

Microcontroller Technical Information

| | | | |
|---|-----------------------------|--|-----------------------|
| ID78K0-QB 78K0 Integrated Debugger Usage Restrictions | Document No. | ZMT-F35-11-0003 | 1/1 |
| | Date issued | April 19, 2011 | |
| | Issued by | MCU Tool Product Marketing Department MCU Software Division MCU Business Unit Renesas Electronics Corporation | |
| Related documents 78K0 Integrated Debugger ID78K0-QB Ver. 3.10 Operating Precautions: U19611EJ1V0UM00 | Notification classification | √ | Usage restriction |
| | | | Upgrade |
| | | | Document modification |
| | | | Other notification |

1. Affected product

| Product | Outline | Target Version |
|-----------|--------------------------|------------------|
| ID78K0-QB | 78K0 integrated debugger | V3.20 or earlier |

2. New items

Restrictions No. 92 to No. 95 have been added. See the attachment for details.

3. Workarounds

See the attachment for details.

4. Modification schedule

Correction of No. 92, No. 93, and No. 95 is planned in ID78K0-QB V3.21, which will be released on the **Development Tools Download** webpage on April 26, 2011.

* Note that this schedule is subject to change without notice. For the detailed release schedule of modified products, contact a Renesas Electronics sales representative.

5. List of restrictions

See the attachment.

6. Document revision history

| Document Number | Date Issued | Description |
|-----------------|------------------|---|
| ZBG-CD-05-0091 | October 4, 2005 | Notification of usage restrictions on ID78K0-QB V2.91 |
| ZBG-CD-06-0017 | March 13, 2006 | Notification of usage restrictions on ID78K0-QB V2.92 |
| ZBG-CD-06-0045 | June 26, 2006 | Notification of usage restrictions on ID78K0-QB V2.94 |
| ZBG-CD-07-0042 | July 12, 2007 | Notification of usage restrictions on ID78K0-QB V2.94 |
| ZBG-CD-09-0009 | February 5, 2009 | Notification of usage restrictions on ID78K0-QB V3.00 |
| ZMT-F35-11-0003 | April 19, 2011 | Notification of usage restrictions on ID78K0-QB V3.20 |

ID78K0-QB Usage Restrictions

1. Product history

| No. | Usage Restrictions | Affected Product | V2.81 | V2.90 | V2.92 | V2.94 | V3.00 | V3.10 |
|-----|--|-----------------------|---|-------|-------|-------|-------|-------|
| | | | V2.82 | V2.91 | V2.93 | | | V3.20 |
| 1 | Display digit of bit variable and bit field is wrong in the Watch window | Common | Moved to the user's manual (debugger specifications) | | | | | |
| 2 | Read-only project file can be overwritten | Common | × | ○ | ○ | ○ | ○ | ○ |
| 3 | Active project cannot be switched correctly in PM+ | Common | Deleted (irrelevant restriction) | | | | | |
| 4 | Restriction on changing the file type by inputting *.hex | Common | × | ○ | ○ | ○ | ○ | ○ |
| 5 | Source path cannot be added even if addition is specified by PM+ | Common | × | × | × | × | × | × |
| 6 | Restriction on redraw | Common | × | × | × | × | × | × |
| 7 | The "Target" option cannot be specified for more than three locations in the Configuration dialog box | Common | × | ○ | ○ | ○ | ○ | ○ |
| 8 | Only written data is displayed in the Trace View window | IECUBE | × | ○ | ○ | ○ | ○ | ○ |
| 9 | Address in PC is decremented when an event break has occurred | IECUBE | ○ | ○ | ○ | ○ | ○ | ○ |
| 10 | The specified event does not occur at the execution start address | IECUBE | × | ○ | ○ | ○ | ○ | ○ |
| 11 | Break does not occur at the subsequent instruction to which a before-execution break is set | IECUBE | ○ | ○ | ○ | ○ | ○ | ○ |
| 12 | Restriction on setting Monitor Clock | MINICUBE MINICUBE2 | Moved to the user's manual (debugger specifications) | | | | | |
| 13 | POW OFF is not displayed on status bar | IECUBE | ○ | ○ | ○ | ○ | ○ | ○ |
| 14 | Codes including PFCMD cannot be assembled | Common | ○ | ○ | ○ | ○ | ○ | ○ |
| 15 | One-byte area cannot be mapped | Common | × | ○ | ○ | ○ | ○ | ○ |
| 16 | Indication of stack overflow and stack underflow are reversed | IECUBE | ○ | ○ | ○ | ○ | ○ | ○ |
| 17 | The Register window is not updated when memory bank size is changed from 0 to another value and vice versa | IECUBE | × | ○ | ○ | ○ | ○ | ○ |
| 18 | Event Manager and Software Break Manager are not updated | Common | ○ | ○ | ○ | ○ | ○ | ○ |
| 19 | The computer freezes if the OCD Checker and debugger are used at the same time | Common | ○ | ○ | ○ | ○ | ○ | ○ |
| 20 | Software breakpoints can no longer be used if the debugger is reset | Common | ○ | ○ | ○ | ○ | ○ | ○ |
| 21 | The Realtime Monitor field becomes unavailable | IECUBE | ○ | ○ | ○ | ○ | ○ | ○ |
| 22 | Only the CPU is reset after the Restart command is executed during user program execution | Common | ○ | ○ | ○ | ○ | ○ | ○ |
| 23 | Each window is updated if an external reset occurs during user program execution | Common | ○ | ○ | ○ | ○ | ○ | ○ |

