

To our customers,

Old Company Name in Catalogs and Other Documents

On April 1st, 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 1st, 2010
Renesas Electronics Corporation

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

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

RENESAS TECHNICAL UPDATE

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Renesas Technology Corp.

Product Category	Packages	Document No.	TN-WRP-A008A/E	Rev.	1.00
Title	Notification of changing the shipment tray for PTQP0144LC-A (TQFP144-16x16-0.4).		Information Category	Packing change	
Applicable Product	All devices whose package code is PTQP0144LC-A (TFP-144/144V). Please refer to the products list.	Lot No.	Reference Document	-	
		-			

1. Contents of Change

We will change the shipment tray for the package PTQP0144LC-A (TQFP144-16x16-0.4), from the Renesas custom tray (PT885C) to the JEDEC standard tray(PTB79C).

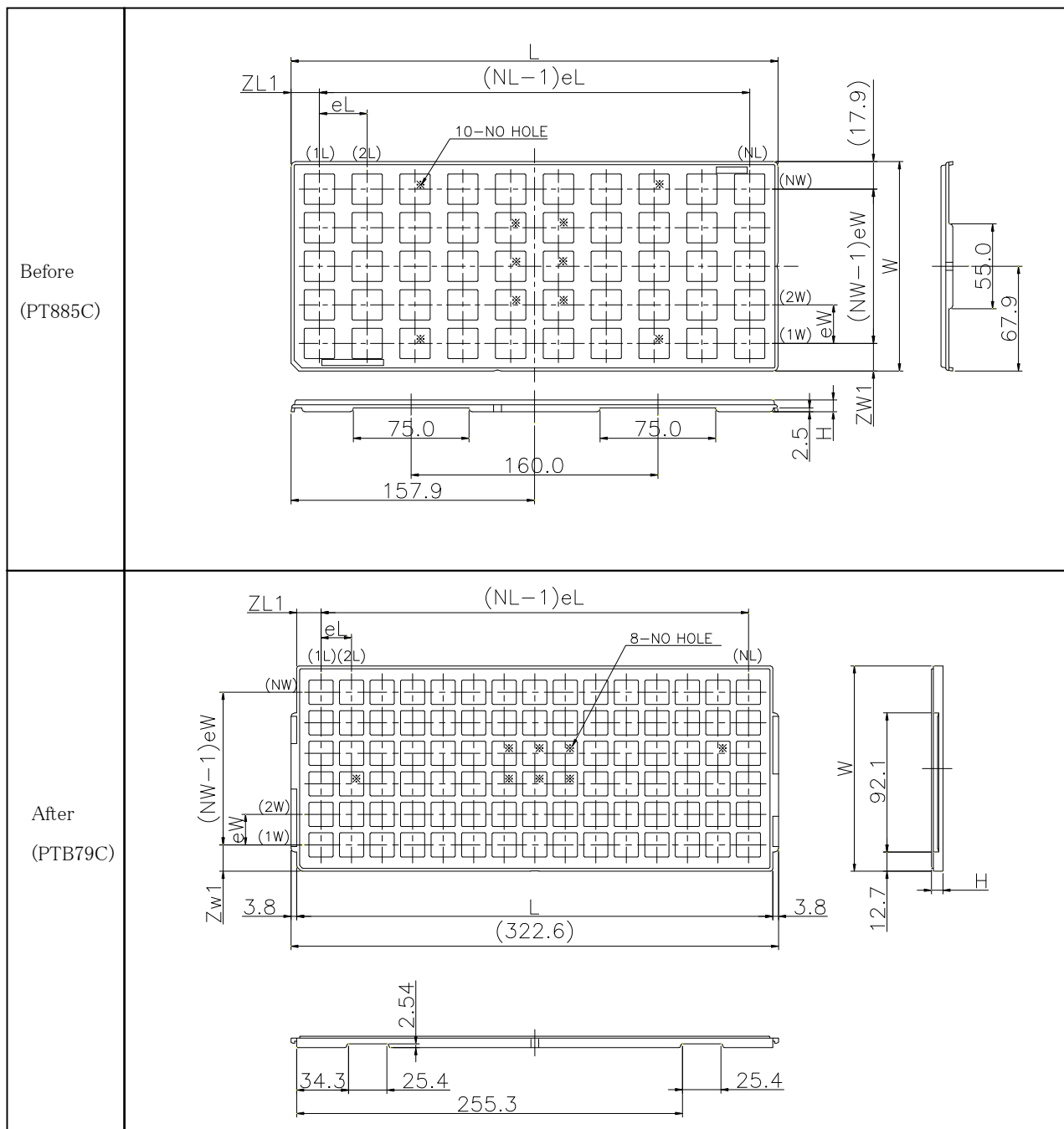
According to this change, the number of devices loaded in a tray, the pocket pitch, and the heat-proof temperature change.

1.1 Comparative table

Items		before change	after change
Tray code		PT885C	PTB79C
Design rule		RENESAS custom	JEDEC standard
Material		Carbon-PPE	Carbon-PPE
Heat-proof temperature		130°C MAX, 24h	150°C MAX, 4h (130°C MAX, 24h)
Surface resistance		Less than $1 \times 10^9 \Omega / \square$	Less than $1 \times 10^9 \Omega / \square$
Outline dimensions	L	315.80 mm	315.00 (322.60 ^{*1}) mm
	W	135.80 mm	135.90 mm
	H	7.60 mm	7.62 mm
Detailed dimensions	ZW1	17.90 mm	17.45 mm
	ZL1	18.40 mm	16.10 mm
	eW	25.00 mm	20.20 mm
	eL	31.00 mm	20.20 mm
	(NW-1) x eW	4 x 25.00 = 100.00 mm	5 x 20.20 = 101.00 mm
	(NL-1) x eL	9 x 31.00 = 279.00 mm	14 x 20.20 = 282.80 mm
	NW	5 pockets	6 pockets
	NL	10 pockets	15 pockets
Number of devices / tray		5 x 10 = 50 pcs	6 x 15 = 90 pcs
Number of devices / inner box		50 x 10 = 500 pcs	90 x 8 = 720 pcs

*1: include protrusion area

1.2 Comparative outline



2. Cause of change

To standardize the tray specification and to reduce the environmental load by increasing the number of devices loaded in a tray. According to this change, we think that the work efficiency of the board assembly process improves.

3. Applicable Time

We will apply the new tray (JEDEC tray) to the devices produced in March 2008.

Due to the stock control, some devices will be shipped in an old tray (Renesas custom tray) for a while.

We hope your understanding and approval.

4. Products list

HD64F2111BVTE10BV
HD64F2111BVTE10CV
HD64F2160BVTE10V
HD64F2161BVTE10
HD64F2161BVTE10V
HD64F2169BVTE10V

R4F2114RVTE20V
R4F2116VTE20MV
R4F2116VTE20V
R4F2117VTE20V
R4F2189RVTE20V

HD64F2165VTE25V
HD64F2166VTE33
HD64F2166VTE33V
HD64F2167VTE33
HD64F2167VTE33V
HD64F2168VTE33
HD64F2168VTE33V
HD64F2177VTE33
HD64F2177VTE33V
HD64F2178VTE33
HD64F2178VTE33V

HD64F2643TF25
HD64F2643TF25V

HD64F3857TG
HD64F3857TGV

HD643385(5/6/7)TG
HD643385(5/6/7)TGI
HD643385(5/6/7)TGV
HD643385(5/6/7)TGIV

HG73C702TEV
R8A01026FTV
R8A01034FTV
HD6417708STF60V