

# RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-RX*-A0246A/E	Rev.	1.00
Title	Addition of New Package (0.5-mm pitch 48-pin QFN and 0.5-mm pitch 32-pin QFN) Products to RX13T Group		Information Category	Technical Notification		
Applicable Product	RX13T Group	Lot No.	Reference Document	RX13T Group User's Manual: Hardware Rev.1.00 (R01UH0822EJ0100)		
		All				

New package products (0.5-mm pitch 48-pin QFN and 0.5-mm pitch 32-pin QFN packages) are added to the RX13T group MCU lineup.

This document contains a list, a pin assignment, and package dimensions of products to be added.

## 1. List of New Products

Eight products listed in Table 1 are added to RX13T group.

**Table 1. List of RX13T Group New Package Products**

Group	Part No.	Part No. (for Orders)	Package	ROM Capacity	RAM Capacity	E2 DataFlash	Operating Frequency (max.)	Operating Temperature
RX13T (D-version)	R5F513T5ADNE	R5F513T5ADNE#20	PWQN0048KE-A	128 Kbytes	12 Kbytes	4 Kbytes	32 MHz	-40 to +85°C
	R5F513T5ADNH	R5F513T5ADNH#20	PWQN0032KE-A	64 Kbytes				
	R5F513T3ADNE	R5F513T3ADNE#20	PWQN0048KE-A					
	R5F513T3ADNH	R5F513T3ADNH#20	PWQN0032KE-A					
RX13T (G-version)	R5F513T5AGNE	R5F513T5AGNE#20	PWQN0048KE-A	128 Kbytes	12 Kbytes	4 Kbytes	32 MHz	-40 to +105°C
	R5F513T5AGNH	R5F513T5AGNH#20	PWQN0032KE-A	64 Kbytes				
	R5F513T3AGNE	R5F513T3AGNE#20	PWQN0048KE-A					
	R5F513T3AGNH	R5F513T3AGNH#20	PWQN0032KE-A					

## 2. Pin Assignment

Pin assignment for the products with 0.5-mm pitch 48-pin QFN package is the same as the products with 48-pin LFQFP package.

Pin assignment for the products with 0.5-mm pitch 32-pin QFN package is the same as the products with 32-pin LFQFP package.

### 3. Package Dimensions

The package dimensions for the 0.5-mm pitch 48-pin QFN package (PWQN0048KE-A) are as follows.

JEITA Package code	RENESAS code	MASS(TYP.)[g]
P-HWQFN048-7x7-0.50	PWQN0048KE-A	0.13