×: Applicable, ○: Not applicable, -: Not relevant

| No. | Usage Restrictions | Affected Product | V2.81 | V2.90 | V2.92 | V2.94 | V3.00 | V3.10 |
|-----|---|-----------------------|---|-------|-------|-------|-------|-------|
| | | | V2.82 | V2.91 | V2.93 | | | V3.20 |
| 24 | Emulation not possible when using a device with ten or more SFRs that can be accessed in 16-bit units | MINICUBE MINICUBE2 | ○ | ○ | ○ | ○ | ○ | ○ |
| 25 | Access breakpoints disabled after a power-on clear occurs | MINICUBE MINICUBE2 | ○ | ○ | ○ | ○ | ○ | ○ |
| 26 | Reset sources are not displayed in the Trace View window | IECUBE | × | × | ○ | ○ | ○ | ○ |
| 27 | Flash memory data become invalid when the debugger is terminated | MINICUBE MINICUBE2 | × | × | × | × | × | × |
| 28 | Events other than after-execution break do not operate normally | Common | × | × | ○ | ○ | ○ | ○ |
| 29 | Restriction on frequency selection display in the Configuration dialog box | IECUBE | × | × | ○ | ○ | ○ | ○ |
| 30 | Restriction on display when timer measurement counter values overflow | IECUBE | × | × | ○ | ○ | ○ | ○ |
| 31 | Help might not be opened from the Help menu in PM+ | Common | × | × | ○ | ○ | ○ | ○ |
| 32 | Pseudo real-time RAM monitoring can be set illegally | MINICUBE MINICUBE2 | × | × | ○ | ○ | ○ | ○ |
| 33 | Settings in Trace Move dialog box is not enabled correctly | IECUBE | × | × | ○ | ○ | ○ | ○ |
| 34 | General-purpose registers are not monitored in real time in the Register window | IECUBE | × | × | ○ | ○ | ○ | ○ |
| 35 | Restrictions on bit manipulation and display | Common | × | × | × | ○ | ○ | ○ |
| 36 | A DMM write executed for an invalid address does not cause errors | Common | × | × | × | ○ | ○ | ○ |
| 37 | Software breakpoints are set during user program execution | Common | × | × | ○ | ○ | ○ | ○ |
| 38 | Address ranges cannot be specified using the <code>breakpoint</code> command | IECUBE | × | × | ○ | ○ | ○ | ○ |
| 39 | Memory mapping cannot be cleared correctly using the <code>map -clear</code> command | Common | × | × | × | ○ | ○ | ○ |
| 40 | Symbols with a <code>func#var</code> format cannot be converted to addresses | Common | × | × | × | × | × | × |
| 41 | Self-programming is not executed normally | IECUBE | × | × | × | × | ○ | ○ |
| 42 | Debugger operation speed is degraded (1) | Common | × | × | ○ | ○ | ○ | ○ |
| 43 | Debugger operation speed is degraded (2) | Common | × | × | ○ | ○ | ○ | ○ |
| 44 | Next Over is not executed normally (1) | Common | × | × | ○ | ○ | ○ | ○ |
| 45 | An extra line displayed when the view position is moved to the last address in the Memory window | Common | × | × | × | × | × | × |
| 46 | Restriction on operation in the Assemble window | Common | Moved to <i>Cautions in Operating Precautions</i> (cursor specifications) | | | | | |
| 47 | Search operation fails in the Assemble window | Common | × | × | × | × | × | × |

×: Applicable, ○: Not applicable, -: Not relevant

| No. | Usage Restrictions | Affected Product | V2.81 V2.82 | V2.90 V2.91 | V2.92 V2.93 | V2.94 | V3.00 | V3.10 V3.20 |
|-----|--|-----------------------|----------------|----------------|----------------|-------|-------|----------------|
| 48 | The Refresh button appears dimmed in the Watch window | Common | × | × | × | × | × | × |
| 49 | Bits of the PSW are added to the Watch window | Common | × | × | × | × | × | × |
| 50 | Values of the PSW bits cannot be changed in the DMM dialog box | Common | × | × | × | × | × | × |
| 51 | Search extending over search-disabled areas is impossible | Common | × | × | × | × | × | × |
| 52 | A function called between banks while stepping through code | Common | × | × | × | ○ | ○ | ○ |
| 53 | Restriction on using pseudo RRM | MINICUBE MINICUBE2 | × | × | × | × | × | ○ |
| 54 | Restriction on stack trace display | Common | × | × | × | × | × | × |
| 55 | A function at a memory bank is stepped into | Common | × | × | × | × | × | × |
| 56 | Restriction on displaying local variables | Common | × | × | × | × | × | × |
| 57 | Restriction on clearing coverage | Common | × | × | × | × | × | × |
| 58 | Restriction on the Run-Break timer | MINICUBE MINICUBE2 | × | × | × | × | × | ○ |
| 59 | A confirmation dialog box is brought to back | Common | × | × | × | ○ | ○ | ○ |
| 60 | A temporary break occurs | Common | × | × | × | ○ | ○ | ○ |
| 61 | Restriction on disassemble display | Common | × | × | × | ○ | ○ | ○ |
| 62 | Static variables of a function in RAM cannot be monitored | Common | × | × | × | ○ | ○ | ○ |
| 63 | The word size cannot be specified in the DMM dialog box | Common | × | × | × | ○ | ○ | ○ |
| 64 | The debugger cannot step through the code correctly | Common | × | × | × | ○ | ○ | ○ |
| 65 | Restriction on the Trace Search dialog box | Common | × | × | × | ○ | ○ | ○ |
| 66 | Restriction on uploading and downloading data | Common | × | × | × | ○ | ○ | ○ |
| 67 | Next Over is not executed normally (2) | Common | × | × | × | ○ | ○ | ○ |
| 68 | Restriction on Assemble window display | Common | × | × | × | ○ | ○ | ○ |
| 69 | Restriction on specifying a size in the RRM dialog box | MINICUBE MINICUBE2 | × | × | × | ○ | ○ | ○ |
| 70 | A security flag is unexpectedly set | MINICUBE MINICUBE2 | × | × | × | ○ | ○ | ○ |
| 71 | Compatibility between V2.92 and V2.93 | MINICUBE MINICUBE2 | - | - | × | ○ | ○ | ○ |
| 72 | The debugger hangs if an attempt is made to save a file with the Intel hexadecimal format. | Common | × | ○ | ○ | ○ | ○ | ○ |
| 73 | File type not displayed normally in the Download dialog box | Common | × | ○ | ○ | ○ | ○ | ○ |
| 74 | The settings in the Event DMM dialog box cannot be saved normally. | IECUBE | × | ○ | ○ | ○ | ○ | ○ |
| 75 | Two-byte SFRs cannot be set normally in the Event DMM dialog box. | IECUBE | × | ○ | ○ | ○ | ○ | ○ |

×: Applicable, ○: Not applicable, -: Not relevant

| No. | Usage Restrictions | Affected Product | V2.81 V2.82 | V2.90 V2.91 | V2.92 V2.93 | V2.94 | V3.00 | V3.10 V3.20 |
|-----|---|-----------------------|---|----------------|----------------|-------|-------|----------------|
| 76 | Restriction on using memory banks 1 to 5 (1) | MINICUBE MINICUBE2 | × | ○ | ○ | ○ | ○ | ○ |
| 77 | Restriction on using memory banks 1 to 5 (2) | MINICUBE MINICUBE2 | × | ○ | ○ | ○ | ○ | ○ |
| 78 | A 1-byte instruction at the end of a file causes a malfunction | Common | × | × | × | × | ○ | ○ |
| 79 | Breakpoints cannot be deleted by Delete All Breakpoints | IECUBE | × | × | × | × | ○ | ○ |
| 80 | Restrictions on adding SFRs to the Add I/O Port dialog box | Common | × | × | × | × | × | × |
| 81 | Restriction on changing font size | Common | × | × | × | × | × | × |
| 82 | Restrictions on setting access breakpoints | Common | × | × | × | × | × | × |
| 83 | Restrictions on the Watch window | Common | × | × | × | × | × | × |
| 84 | Restriction on target system power supply voltage | MINICUBE MINICUBE2 | Moved to <i>Cautions in Operating Precautions</i> (device specifications) | | | | | |
| 85 | Restriction on uninstalling a USB driver | Common | Moved to <i>Cautions in Operating Precautions</i> (USB driver uninstallation procedure) | | | | | |
| 86 | The subclock setting is not saved when a project is saved | IECUBE | × | × | × | × | × | ○ |
| 87 | Variables written as <i>structure.member</i> cannot be converted | Common | × | × | × | × | × | ○ |
| 88 | Restriction on using <code>xtime -gobreak</code> | Common | × | × | × | × | × | ○ |
| 89 | The debugger operation becomes very slow under certain conditions | Common | × | × | × | × | × | ○ |
| 90 | Restriction on address specification by using the debugger | Common | × | × | × | × | × | ○ |
| 91 | Starting the debugger by using a new login name | MINICUBE MINICUBE2 | × | × | × | × | × | ○ |
| 92 | Restrictions on Main Clock setting "System", 8.00MHz, 16.00MHz | MINICUBE2 | ○ | ○ | ○ | ○ | ○ | × |
| 93 | Restrictions on break of sub-clock operation | Common | × | × | × | × | × | × |
| 94 | Restrictions about ADCR/ADCRH indication of sub-clock operation | Common | × | × | × | × | × | × |
| 95 | Restrictions on the setting of 16-bit timer X0/X1 compare registers 0 to 3 for 78K0/lx2 | MINICUBE2 | × | × | × | × | × | × |

