: 2.5 m
Documen- tation	Description Notes on Using LAN Adapter for E6000/E6000H/ E8000 Emulator (HS6000ELN01H) (This manual)	Service on high Control of the Contr	1	HS6000ELN01HE

Note: EMI is an abbreviation of electrical magnetic interference.

## 2.1 LAN Adapter

Figure 2.1 shows each part of the LAN adapter.

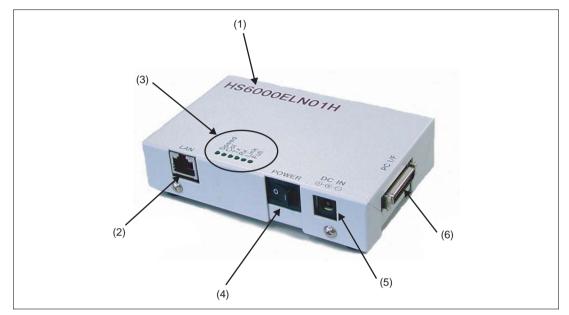


Figure 2.1 LAN Adapter

Numbers in figure 2.1 indicate the following:

- (1) Product name: Product name (HS6000ELN01H) of the LAN adapter.
- (2) 100BASE-TX/10BASE-T port: Connects the LAN cable.
- (3) LED displaying the communication state: Table 2.2 shows the LED names, contents, and states at power-on.

Table 3 LED Names, Contents, and States at Power-on

LED Name	LED Contents		
Speed	During 100BASE-TX mode communication: Lit		
	During 10BASE-T mode communication: Unlit		
Col	During collision detection in half-duplex mode (with Monostable function): Lit		
Tx	During data transmission (with Monostable function): Lit		
Rx	During data receiving (with Monostable function): Lit		
Link	During normal linking (communication with the connected hub enabled): Lit		
Full	During full-duplex mode communication: Lit		

Note: The LAN adapter only lights "Speed" if the LAN cable is not connected at power-on.

- (4) Power switch: Power switch for the LAN adapter. (Pressing the O-side powers-on the adapter. Pressing the I-side powers-off the adapter.)
- (5) Power input connector: Inputs the external AC power supply by using the power adapter of the LAN adapter.
- (6) PC interface cable connector: Connects the emulator.

Figure 2.2 shows the label on the back of the LAN adapter. The MAC address of the LAN adapter is printed on the back label.

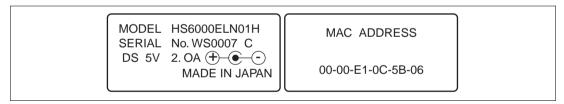


Figure 2.2 LAN Adapter Label

# Section 3 Preparation before Use

## 3.1 Power Supply

#### 3.1.1 AC Power-Supply Adapter

The AC power-supply adapter supplied with the LAN adapter must be used at all times.

#### 3.1.2 Polarity

Figure 3.1 shows the polarity of the power-supply plug.

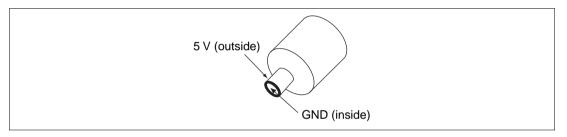


Figure 3.1 Polarity of Power Supply Plug

# **WARNING**

Always switch OFF the emulator product and user system before connecting or disconnecting the LAN adapter.

Failure to do so will result in a FIRE HAZARD and will damage the user system, LAN adapter, and emulator product or will result in PERSONAL INJURY.

Use the AC power-supply adapter provided in the package.

- (1) Connect the LAN cable to the connector marked 'LAN'.
- (2) Connect the power-supply plug of the AC power-supply adapter to the connector marked 'DCIN'.



Figure 3.2 Connecting LAN Cable to LAN Adapter

## 3.3 Connecting LAN Adapter to E6000 Emulator

# **WARNING**

Always switch OFF the emulator product and user system before connecting or disconnecting the LAN adapter.

Failure to do so will result in a FIRE HAZARD and will damage the user system, LAN adapter, and E6000 emulator or will result in PERSONAL INJURY.

To use the E6000 emulator, connect the LAN adapter to the E6000 emulator station via the supplied PC interface cable, as shown in figure 3.3. Connect the PC interface cable connector with a ferrite core to the emulator.

