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Renesas Electronics Corporation

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User's Manual

QB-788020-EA-01T

Exchange adapter
(On board LIN Transceiver & Voltage Regulator)

Target Devices

- μPD78F8017A
- μPD78F8018A
- μPD78F8019A
- μPD78F8020A

Document No. U17853XJ2V0UM00 (2nd Edition)
Date Published June 2008 NS

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第1章　概　　説

QB-788020-EA-01Tは，電源とLIN Transceiver機能を搭載したエクスチェンジ・アダプタです。

★　μPD78F8017A/78F8018A/78F8019A/78F8020Aを用いたシステム開発において，本製品とQB-78K0KX2を組み合わせて，ハードウエアおよびソフトウエアを効率的にデバッグできます。

CHAPTER　1　GENERAL

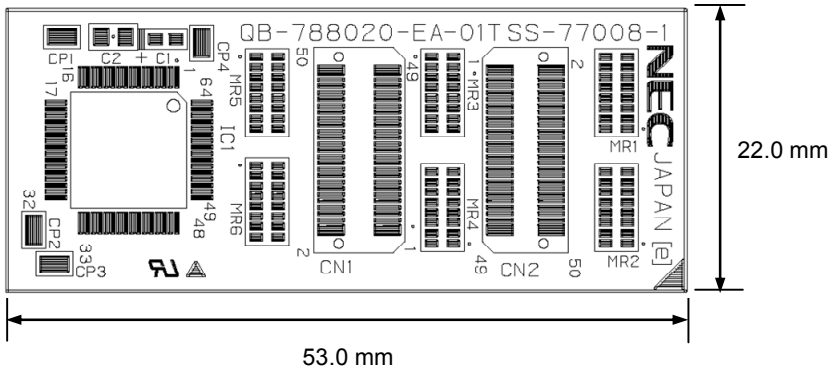
The QB-788020-EA-01T is an exchange adapter on board voltage regulator and LIN transceiver function.

Hardware and software can be debugged efficiently in the development of systems in which the <R> μPD78F8017A/78F8018A/78F8019A/78F8020A are used by combining with this product and QB-78K0KX2.

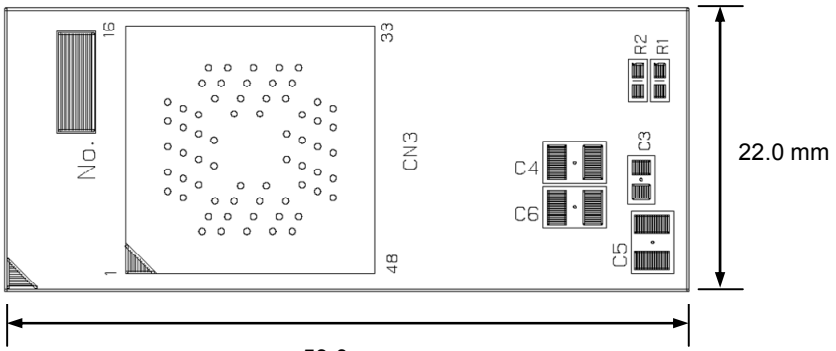
図1－1　外観図

Figure 1-1.　Appearance Diagram

Top View (QB-80-EP-01T connection side)