×: Applicable, ○: Not applicable, -: Not relevant

2. Restriction details

No. 1 Display digit of bit variable and bit field is wrong in the Watch window <Common>

[Description]

If both a bit variable and bit field are displayed in the Watch window, the digit is not displayed as 1 digit, but as 16 digits (in binary, not 0b1 but 0b0000000000000001). The data contents are correct.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in the user's manual.

No. 2 Read-only project file can be overwritten <Common>

[Description]

Project files (*.prj, *.pri) can be overwritten depending on the OS even if the file attribute is set to read-only.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.90.

No. 3 Active project cannot be switched correctly in PM+ <Common>

This restriction has been deleted because it does not apply to this product.

No. 4 Restriction on changing the file type by inputting *.hex <Common>

[Description]

Even if the display of the extension select area is changed by specifying the file type as *.hex in the file selection area in a file selection dialog box, the change is not reflected internally.

[Workaround]

Specify the file type in the extension select area.

[Correction]

This issue has been corrected in V2.90.

No. 5 Source path cannot be added even if addition is specified by PM+ <Common>

[Description]

When a project is saved in the ID78K0-QB and then a new source path is added in PM+, the new source path cannot be added to the debugger.

[Workaround]

On the ID78K0-QB Option menu, select Debugger Options to add the source path manually.

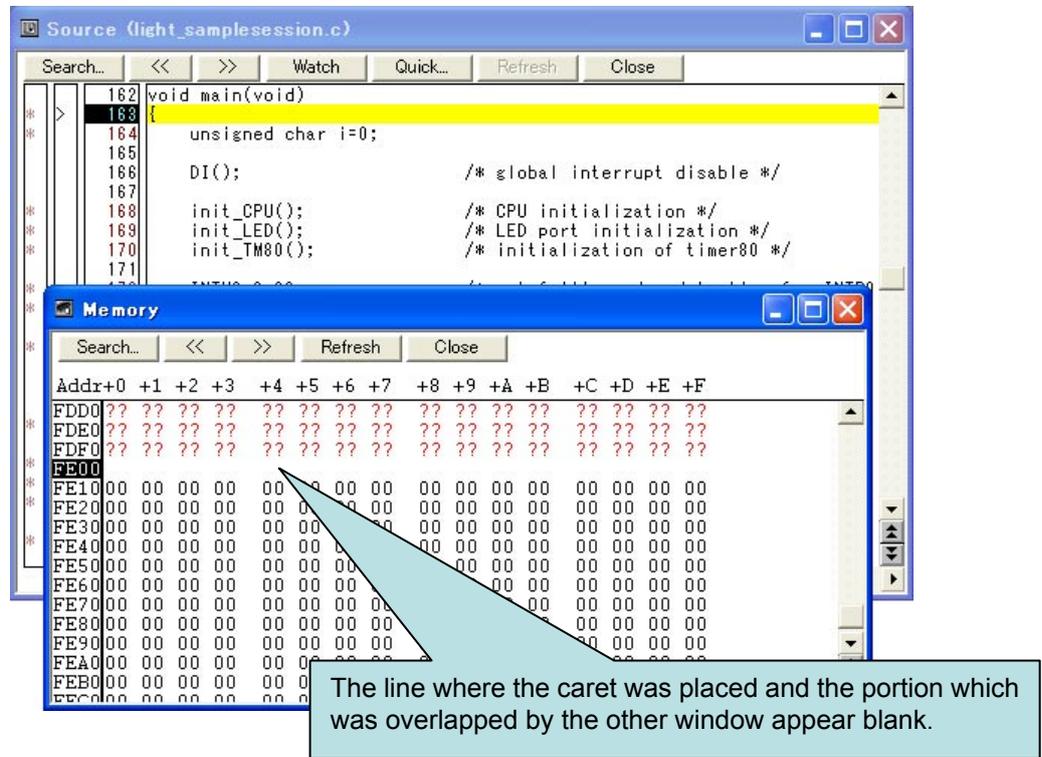
[Correction]

Under study

No. 6 Restriction on redraw <Common>

[Description]

When the Memory window is displayed in front of another window, if the window behind the Memory window is clicked to the front and then the Memory window is clicked to the front again, the line where the caret was placed and the portion which was overlapped by the other window appear blank in the Memory window.



[Workaround]

Click the [Refresh] button or click on the blanked line to restore the original display.

[Correction]

Under study

No. 7 The “Target” option cannot be specified for more than three locations in the Configuration dialog box <Common>

[Description]

The “Target” option cannot be specified for more than three locations in the Memory Mapping field in the Configuration dialog box.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.90.

No. 8 Only written data is displayed in the Trace View window <IECUBE>

[Description]

If data is read and written simultaneously in one frame, only the trace result of the written data is displayed.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.90.

No. 9 Address in PC is decremented when an event break has occurred <IECUBE>

[Description]

If a software breakpoint is set to the address where an event break has occurred, the address in the program counter (PC) might be decremented.

Example 1: When a before-execution break and software breakpoint are set to the same address

Example 2: When a software breakpoint is set to the next instruction to the one to which an after-execution break is set

[Workaround]

Increment the PC value in the Register window before executing an after-execution break.

[Correction]

This issue has been corrected in V2.82.

No. 10 The specified event does not occur at the execution start address <IECUBE>

[Description]

If a software breakpoint is set to the execution start address, the event that should be established at the execution start address does not occur. The following functions are affected.

- (1) Start of section trace
- (2) Start of section measurement
- (3) Trace delay trigger
- (4) Event after execution
- (5) Access event

[Workaround]

Delete the software breakpoint set to the execution start address. To break execution when the program is re-executed from the execution start address, set a before-execution break to the execution start address.

[Correction]

This issue has been corrected in V2.90.

No. 11 Break does not occur at the subsequent instruction to which a before-execution break is set <IECUBE>

[Description]

If a software breakpoint is set to the execution start address and a before-execution break is set to the subsequent instruction, the break does not occur at the subsequent instruction.

[Workaround]

Delete the software breakpoint set to the execution start address. Step through the code instead, if there is no problem.

[Correction]

This issue has been corrected in V2.82.

No. 12 Restriction on setting Monitor Clock <MINICUBE, MINICUBE2>

[Description]

When “User” is selected as the Monitor Clock option in the Configuration dialog box and the debugger is operating on the subsystem clock or high-speed internal oscillator clock, values in the Memory window are not reflected in the device. The overwritten values are reflected in the device when the clock is switched to the main system clock.

