

This document describes the following items. Refer to the user's manual for cautions on using an in-circuit emulator.

- Restrictions not applicable to the target device but applicable to an in-circuit emulator
- Restrictions applicable to both the target device and an in-circuit emulator but the correction is planned only for the in-circuit emulator

Also refer to the following documents for the restrictions in the target device.

- User's manual of target device
- Restrictions notification document for target device

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## Chapter 1. Product Version

The product versions of Renesas Electronics in-circuit emulators IECUBE are indicated by a control code. The control code is the second digit from the left in the 10-digit serial number. On the back of IECUBE are labeled in Figure 1. The red frame control code in Figure 1. If the product has been upgraded, the control code can be checked by 'IECUBE Self Check Tool'. Please start 'IECUBE Self Check Tool' and press START button, and then IECUBE information is displayed (Figure 2).

To start 'IECUBE Self Check Tool' check following place.

[Start]→[programs]→[Renesas Electronics CubeSuite+]→[Emulator Utilities]→[78K0]→[IECUBE Self Check Tool]

Figure 1. Checking Control Code (Label on QB-78K0IX2)

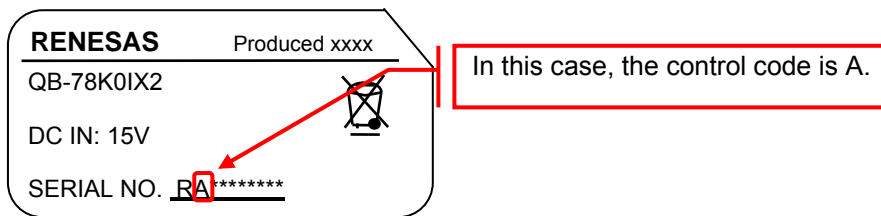
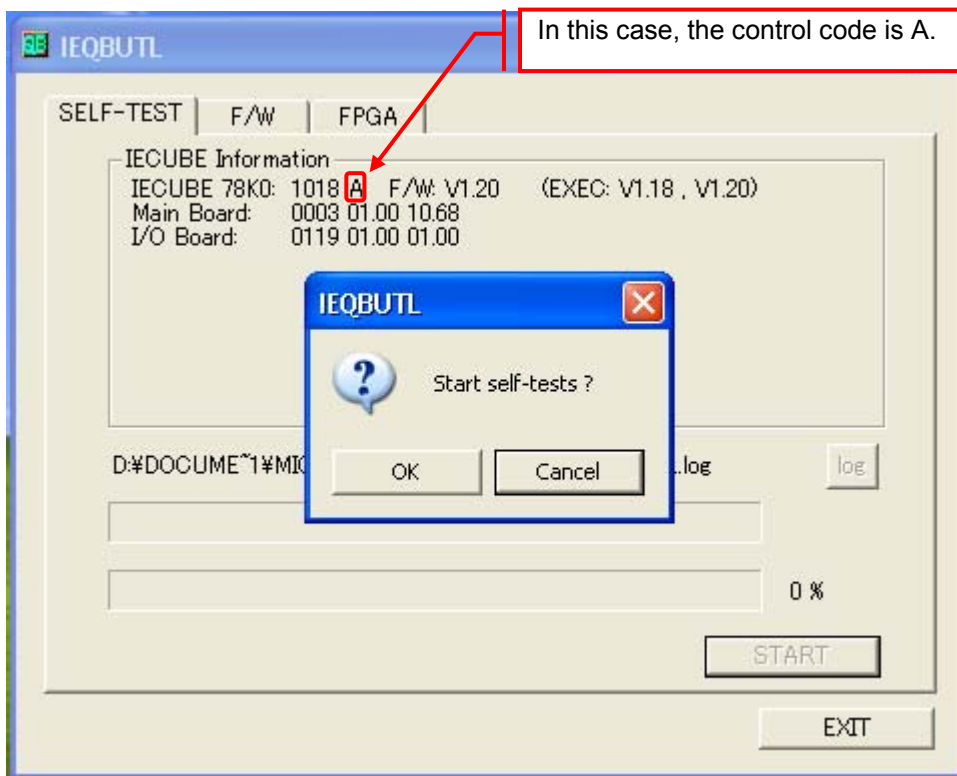


Figure 2. Checking Control Code for 'IECUBE Self Check Tool'