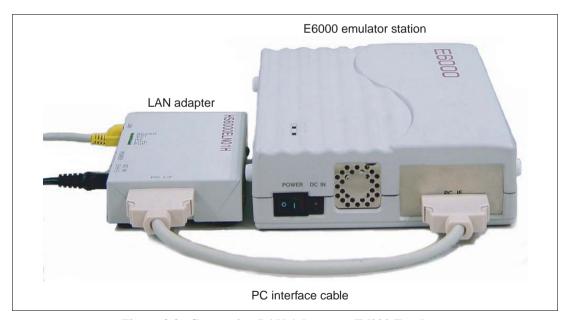


Figure 3.3 Connecting LAN Adapter to E6000 Emulator

#### 3.4 Connecting USB Adapter to E6000H Emulator

# **A** CAUTION

Always switch OFF the emulator product and user system before connecting or disconnecting the LAN adapter.

Failure to do so will result in a FIRE HAZARD and will damage the user system, LAN adapter, and E6000H emulator or will result in PERSONAL INJURY.

To use the E6000H emulator, connect the LAN adapter to the E6000H emulator station via the supplied PC interface cable, as shown in figure 3.4. Connect the PC interface cable connector with a ferrite core to the emulator.



Figure 3.4 Connecting LAN Adapter to E6000H Emulator

## 3.5 Connecting LAN Adapter to E8000 Emulator

# **WARNING**

Always switch OFF the emulator product and user system before connecting or disconnecting the LAN adapter.

Failure to do so will result in a FIRE HAZARD and will damage the user system, LAN adapter, and E8000 emulator or will result in PERSONAL INJURY.

Note: When connecting the E8000 emulator to the host computer using a LAN adapter, select host computer interface as 'IBM PC interface' (S7: ON, S8: ON) for the console setting. For details, refer to section 3.3, System Connection, in the E8000 Emulator User's Manual



To use the E8000 emulator, connect the LAN adapter to the E8000 emulator station via the supplied PC interface cable, as shown in figure 3.5. Connect the PC interface cable connector with a ferrite core to the emulator.

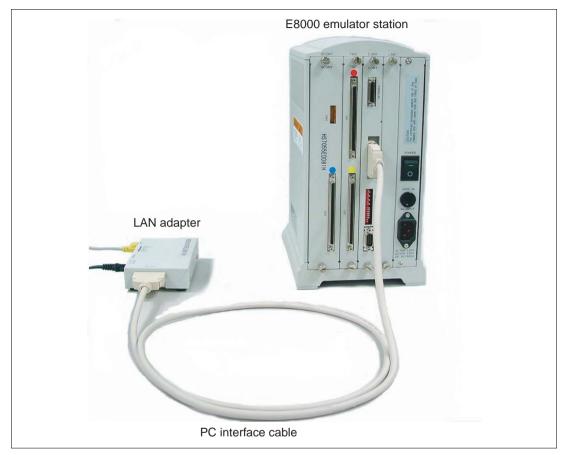


Figure 3.5 Connecting LAN Adapter to E8000 Emulator

## Section 4 Setting up the LAN Adapter

#### 4.1 Procedures

Figure 4.1 shows the setup procedures of the LAN adapter.

Before using the LAN adapter, set the IP address and the subnet mask because they have not been set initially in the LAN adapter.

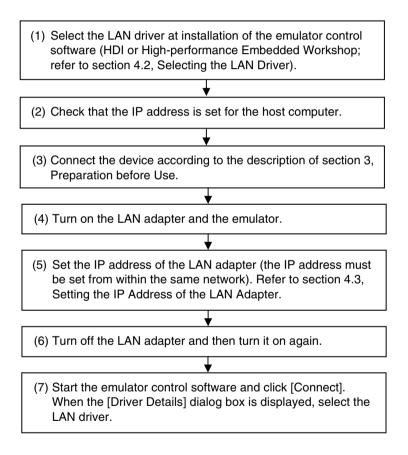


Figure 4.1 Setup Procedures

#### 4.2 Selecting the LAN Driver

During installation of the emulator control software (HDI or High-performance Embedded Workshop), select the LAN driver in the [Select Components] dialog box.

Even if the [Select Components] dialog box is not displayed in some products, it is not a problem because the driver is automatically installed.