[Workaround]

Select “System” as the Monitor Clock option.

Do not write data to the memory during a break when “User” is selected as the Monitor Clock option and the subsystem clock or high-speed internal oscillator clock is specified as the clock source.

[Correction]

This issue has been corrected in the user’s manual.

No. 13 POW OFF is not displayed on status bar <IECUBE>

[Description]

“POW OFF” is not displayed on the status bar even if the target power supply is disconnected.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.82.

No. 14 Codes including PFCMD cannot be assembled <Common>

[Description]

Assembly of codes including PFCMD (e.g. `MOV PFCMD, #0A5H`) fails in the Assemble window.

[Workaround]

Input the code in the form `MOV 0FFC0H, #0A5H`.

[Correction]

This issue has been corrected in V2.82.

No. 15 One-byte area cannot be mapped <Common>

[Description]

Mapping of a 1-byte area cannot be specified in the Configuration dialog box.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.90.

No. 16 Indication of stack overflow and stack underflow are reversed <IECUBE>

[Description]

When the settings for break triggers and fail-safe breaks are specified, the settings for the stack overflow and stack underflow are reversed. (A stack underflow occurs when a PUSH instruction is executed.)

[Workaround]

Read stack overflow as stack underflow, and stack underflow as stack overflow.

[Correction]

This issue has been corrected in V2.82.

No. 17 The Register window is not updated when memory bank size is changed from 0 to another value and vice versa <IECUBE>

[Description]

When the bank ROM size is changed from 0 to another value and vice versa in the Configuration dialog box, the Register window is not updated and the PC count value does not change.

[Workaround]

Use the [Refresh] button to update the Register window.

[Correction]

This issue has been corrected in V2.90.

No. 18 Event Manager and Software Break Manager are not updated <Common>

[Description]

When registration of a break using the *breakpoint* command in the Console window has failed, the generated invalid event or the software breakpoint might not be displayed in the Event Manager window or Software Break Manager window.

[Workaround]

Close the Event Manager or Software Break Manager and open it again to update the window.

[Correction]

This issue has been corrected in V2.82.

No. 19 The computer freezes if the OCD Checker and debugger are used at the same time <Common>

[Description]

The computer freezes if the OCD Checker executes self-checking while the debugger is active.

[Workaround]

Do not use the OCD Checker and debugger at the same time.

[Correction]

This issue has been corrected in V2.82.

No. 20 Software breakpoints can no longer be used if the debugger is reset <Common>

[Description]

If the debugger is reset ("Debugger" is selected in the Reset Debugger dialog box), software breakpoints can no longer be used. The debugger is also reset if a project is switched in PM+ when the debugger is linked with PM+. In this case, software breakpoints can also no longer be used.

[Workaround]

Restart the debugger.

[Correction]

This issue has been corrected in V2.82.

No. 21 The Realtime Monitor field becomes unavailable <IECUBE>

[Description]

If the "Realtime Readout" option that is selected by default in the Extended Option dialog box is clicked in the default state, the Realtime Monitor field becomes unavailable.

[Workaround]

Do not click the "Realtime Readout" option. The Realtime Monitor field becomes available again by closing and opening the Extended Option dialog box.

[Correction]

This issue has been corrected in V2.82.

No. 22 Only the CPU is reset after the Restart command is executed during user program execution

<Common>

[Description]

If the Restart command is executed during user program execution, only the CPU is reset and the user program execution stops.

[Workaround]

Execute the Go command.

[Correction]

This issue has been corrected in V2.82.

No. 23 Each window is updated if an external reset occurs during user program execution <Common>

[Description]

If an external reset occurs during user program execution, each window is updated.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.82.

No. 24 Emulation not possible when using a device with ten or more SFRs that can be accessed in 16-bit units <MINICUBE, MINICUBE2>

[Description]

Emulation is not possible when using a device with ten or more SFRs that can be accessed in 16-bit units.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.82.

Expand the program area for on-chip debugging (default: 247 bytes of 0x8F to 0x18F) by the amount exceeding the 10-SFR area.

As a rough guide, add the number of exceeding registers \times 6 bytes.

Specify the size of the program area as "default size (257 bytes) + (the number of exceeding registers \times 6 bytes) with the linker option.

No. 25 Access breakpoints disabled after a power-on clear occurs <MINICUBE, MINICUBE2>

[Description]

If a power-on clear occurs while an access breakpoint is set and Power Off emulation is enabled, the access breakpoint setting is enabled in the GUI, but actually the breakpoint is disabled and no break can occur.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.82.

No. 26 Reset sources are not displayed in the Trace View window <IECUBE>

[Description]

Reset sources are not displayed in the Trace View window.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.93.

No. 27 Flash memory data become invalid when the debugger is terminated <MINICUBE, MINICUBE2>

[Description]

If the debugger is terminated with a voltage lower than the minimum voltage that enables rewriting of the flash memory, the flash memory data might become invalid.

[Workaround]

Download the load module when restarting the debugger.

[Correction]

Under study

No. 28 Events other than after-execution break do not operate normally <Common>

[Description]

Hardware events that are set as hardware breakpoints do not operate normally, except for after-execution break.

- (1) If an attempt is made to set an event for which "R/W" is specified in the Event Status list in the Event dialog box, the error message "F4004: Illegal status." is displayed and the setting cannot be completed.
- (2) If an event for which "Read" or "Write" is specified in the Event Status list in the Event dialog box is set, the debugger internally operates as "Write" or "R/W", respectively. The event link, break, trace, snap-shot, stub, timer, and event DMM that use such events do not operate normally.
- (3) If an attempt is made in the Break dialog box to enable a break event for which "Before Execution" is specified in the Event Status list in the Event dialog box, the error message "F0400: Illegal condition." is displayed and the event cannot be enabled.

- (4) If an attempt is made to set “Break when Access to this Variable” in the Source window or a variable-setting window, the error message “Ff504: This variable cannot be set as a break.” is displayed and the setting cannot be completed.
- (5) If “Break when Write to this Variable” or “Break when Read from this Variable” is selected in the Source window or a variable-setting window, the debugger internally operates as “Break when Access to this Variable” or “Break when Write to this Variable”, respectively.
- (6) When the `breakpoint -beforeexecute` command is executed in the Console window, the error message “F0400: Illegal condition.” is displayed and the setting cannot be completed. As a result, a disabled break event is added.
- (7) When the `breakpoint -access` command is executed in the Console window, the error message “F4004: Illegal status.” is displayed and the setting cannot be completed.
- (8) When the `breakpoint -read` or `breakpoint -write` command is executed in the Console window, the debugger internally executes `breakpoint -write` or `breakpoint -access`, respectively.
- (9) If an attempt is made to set a hardware breakpoint in the Source window or Assemble window, a “break after execution” is always set. (Only when IECUBE is connected.)
- (10) If an attempt is made to set a hardware breakpoint in the Source window or Assemble window, the error message “F0400: Illegal condition.” is displayed and the setting cannot be completed. As a result, a disabled break event is added. (Only when MINICUBE or MINICUBE2 is connected.)

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.92.

No. 29 Restriction on frequency selection display in the Configuration dialog box <IECUBE>

[Description]

Even if “System” is selected and 8.33 MHz is selected from the drop-down list in the Main Clock field in the Configuration dialog box, the operating frequency is set to 8.38 MHz.