## Chapter 2. Support Devices

Control Code	Supported Devices
A	78K0/IY2, 78K0/IA2, 78K0/IB2
B	78K0/IY2, 78K0/IA2, 78K0/IB2

## Chapter 3. Restrictions

### 3.1 List of restrictions

No.	Restrictions	Control Code	
		A	B
1	Restriction of RMC register writing.	×	○
2	Restriction of shift to Self Programming Mode .	×	○

×: Change not implemented, ○: Change implemented

### 3.2 Details of Restriction

#### No. 1 [Restriction of RMC register writing.](#)

**[Description]** Regulator mode control register (RMC) can not be written.

**[Work-around]** There is no workaround.

**[Correction]** This issue has been corrected in products with control code B and later.

#### No. 2 [Restriction of shift to Self Programming Mode .](#)

**[Description]** The writing to Self Programming Mode (FPCTL) is ignored, so the return value of mode check function (CheckFLMD) is always abnormal (01H).

**[Work-around]** There is no workaround.

**[Correction]** This issue has been corrected in products with control code B and later.

## Chapter 4. Changes in User's Manual

This section describes changes in the QB-78K0IX2 In-Circuit Emulator User's Manual (document number: U19513EJ1V0UM00).

No. 1 Addition of a new package.

- Location  
Table 1-3 Adapters and Connectors for Each Target Device on page14
- Before change

Target Device	Package	Exchange Adapter	YQ Connector	Target Connector	Mount Adaptor	Space Adaptor
78K0/IY2	16-pin	QB-78K0IY2-EA-01T	NOTE2	QB-16GR-NQ-01T	NOTE2	NOTE2
	SSOP	(sold separately) <sup>Note1</sup>		(sold separately) <sup>Note1</sup>		
78K0/IA2	20-pin	QB-78K0IA2-EA-02T	NOTE2	QB-20GT-NQ-01T	NOTE2	NOTE2
	SOP	(sold separately) <sup>Note1</sup>		(sold separately) <sup>Note1</sup>		
78K0/IB2	30-pin	QB-78K0IB2-EA-01T	QB-30MC-YQ-01T	QB-30MC-NQ-01T	QB-30MC-HQ-01T	QB-30MC-YS-01T
	SSOP	(sold separately) <sup>Note1</sup>	(sold separately) <sup>Note1</sup>	(sold separately) <sup>Note1</sup>	(sold separately) <sup>Note1</sup>	(sold separately) <sup>Note1</sup>

- After change

Target Device	Package	Exchange Adapter	YQ Connector	Target Connector	Mount Adaptor	Space Adaptor
78K0/IY2	16-pin	QB-78K0IY2-EA-01T	NOTE2	QB-16GR-NQ-01T	NOTE2	NOTE2
	SSOP	(sold separately) <sup>Note1</sup>		(sold separately) <sup>Note1</sup>		
78K0/IA2	20-pin	QB-78K0IA2-EA-01T	NOTE2	QB-20MC-NQ-01T	NOTE2	NOTE2
	SSOP	(sold separately) <sup>Note1</sup>		(sold separately) <sup>Note1</sup>		
	20-pin SOP	QB-78K0IA2-EA-02T (sold separately) <sup>Note1</sup>	NOTE2	QB-20GT-NQ-01T (sold separately) <sup>Note1</sup>	NOTE2	NOTE2
78K0/IB2	30-pin	QB-78K0IB2-EA-01T	QB-30MC-YQ-01T	QB-30MC-NQ-01T	QB-30MC-HQ-01T	QB-30MC-YS-01T
	SSOP	(sold separately) <sup>Note1</sup>	(sold separately) <sup>Note1</sup>	(sold separately) <sup>Note1</sup>	(sold separately) <sup>Note1</sup>	(sold separately) <sup>Note1</sup>
	32-pin QFN	QB-78K0IB2-EA-02T (sold separately) <sup>Note1</sup>	NOTE2	QB-32K8-NQ-02T (sold separately) <sup>Note1</sup>	NOTE2	NOTE2

**No. 2 Modification of adapters and Connectors for Each Target Device of NOTE2**

- Location  
NOTE2 of page 14
  
- Before change  
There is no space adapter, mount adapter, or YQ connector in a configuration of less than 30 pins.
  
- After change  
There is no space adapter, mount adapter, or YQ connector in a configuration of other than 30 pins SSOP.

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