- Notes: 1. If the LAN driver is not selected in the [Select Components] dialog box, the LAN interface is not available.
  - 2. If the LAN driver is not displayed in the [Select Components] dialog box, operating environments in table 1.1 will not be satisfied. Check the operating system in use.

#### 4.3 Setting the IP Address of the LAN Adapter

To set the IP address for the LAN adapter, the LAN adapter configuration (LAC) in the emulator control software (HDI or High-performance Embedded Workshop) is needed.

The online help function is available by clicking the [Help] button of the [LAN adapter configuration] dialog box. For the usage or troubleshooting, refer to the online help of the LAN adapter configuration.

- (1) Select 'LAN adapter configuration' from the program menu of the installed HDI or Highperformance Embedded Workshop.
- (2) When the LAN adapter configuration is started, the following dialog box is displayed.

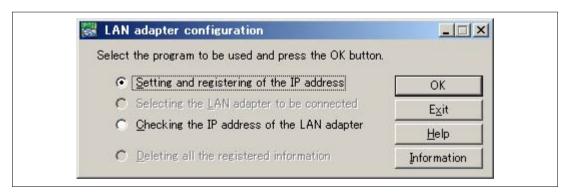
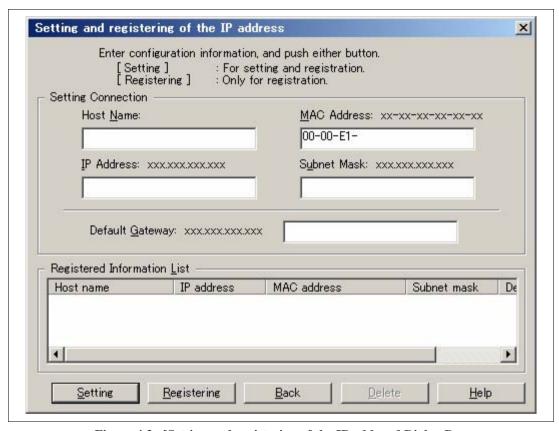


Figure 4.2 Dialog Box at Starting the LAN Adapter Configuration

(3) Set the IP address for the LAN adapter and register the setting information in the host computer. When the 'Setting and registering of the IP address' is selected and the OK button is clicked, the following dialog box is displayed.



 $Figure \ 4.3 \quad [Setting \ and \ registering \ of \ the \ IP \ address] \ Dialog \ Box$ 

(4) After entering the setting values (Host Name, MAC Address, IP Address, and Subnet Mask) and clicking the 'Setting' button, set the IP address for the LAN adapter and register the setting information in the host computer. The information registered in the LAN adapter is displayed in 'Registered Information List'.

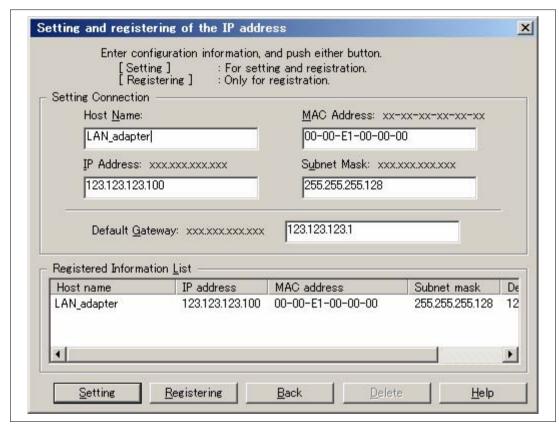


Figure 4.4 Entering the Setting Values in the [Setting and registering of the IP address]
Dialog Box

Notes: 1. Set the different IP address of the LAN adapter from that of the host computer.

- 2. To set the IP address of the LAN adapter, connect the host computer and LAN adapter to the same network.
- 3. After the IP address is set for the LAN adapter, be sure to turn off the adapter, and then turn it on again.

# Section 5 Troubleshooting

The problems that may occur when using the LAN adapter and the measures to be taken are as follows.