[Workaround]

There is no workaround.

[Correction]

In V2.92, the display of “8.33 MHz” has been changed to “8.38 MHz”.

No. 30 Restriction on display when timer measurement counter values overflow <IECUBE>

[Description]

If counter values for “Pass” and “Max” overflow, the correct values are not displayed in the Timer dialog box.

[Workaround]

There is no workaround. The measurement values are displayed in red in the execution time display area if a counter value overflow occurs, so you can check it.

[Correction]

This issue has been corrected in V2.92.

No. 31 Help might not be opened from the Help menu in PM+ <Common>

[Description]

If ID78K0-NS V2.52 or earlier and ID78K0-QB V2.91 or earlier are installed in the same machine, the help of the debugger that was installed first cannot be opened from the Help menu in PM+.

[Workaround]

Open the help from the menu bar in the debugger, or the Start menu of Windows.

[Correction]

This issue has been corrected in V2.92.

No. 32 Pseudo real-time RAM monitoring can be set illegally <MINICUBE, MINICUBE2>

[Description]

If the RRM dialog box is opened by the operations (1) through (5) below and the operations (6) through (9) below are performed, pseudo real-time RAM monitoring can be set illegally even if the "Use MINICUBE Extended Function" check box is cleared in step (7).

- (1) The Extended Option dialog box is opened.
- (2) The "Use MINICUBE Extended Function" check box is selected.
- (3) The "RRM Setting" button is selected for "Break When Readout".
- (4) The OK button is clicked and the Extended Option dialog box is closed.
- (5) The RRM dialog box is opened.
- (6) The Extended Option dialog box is opened. (**Illegal operation**)
- (7) The "Use MINICUBE Extended Function" check box is cleared. (**Illegal operation**)
- (8) The OK button is clicked and the Extended Option dialog box is closed. (**Illegal operation**)
- (9) RRM is set in the RRM dialog box. (**Illegal operation**)

[Workaround]

Specify the sampling range in the RRM dialog box without performing operations (6) through (9).

If pseudo real-time RAM monitoring is set up by operations (6) through (9), the correct status is restored by re-selecting "Use MINICUBE Extended Function" and "Break When Readout" in the Extended Option dialog box.

[Correction]

This issue has been corrected in V2.92.

No. 33 Settings in Trace Move dialog box is not enabled correctly <IECUBE>

[Description]

In the Trace Move dialog box opened from the Trace View window, if "First" or "Last" is input to the "Frame No." box, the move destination differs from that specified with the corresponding button "1st frame of last block" or "Last frame of last block".

[Workaround]

Specify the move destination using the button "1st frame of last block" or "Last frame of last block".

[Correction]

This issue has been corrected in V2.93.

No. 34 General-purpose registers are not monitored in real time in the Register window <IECUBE>

[Description]

If “Off” is selected as the “Break When Readout:” option in the Extended Option dialog box, the general-purpose register values are not updated in real time in the Register window during user program execution. The values are updated in the Memory window in real time.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.93.

No. 35 Restrictions on bit manipulation and display <Common>

[Description]

<1> If “SET1 ISP” is input by the user program or in the Assemble window, “SET1 ISP.1H”, not “SET1 ISP” or “SET1 PSW.1H”, is displayed in the Assemble window.

The same result occurs when the CLR1 instruction is used.

<2> Bit symbols such as SET1 (ASM source) or bit variables (C source) are not displayed normally in the Assemble window.

<3> An error is displayed if an address for a bit SFR is specified in the Address Move dialog box, for the SFR window display start address.

<4> An error occurs if a breakpoint is set by specifying the address in bit units.

Example of when the following conditions are set for a breakpoint:

Event Status: Write

Access Size: Bit

Address: x == A

A: 0xfede.7

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.94.

No. 36 A DMM write executed for an invalid address does not cause errors <Common>

[Description]

When memory banks are used, no errors are output, even if an invalid address such as 0x17fff or 0x1c000 is specified in the DMM dialog box, but DMM write is executed for 0x7fff or 0xc000.

If data is written to an invalid address such as 0x17fff or 0x1c000 in the Memory window, data is written to 0x7fff or 0xc000.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.94.

No. 37 Software breakpoints are set during user program execution <Common>

[Description]

If a software breakpoint is set during user program execution, a dialog box for prompting the user to confirm enabling of the instantaneous break does not appear and the software breakpoint is set as is (an instantaneous break occurs).

[Workaround]

When not using instantaneous breaks, do not set software breakpoints during user program execution.

[Correction]

This issue has been corrected in V2.93.

No. 38 Address ranges cannot be specified using the `breakpoint` command <IECUBE>

[Description]

Address ranges cannot be specified using the `breakpoint` command in the Console window.

[Workaround]

Specify the address ranges in the Event dialog box.

[Correction]

This issue has been corrected in V2.93.

No. 39 Memory mapping cannot be cleared correctly using the `map -clear` command <Common>

[Description]

Memory mapping cannot be cleared correctly using the `map -clear` command in the Console window.

[Workaround]

Clear memory mapping in the Configuration dialog box.

[Correction]

This issue has been corrected in V2.94.

No. 40 Symbols with a `func#var` format cannot be converted to addresses <Common>

[Description]

- (1) Symbols with a `func#var` (*func*: Function name, *var*: Variable name) format cannot be converted to addresses in the Symbol To Address dialog box, if the conversion targets are variables.
- (2) If a static variable in a function is added as a `func#var` format symbol (*func*: Function name, *var*: Variable name) in the Add Watch dialog box, the variable value cannot be displayed.

[Workaround]

Set such symbols using a format other than `func#var`, such as `var`, `file#var`, or `file#func#var`. If a variable with the same name exists as a static variable in a function, set the variable when the program counter (PC) indicates a location in that function.

[Correction]

Under study

No. 41 Self-programming is not executed normally <IECUBE>

[Description]

If a parameter other than "BANK0" is set to the BANK register, self-programming is not executed normally. If "BANK5" is set to the BANK register and then "CALL !8100" is executed, for example, the program branches to address 58100.

Self-programming can be executed in the target device, regardless of the BANK register setting.

[Workaround]

Set "BANK0" to the BANK register before executing self-programming ("CALL !8100").

[Correction]

This issue has been corrected in V3.00.

To resolve this issue, both of the ID78K0-QB and IECUBE must be upgraded. Use the IECUBE in which this issue is resolved.

No. 42 Debugger operation speed is degraded (1) <Common>

[Description]

The debugger operation speed might be degraded if too many labels or variables are added in the Watch window.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.93.

No. 43 Debugger operation speed is degraded (2) <Common>

[Description]

The debugger operation speed is degraded if a "0x*a97f" or higher bank address is specified for the program counter (PC) in the Register window.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.93.

No. 44 Next Over is not executed normally (1) <Common>

[Description]

If an instruction to return to the common area from a bank area is executed with Next Over, the execution does not stop.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.93.

No. 45 An extra line displayed when the view position is moved to the last address in the Memory window <Common>

[Description]

When the view position is moved to the last address (e.g., 0xFFFF0 to 0xFFFFF in a device without BANK) using the Move menu in the Memory window, one extra line is displayed.

