

ADP-V850E/xxx-144

USER'S MANUAL

RealTimeEvaluator

REVISION HISTORY

Rev.1.00 February 22, 2002 Official first edition

CONTENTS

1. OVERVIEW	3
2. APPEARANCE.....	4
3. NBD-IF CONNECTOR	5
4. PRECAUTIONS FOR USE.....	6
5. CONNECTING THIS PRODUCT TO USER SYSTEM	7

1. OVERVIEW

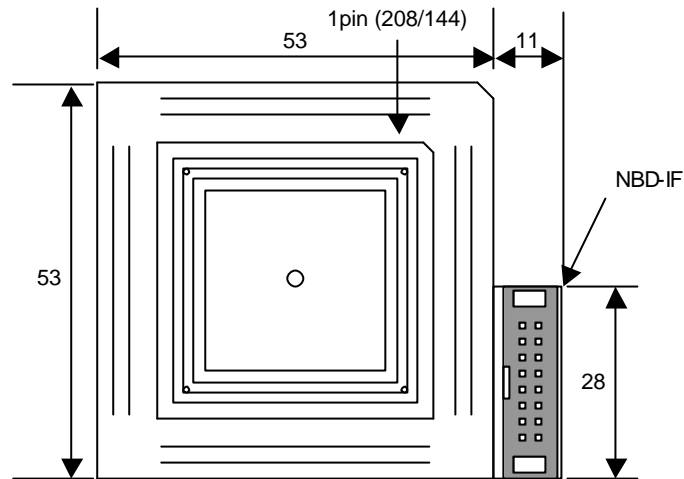
The **ADP-V850E/xxx-144** is an adapter that is to be attached to the tip of an in-circuit emulator for NEC's RISC microcontroller V850E/xxx, to convert a 208-pin product into a 144-pin one.

This product is supplied with the following accessories:

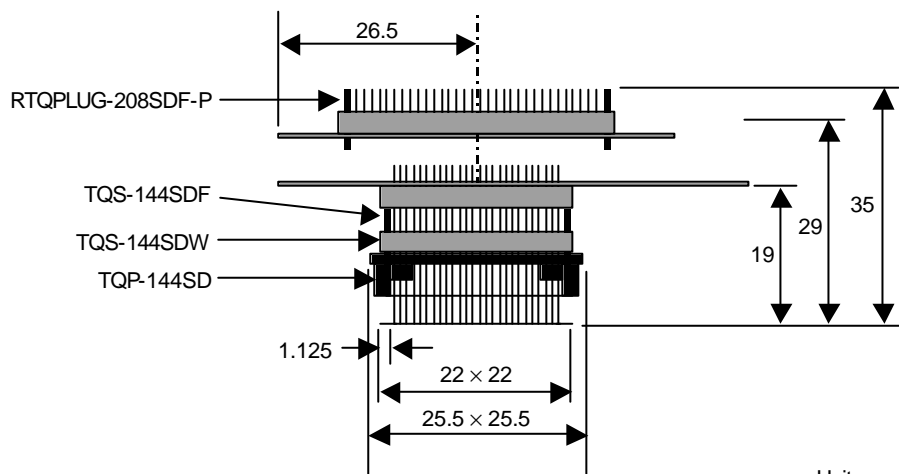
- | | | |
|---|---|---|
| 1. ADP-V850E/xxx-144 main enclosure (with 208-pin plug) | : | 1 |
| 2. RTE for Win32 setup disk | : | 1 |
| 3. User's Manual (this document) | : | 1 |
| 4. 144-pin TQPACK set | : | 1 |

2. APPEARANCE

The appearance of the ADP-V850E/xxx-144 is shown below.



Top view



Side view

Unit : mm

3. NBD-IF CONNECTOR

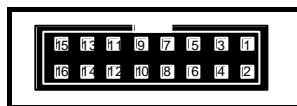
The following table shows the specifications of the NBD-IF connector. An RTE-NBD2 16-pin connector can be directly connected.

Pin No.	Signal name	I/O	Description
1	NBD_TRG-	O	Connected to TRIG_DBG pin of CPU in ICE
2	NBD_VCC	--	Connected to 3.3 V
3	no use	--	Not used
4	GND	--	Connected to ground
5	NBD_CLK	I	Connected to CLK_DBG pin of CPU in ICE
6	GND	--	Connected to ground
7	NBD_SYNC-	I	Connected to SYNC pin of CPU in ICE
8	GND	--	Connected to ground
9	NBD_DATA0	I/O	Connected to AD0_DBG pin of CPU in ICE
10	GND	--	Connected to ground
11	NBD_DATA1	I/O	Connected to AD1_DBG pin of CPU in ICE
12	GND	--	Connected to ground
13	NBD_DATA2	I/O	Connected to AD2_DBG pin of CPU in ICE
14	NBD_DATA3	I/O	Connected to AD3_DBG pin of CPU in ICE
15	MODE_DBG	I	Connected to MODE_NBD pin of CPU in ICE
16	NBD_RESETO-	O	Connected to RESET0_DBG pin of CPU in ICE

Note:

- "I/O" in the above table indicates the direction of input and output viewed from this adapter.

Pin configuration



Pin configuration of NBD-IF connector

Applicable connector:

- 16-pin cable side: XG4M-1630-T manufactured by Omron Corporation, or equivalent
- 16-pin board side: XG4C-1631 manufactured by Omron Corporation

4. PRECAUTIONS FOR USE

Note the following points when using this adapter.

1. Checking emulator version

The version must be **5** or later.

Check the version on the sticker on the rear panel of the emulator.

2. Setting DIP switch of emulator

* Set Nos. 2, 3, and 4 of SW1 as shown in the following table to set the operating frequency to **32 MHz**.

CLKHALF(4)	PLLSEL2(3)	PLLSEL1(2)	Operating frequency
ON	OFF	OFF	(48 MHz)
ON	OFF	ON	(72 MHz)
ON	ON	OFF	(80 MHz)
ON	ON	ON	64 MHz
OFF	ON	ON	32 MHz

* Set No. 8 (CLKINT) of SW1 to ON (internal clock) only. Setting it to OFF is prohibited.

3. Installing RTE for Win32

Install the CD supplied as an accessory.

For upgrading, use version 5.06 or later.

4. Initializing RTE for Win32

Start up ChkRTE2.exe and initialize RTE for Win32 with the following parameters.

RTE: **V850E/yyy-IE** or **V850E/zzz-IE**

I/F-1: << Specify the interface card to be used.

I/F-2: << Specify an IO port as necessary.

Specifying RTE:

V850E/yyy-IE : Select this when the internal ROM is a 384K version.

V850E/zzz-IE : Select this when the internal ROM is a 256K version.

5. Mounting to emulator

Mount the adapter to the emulator so that pin 1 of the adapter matches the position of the corresponding pin of the emulator.

If the adapter is mounted in a wrong direction, it may cause malfunctioning.

6. Others

When the adapter is connected to the emulator, the noise margin may drop as compared with when the emulator alone is used. Observe the points to be noted of the emulator and use the adapter and emulator in the best conditions. For the same reason, do not use any other package conversion adapter in combination.

5. CONNECTING THIS PRODUCT TO USER SYSTEM

When connecting the user system, refer to the technical document of the PACK supplied as an accessory. After mounting the adapter to the user system, connect the adapter and emulator, in that order, as illustrated below.