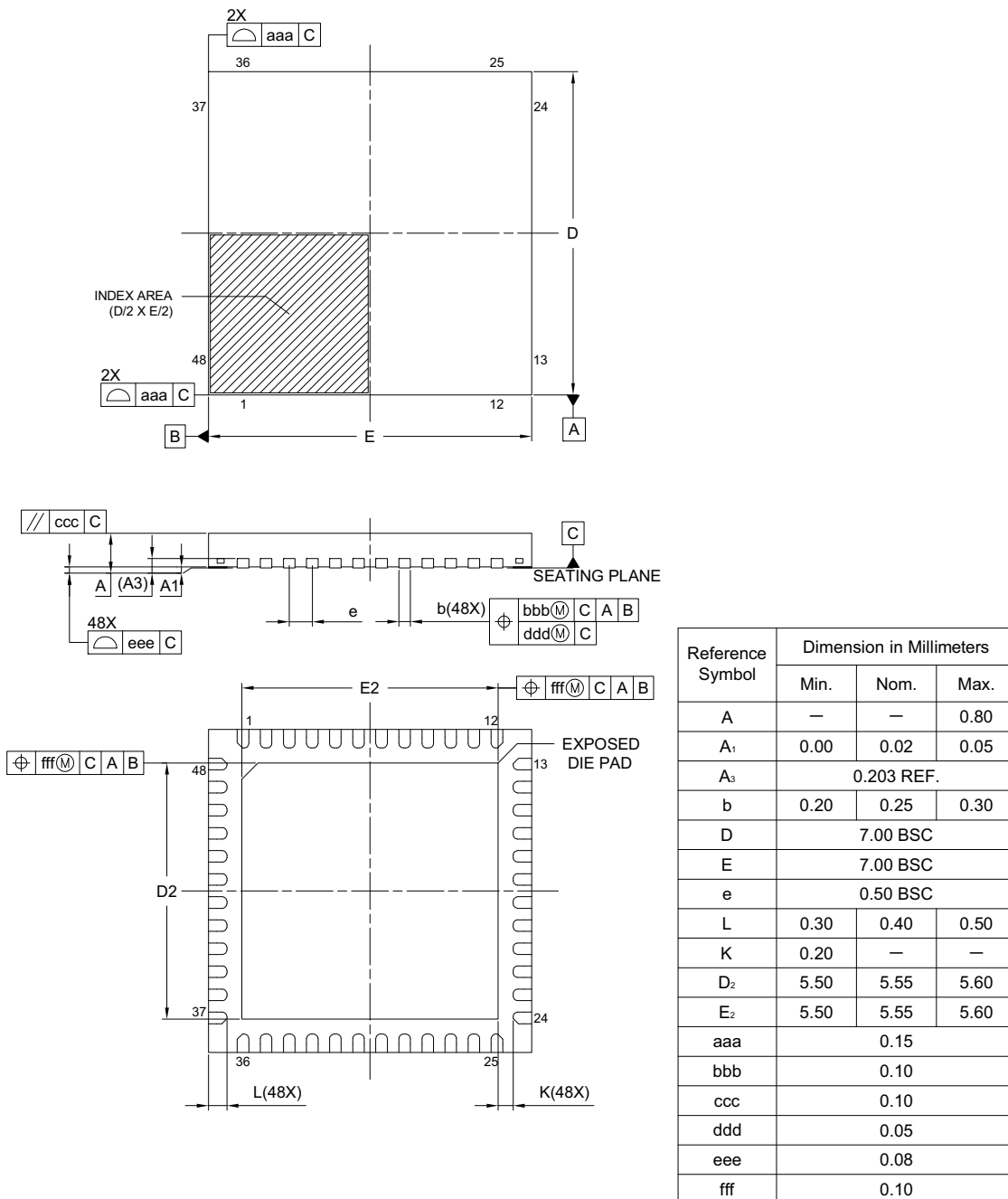


Figure 1. 48-pin QFN (PWQN0048KE-A)

The package dimensions for the 0.5-mm pitch 32-pin QFN package (PWQN0032KE-A) are as follows.

JEITA Package code	RENESAS code	MASS(TYP.)[g]
P-HWQFN032-5x5-0.50	PWQN0032KE-A	0.06

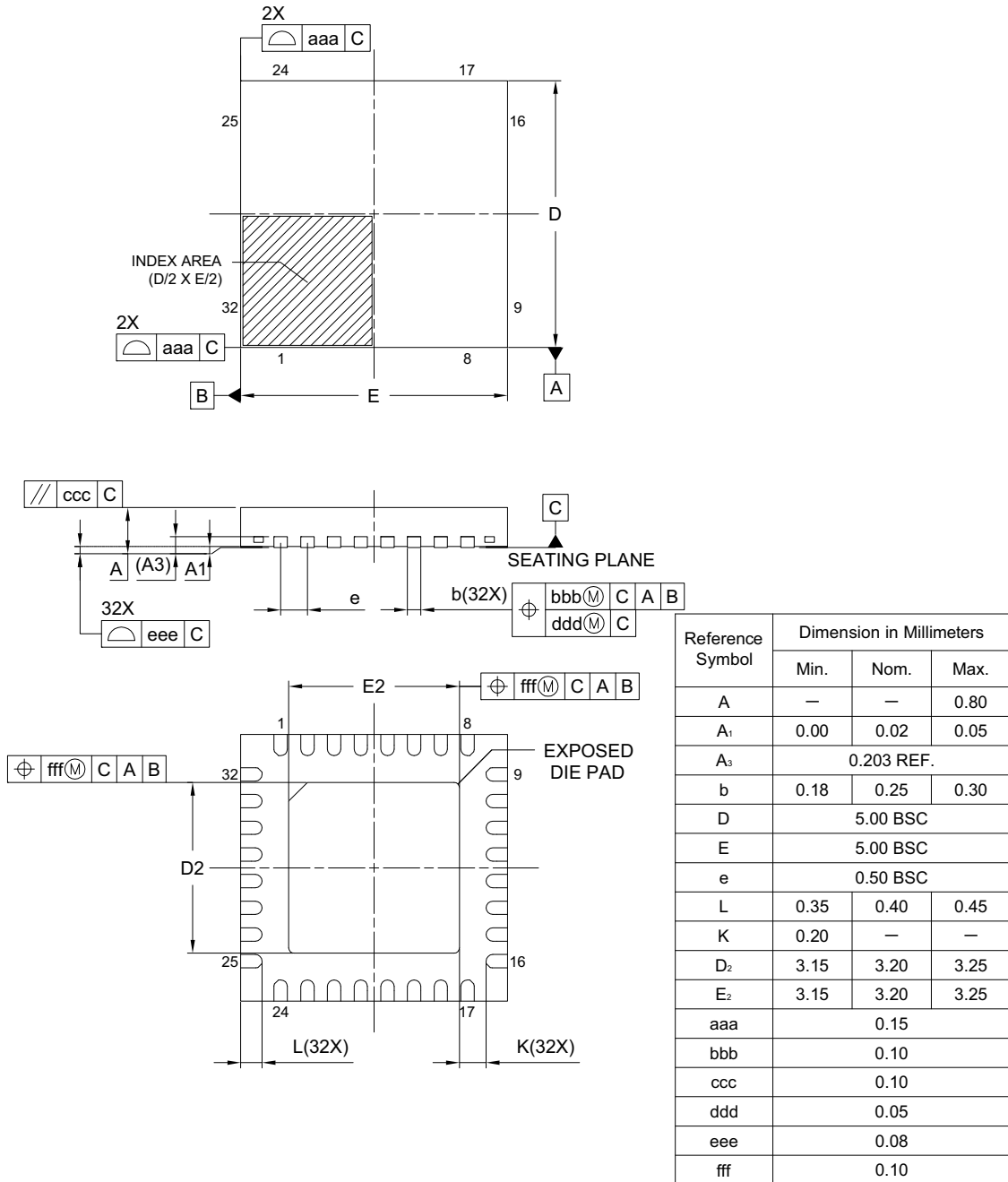


Figure 2. 32-pin QFN (PWQN0032KE-A)