[Workaround]

There is no workaround.

[Correction]

Under study

No. 46 Restriction on operation in the Assemble window <Common>

[Description]

The insertion point can be placed at a position to which nothing can be input in the Assemble window, using arrow keys or Back Space key.

[Workaround]

There is no workaround.

[Correction]

Because this is a cursor specification and does not affect the debugger operation, it is no longer handled as a restriction but handled as a caution, and its description has been moved to *Cautions in Operating Precautions*.

No. 47 Search operation fails in the Assemble window <Common>

[Description]

Search might not be performed for the last 0x400 spaces of the range subject to search in the Assemble window. For example, if the range 0x1000 to 0x1FFF is searched for toward the down direction and a character string that matches the searched target exists in the range 0x1C00 to 0x1FFF, the search might fail. In the same manner, if the range 0x2000 to 0x2FFF is searched for toward the up direction, the search in the range 0x2000 to 0x23FF might fail.

[Workaround]

Add 0x400 spaces to the search target range.

(To search a character string in the range 0x1000 to 0x1FFF toward the down direction, for example, specify 0x1000 to 0x23FF.)

[Correction]

Under study

No. 48 The Refresh button appears dimmed in the Watch window <Common>

[Description]

If an item at the bottom in the Watch window is deleted, the Refresh button appears dimmed.

[Workaround]

Close the Watch window, and then open it again.

[Correction]

Under study

No. 49 Bits of the PSW are added to the Watch window <Common>

[Description]

If bits of the PSW (ie, z, rbs1, ac, rbs0, isp, or cy) are added to the Watch window, the values are not displayed correctly. If an attempt is made to change the value, the error message "A9004: Too large register size." is displayed.

[Workaround]

Check and change the value in the Register window.

[Correction]

Under study

No. 50 Values of the PSW bits cannot be changed in the DMM dialog box <Common>

[Description]

If an attempt is made to change the value of the PSW bits (ie, z, rbs1, ac, rbs0, isp, or cy) in the DMM dialog box, the error message "A9004: Too large register size." is displayed.

[Workaround]

Change the value of the PSW in byte units.

[Correction]

Under study

No. 51 Search extending over a search-prohibited area is impossible <Common>

[Description]

If an area for which searching is prohibited (non-mapped area, SFR area, or I/O protect area) is included in the search target specified in the Memory Search dialog box and Assemble Search dialog box, search is not performed for any area later than the area for which search is prohibited.

[Workaround]

There is no workaround.

[Correction]

Under study

No. 52 A function called between banks while stepping through code <Common>

[Description]

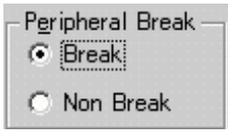
If a function is called between banks while the debugger is stepping through the code (C source view), the execution view stops at an unexpected position.

This restriction occurs when all of the following conditions are satisfied.

- (1) The debugger is stepping through the C source code for calling a bank.
- (2) An interrupt occurs during the above execution.
- (3) Code for calling a different bank exists in the interrupt handler.
- (4) "Non Break" is selected as the Peripheral Break option.

[Workaround]

In the ID78K0-QB main window, click the [Option] menu to open the Configuration dialog box. Select "Break" as the Peripheral Break option. Alternatively, set the mixed display mode while stepping through the code to enable the assembler view.



[Correction]

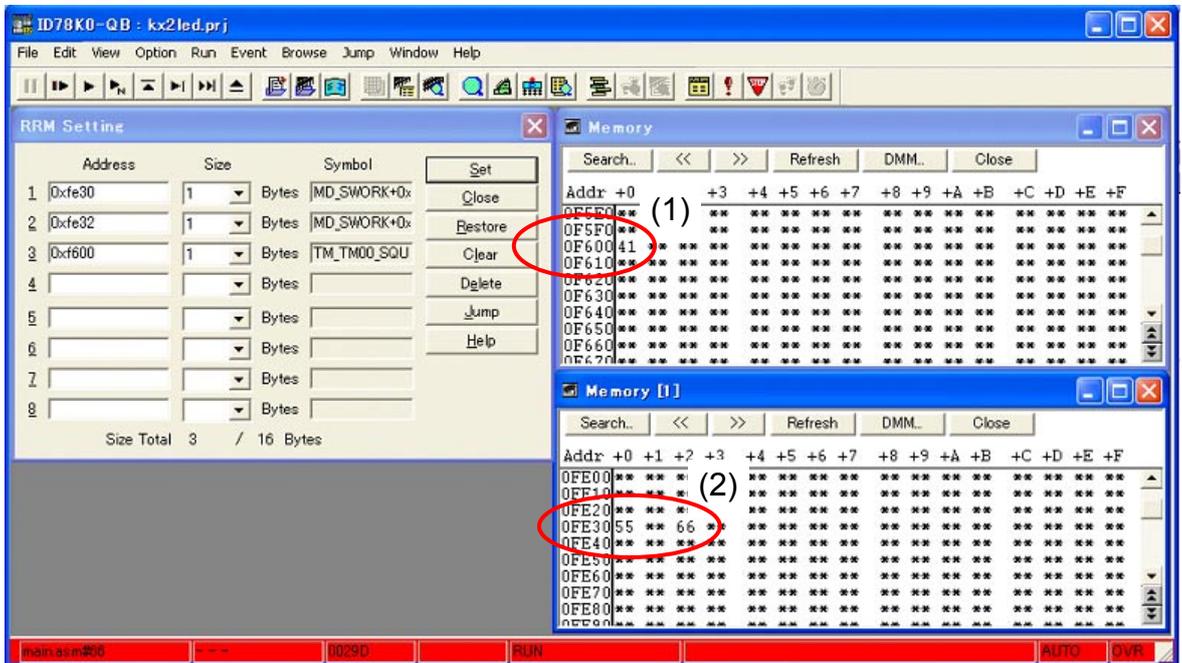
This issue has been corrected in V2.94.

No. 53 Restriction on using pseudo RRM <MINICUBE, MINICUBE2>

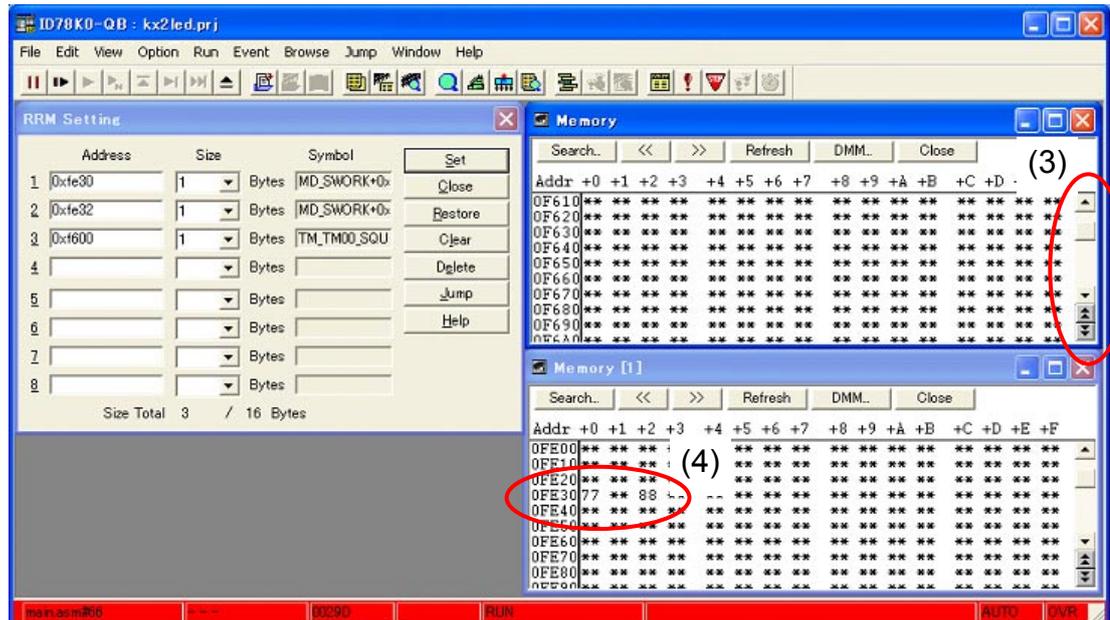
[Description]