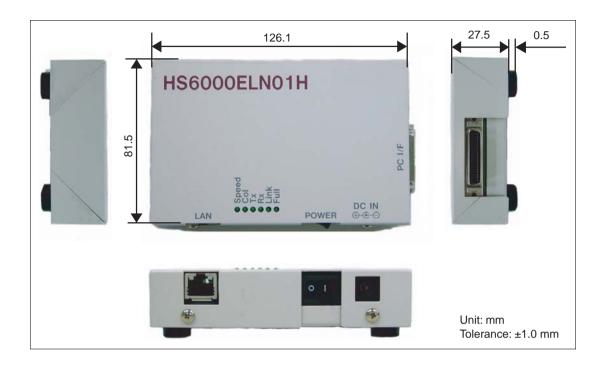
- 1. When the LAN adapter configuration is used, the IP address cannot be set for the LAN adapter or the IP address that has been set cannot be checked.
  - Check that the LAN adapter and the host computer using the LAN adapter configuration are connected to the same network.
  - Check that the LAN adapter is turned on.
- 2. The HDI or the High-performance Embedded Workshop will not start.
  - If the LAN adapter and the emulator are not both turned on, a timeout error will occur after one minute.
  - Check that the IP address, subnet mask, and default gateway in the LAN adapter are correctly set. Refer to online help for the LAN adapter configuration for details on the adapter settings.
  - After setting the IP address for the LAN adapter, turn off the adapter and turn it on again.
- 3. The HDI or the High-performance Embedded Workshop stops operating.
  - Check that the LAN adapter and emulator are correctly connected.
  - Check that the LAN adapter and emulator are turned on.
- 4. The diagnostic LED is lit.
  - The LAN adapter has diagnostic LEDs as shown in figure 5.1.
    If the problem is not resolved even if those measures have been taken, check whether or not the diagnostic LEDs are lit. If they are lit, inform Renesas' sales agency of those LED numbers.





Figure 5.1 Diagnostic LEDs

# Section 6 External Dimensions of the LAN Adapter



# Description Notes on Using LAN Adapter for E6000/E6000H/E8000 Emulator (HS6000ELN01H)

Publication Date: Rev. 1.00, July 8, 2002

Rev. 4.00, April 25, 2007

Published by: Sales Strategic Planning Div.

Renesas Technology Corp.

Edited by: Customer Support Department

Global Strategic Communication Div.

Renesas Solutions Corp.

©2007. Renesas Technology Corp. All rights reserved. Printed in Japan.



#### **RENESAS SALES OFFICES**

http://www.renesas.com

Refer to "http://www.renesas.com/en/network" for the latest and detailed information.

**Renesas Technology America, Inc.** 450 Holger Way, San Jose, CA 95134-1368, U.S.A Tel: <1> (408) 382-7500, Fax: <1> (408) 382-7501

#### Renesas Technology Europe Limited

Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K. Tel: <44> (1628) 585-100, Fax: <44> (1628) 585-900

Renesas Technology (Shanghai) Co., Ltd. Unit 204, 205, AZIACenter, No.1233 Lujiazui Ring Rd, Pudong District, Shanghai, China 200120 Tel: <86> (21) 5877-1818, Fax: <86> (21) 6887-7898

Renesas Technology Hong Kong Ltd.
7th Floor, North Tower, World Finance Centre, Harbour City, 1 Canton Road, Tsimshatsui, Kowloon, Hong Kong Tel: <852> 2265-6688, Fax: <852> 2730-6071

**Renesas Technology Taiwan Co., Ltd.** 10th Floor, No.99, Fushing North Road, Taipei, Taiwan Tel: <886> (2) 2715-2888, Fax: <886> (2) 2713-2999

## Renesas Technology Singapore Pte. Ltd. 1 Harbour Front Avenue, #06-10, Keppel Bay Tower, Singapore 098632

Tel: <65> 6213-0200, Fax: <65> 6278-8001

Renesas Technology Korea Co., Ltd. Kukje Center Bidg. 18th Fl., 191, 2-ka, Hangang-ro, Yongsan-ku, Seoul 140-702, Korea Tel: <82 · Q. 796-3115, Fax: <82 · Q. 796-2145

#### Renesas Technology Malaysia Sdn. Bhd

Unit 906, Block B, Menara Amcorp, Amcorp Trade Centre, No.18, Jalan Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia Tel: <603> 7955-9390, Fax: <603> 7955-9510

# Description Notes on Using LAN Adapter for E6000/E6000H/E8000 Emulator (HS6000ELN01H)