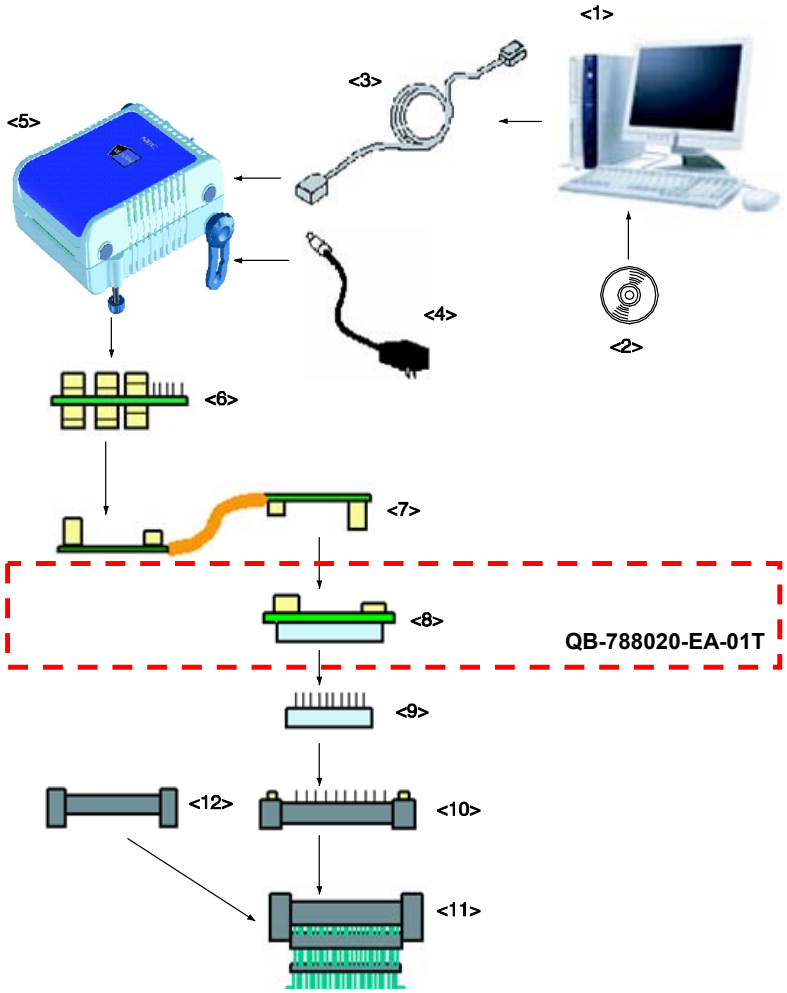


Bottom View (QB-64GB-YQ-01T connection side)



★ 図1－2　μPD78F8017A/78F8018A/78F8019A/78F8020Aシステム構成

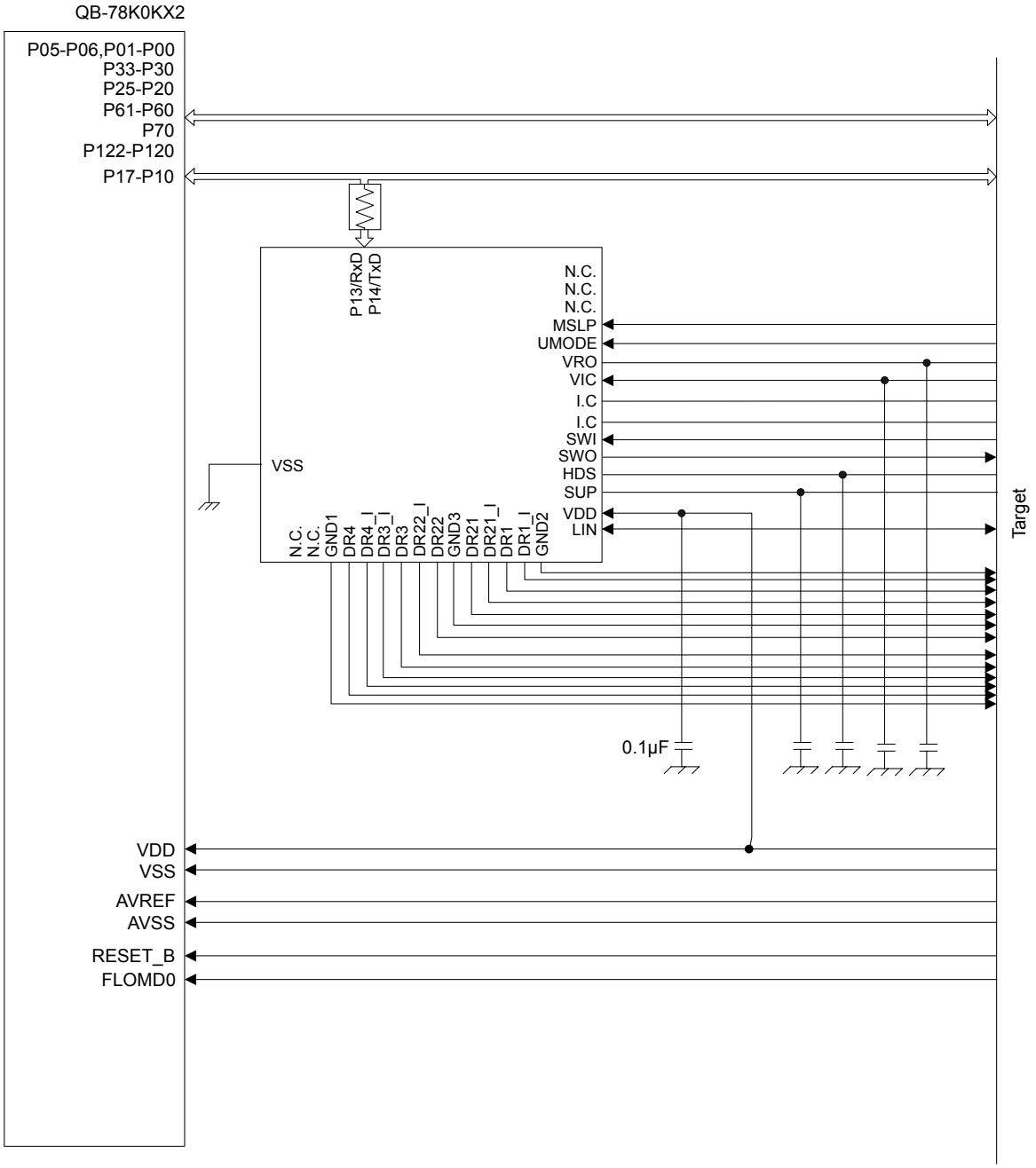
<R> Figure 1-2.　Emulation System Configuration for μPD78F8017A/78F8018A/78F8019A/78F8020A