If multiple pseudo RRM addresses are set without making the lowest address that has been set to the RRM target to be viewed in the Memory window or Watch window, the other RRM-target addresses will not be updated.

Example Pseudo RRM is executed for addresses 0xF600, 0xFE30 and 0xFE32 in byte units. If 0xF600, the lowest address among the addresses specified for RRM, is displayed in area (1), 0xFE30 and 0xFE32 of (2) are also updated.



However, if the window is scrolled with the scroll bar (3) and 0xF600 is hidden, 0xFE30 and 0xFE32 of (4) are not updated.



[Workaround]

Displays multiple Memory windows or always view the lowest address in the Watch window.

[Correction]

This issue has been corrected in V3.10.

No. 54 Restriction on stack trace display <Common>

[Description]

The `main` function might not be displayed correctly in the stack trace results if there is a function (such as `noauto`, `norec`) that does not push the frame pointer (HL) in the stack, or if a memory bank is used. When returning from such a function or from a memory bank function, the program might start free-running.

[Workaround]

There is no workaround.

[Correction]

Under study

No. 55 A function at a memory bank is stepped into <Common>

[Description]

If a user-defined library function at a memory bank or a function without debug information at a memory bank is stepped at the source level, a break occurs in the bank switching library.

[Workaround]

There is no workaround.

[Correction]

Under study

No. 56 Restriction on displaying local variables <Common>

[Description]

The local variables out of the current scope are not displayed normally in the Stack window.

[Workaround]

There is no workaround.

[Correction]

Under study

No. 57 Restriction on clearing coverage <Common>

[Description]

If the coverage is cleared while the Code Coverage window is displayed at the front, the highlight colors that show the access monitoring statuses might not be cleared in the Memory window.

[Workaround]

Click the [Refresh] button in the Memory window.

[Correction]

Under study

No. 58 Restriction on the Run-Break timer <MINICUBE, MINICUBE2>

[Description]

If data is written to the memory (pseudo DMM) while MINICUBE2 is running, the Run-Break timer is reset.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V3.10.

No. 59 A confirmation dialog box is brought to back <Common>

[Description]

When a CPU load is too heavy, a confirmation dialog box might be brought to the back of the main window.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.94.

No. 60 A temporary break occurs <Common>

[Description]

When variables or registers are added to the Watch window, the execution temporarily stops the CPU and reads the added items, even if pseudo RRM is disabled.

The Run-Break timer stops if the Watch window in which variables are added is open during program execution.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.94.

No. 61 Restriction on disassemble display <Common>

[Description]

If the bank area starting from 0x18000 is displayed in the disassemble view during program execution, the area at bank 0 (addresses 0x8000 to 0xBFFF) is disassembled.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.94.

No. 62 Static variables of a function in RAM cannot be monitored <Common>

[Description]

Static variables of a function in RAM cannot be monitored in the Watch window.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.94.

No. 63 The word size cannot be specified in the DMM dialog box <Common>

[Description]

If an attempt is made to write values while Word is specified as the Data Size option in the DMM dialog box during program execution, an error occurs and the write fails.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.94.

No. 64 The debugger cannot step through the code correctly <Common>

[Description]

The debugger cannot correctly step through source lines that satisfy either of the following conditions (error F7801 "End waiting state of stepwise execution was canceled." is displayed).

- (1) It is the last line in which a 1-byte instruction is described, the last line, being at the end of a function in a C source.
- (2) It is the last line of a segment in the assembler source, there are blank lines until the next segment starts, and the line contains a 1-byte instruction.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.94.

No. 65 Restriction on the Trace Search dialog box <Common>

[Description]

Trace data cannot be searched for with symbols specified for the search address in the Trace Search dialog box. In addition, the debugger might inadvertently terminate if too-long character strings are specified for the search address.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.94.

No. 66 Restriction on uploading and downloading data <Common>

[Description]

If data is uploaded to or downloaded from areas including memory bank areas, some data might not be uploaded or downloaded normally.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.94.

No. 67 Next Over is not executed normally (2) <Common>

[Description]

If Next Over is executed for a brace (}) at the end of a function in a memory bank area, the execution returns to an incorrect calling source bank.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.94.

No. 68 Restriction on Assemble window display <Common>

[Description]

When an attempt is made to display in the Assemble window an instruction in a memory bank area and a symbol in the memory bank area is used to display the instruction, a symbol in another bank might be displayed.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.94.

No. 69 Restriction on specifying a size in the RRM dialog box <MINICUBE, MINICUBE2>

[Description]

If an odd address is specified for the address subject to RAM monitoring in the RRM dialog box, the area subject to monitoring is aligned to an even address.

[Workaround]

Specify 2 or greater value with the Size list box to monitor an odd address.

[Correction]

This issue has been corrected in V2.94.

No. 70 A security flag is unexpectedly set <MINICUBE, MINICUBE2>

[Description]

If any of the following operations is performed while specific values are set to a memory bank, the security flag might be set.

- (1) A project file is reloaded by selecting [File], [Project], and then [Open] on the menu bar.
- (2) The ID78K0-QB was started via PM+ while a project file (*.pri) was already created.
- (3) The ID78K0-QB is reset by setting reset in the Reset Debugger dialog box of the ID78K0-QB.
- (4) PM+ and the ID78K0-QB are running at the same time, and first PM+ is terminated.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.94.

No. 71 Compatibility between V2.92 and V2.93 <MINICUBE, MINICUBE2>

[Description]

A project file that was created with ID78K0-QB V2.92 might not be able to open with V2.93.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.94.

No. 72 The debugger hangs if an attempt is made to save a file with the Intel hexadecimal format.

<Common>

[Description]

The debugger hangs if all of the following conditions are satisfied in the Upload dialog box.

- (1) A file is uploaded with the Intel hexadecimal format.
- (2) The save end address is an address within a 64 KB area.
- (3) The save end address is in the non-mapped area.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.91.

No. 73 File types not displayed normally in the Download dialog box <Common>

[Description]

If the following operations (1) to (3) are performed when memory bank switching is used, a hexadecimal file or binary data cannot be downloaded to the bank area.