<1>	Host machine:	Windows PC (Windows2000 and Windows XP), IBM PC/AT™ compatible can be used.
<2>	ID78K0-QB Disk/Accessory Disk:	Debugger, USB drivers, manual, etc. Obtain latest Software from the NEC Electronics website.
<3>	USB interface cable:	Cable connecting QB-78K0KX2 to host machine
<4>	AC adapter:	Can support 100 to 240 V by replacing AC plug
<5>	QB-78K0KX2:	IECUBE for 78K0/Kx2
<6>	Check pin adapter:	Adapter used for monitoring waveforms with oscilloscope
<7>	Emulation probe:	Flexible type of emulation probe
<8>	**Exchange adapter: QB-788020-EA-01T**	**On board LIN transceiver and Voltage Regulator adapter that performs pin conversion**
<9>	Spacer adapter:	Adapter used for height adjustment
<10>	YQ connector: QB-64GB-YQ-01T	Connector that connects exchange adapter to target connector
<11>	Target connector: QB-64GB-NQ-01T	Connector soldered to target system
<12>	Mount adapter:	Adapter for socket mounting target device

★ **図1－3　QB-788020-EA-01Tブロック構成**

<R> **Figure 1-3.　QB-788020-EA-01T Block Diagram**



第2章　注意事項

○ QB-788020-EA-01Tは，電源回路，LINトランシーバ回路およびDr4回路の過熱保護機能を保証していません。
QB-788020-EA-01Tを過熱状態および過電流状態で使用しないでください。

○ デバッグするときは，必ずターゲット・ボードからSUP，VRO，VDD端子に電源が供給された状態で行ってください。

○ SUP，HDS，LIN端子には，20 V以上印加しないでください。

CHAPTER　2　　CAUTIONS

O The over temperature protect function of Voltage regulator circuit, LIN transceiver circuit and Dr4 circuit is not guarantee on QB-788020-EA-01T. To operate with overheat or over current on QB-788020EA-01T is not allowed.

O In the debug, SUP and VRO, VDD terminal have to be supplied power by target board.

O To supply the SUP, HDS and LIN terminal more than 20 V is not allowed.

★

付録A　改版履歴

これまでの改版履歴を次に示します。なお，適用箇所は各版での章を示します。

版　　数	前版からの主な改版内容	適用箇所
第2版	・製品名を変更。 μPD78F8017 → μPD78F8017A μPD78F8018 → μPD78F8018A μPD78F8019 → μPD78F8019A μPD78F8020 → μPD78F8020A	全般
	・図1－2．μPD78F8017A/78F8018A/78F8019A/78F8020Aシステム構成の記載を変更。	第1章　概　　説
	・図1－3　QB-788020-EA-01Tブロック構成を変更。	

本文欄外の★印は，本版で改訂された主な箇所を示しています。
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<R>

APPENDIX　A　REVISION　HISTORY

Revisions up to the previous edition are shown below. The “Applied to” column indicates the chapter in each edition to which the revision was applied.

Edition	Description	Applied to
2nd edition	• Change of package names. μPD78F8017 → μPD78F8017A μPD78F8018 → μPD78F8018A μPD78F8019 → μPD78F8019A μPD78F8020 → μPD78F8020A	throughout
	• Change of description in **Figure 1-2.　Emulation System Configuration for μPD78F8017A/78F8018A/78F8019A/78F8020A**.	**CHAPTER 1　GENERAL**
	• Change of **Figure 1-3.　QB-788020-EA-01T Block Diagram**.	

The mark <R> shows major revised points.
The revised points can be easily searched by copying an “<R>” in the PDF file and specifying it in the “Find what:” field.

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