- (1) Downloading of a load module
- (2) Saving of a project file
- (3) Opening followed by re-downloading of the saved project file

If the above operations are performed, the following four file formats are no longer displayed (cannot be selected) in the “Files of type” list in the Download dialog box.

- Hex Format [Bank] (*.hex)
- Hex Format [64KB] (*.hex)
- Binary Data [Bank] (*.bin)
- Binary Data [64KB] (*.bin)

Normally, the following six file formats are displayed (selectable) in the “Files of type” list.

- Hex Format [Bank] (*.hex)
- Hex Format [64KB] (*.hex)
- Binary Data [Bank] (*.bin)
- Binary Data [64KB] (*.bin)
- Coverage (*.cvb) (when IECUBE is connected)

However, only the following three file formats are displayed (selectable) for the hexadecimal file or binary data to be downloaded to the common area.

- Hex Format (*.hex)
- Binary Data (*.bin)
- Hex Format [64KB] (*.hex)

[Workaround]

Open the Configuration dialog box, confirm that the “Use Bank” check box is selected, and then click the OK button to close the Configuration dialog box.

[Correction]

This issue has been corrected in V2.91.

No. 74 The settings in the Event DMM dialog box cannot be saved normally. <IECUBE>

[Description]

If “sfr” is selected as the Select option in the Event DMM dialog box and an environment configuration file or a project file is saved, the event cannot be saved normally. In addition, even if the configuration setting file or the project file is loaded later, the event cannot be restored.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.91.

No. 75 Two-byte SFRs cannot be set normally in the Event DMM dialog box. <IECUBE>

[Description]

If an attempt is made to set a 2-byte SFR in 9 to 18-bit width in the Event DMM dialog box, the error message “F4005: Illegal data.” is displayed and the SFR cannot be set.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.91.

No. 76 Restriction on using memory banks 1 to 5 (1) <MINICUBE, MINICUBE2>

[Description]

When using memory banks 1 to 5 (memory bank select register is set to other than 00h), if a software breakpoint is set to an instruction in the common area and the program is executed by the instruction, an invalid instruction is executed.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.91.

No. 77 Restriction on using memory banks 1 to 5 (2) <MINICUBE, MINICUBE2>

[Description]

When using memory banks 1 to 5 (memory bank select register is set to other than 00h), if the debugger steps through the code of an instruction that accesses bank areas 1 to 5, or if an instruction that accesses bank areas 1 to 5 is set as a software breakpoint and the instruction is executed in real time, an area in memory bank 0 is accessed.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V2.91.

No. 78 A 1-byte instruction at the end of a file causes a malfunction <Common>

[Description]

If the instruction placed at the end of a file is a 1-byte instruction such as RET, the program code indication (asterisk) is not output to the line. Consequently, an event such as a breakpoint cannot be set to the line, or the debugger cannot step through the line.

| Search... | << | >> | Watch | Quic |
|-----------|----|----|-------|---------|
| * | | 63 | PUSH | AX |
| * | | 64 | CLR1 | RSTOP |
| * | | 65 | CLR1 | XSEL |
| * | | 66 | CLR1 | MCM0 |
| * | | 67 | SET1 | MCM0 |
| * | | 68 | CLR1 | OSCSELS |
| * | | 69 | SET1 | MSTOP |
| * | | 70 | MOV | PCC, A |
| * | | 71 | POP | AX |
| | | 72 | RET | ← |
| | | 73 | END | |

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V3.00.

No. 79 Breakpoints cannot be deleted by Delete All Breakpoints <IECUBE>

[Description]

Even if "Delete All Breakpoints" in the Run menu is executed while an event is used for another purpose, as well as a hardware break, the breakpoints will not be deleted.

[Workaround]

Delete breakpoints one by one, such as by means of the event manager.

[Correction]

This issue has been corrected in V3.00.

No. 80 Restrictions on adding SFRs to the Add I/O Port dialog box <Common>

[Description]

The following restrictions apply when adding SFRs to the Add I/O Port dialog box (dialog box used when an SFR name is redefined with another name in a C source).

- (1) If an R/W-attribute SFR is added as a W-attribute register with another name, the SFR is added to the Add Watch window and its value is changed in the Watch window, values displayed in the SFR window are not updated.
- (2) If an SFR that satisfies the following conditions below is added, the SFR name is added but an error occurs if an attempt is made to display the added SFR by using the [Move] command of the right-click menu in the SFR window (move fails).
 - The name of the SFR to be added is used for a general-purpose register.
 - The address to be added is the same as that of an SFR area (different from the address of the general-purpose register.)

[Workaround]

- (1) When changing values in the Watch window, input the value two or more times, or change the values in the SFR window.
- (2) There is no workaround.

[Correction]

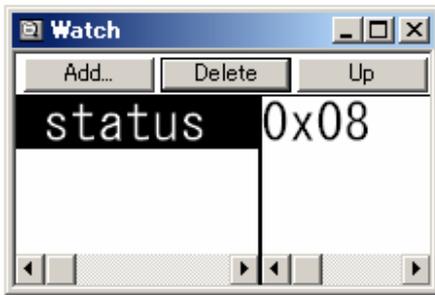
Under study

No. 81 Restriction on changing font size <Common>

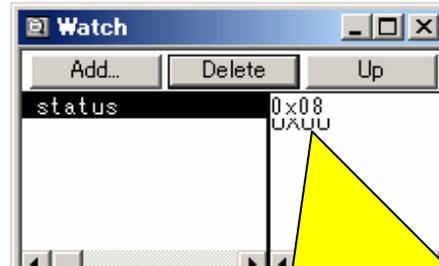
[Description]

The font size in the Watch window and Local Variable window can be specified by using the [Font] button in the Debugger Option dialog box, which is opened by selecting the [Option] menu and then [Debugger Option...], but if the font size is reduced, the graphics before changing the font size remain in the window.

Example of Watch window:
Font size: Large



Font size: Small



The graphics before changing the font size remain.

[Workaround]

When such a case occurs, minimize the window once and then restore the window size, or close the window once and then open it again.

[Correction]

Under study

No. 82 Restrictions on setting access breakpoints <Common>

[Description]

- (1) A variable other than global cannot be specified for an access breakpoint in the Watch window.
- (2) A variable other than global cannot be specified for an access breakpoint in the Source window.

[Workaround]

To set an access breakpoint to a static variable in a function, specify the settings in the Event dialog box while the current PC line is in that function. To set an access breakpoint to a static variable in a file, specify the settings in the Event dialog box while the current PC line is in that file.

[Correction]

Under study

No. 83 Restrictions on the Watch window <Common>

[Description]

- (1) If a general-purpose register is added to the Watch window, the displayed data digit might be incorrect. (For example, instead of the values of the PC register being displayed with five digits, they are displayed with four.)
- (2) If the item at the bottom of the list is deleted in the Watch window, the [Refresh] button appears dimmed and is no longer available. In such a case, close the Watch window and then open it again.

[Workaround]

- (1) Use the Register window to reference the general-purpose register values.
- (2) Close the Watch window and then open it again.

[Correction]

Under study

No. 84 Restriction on target system power supply voltage <MINICUBE, MINICUBE2>

[Description]

When performing on-chip debugging for microcontrollers μ PD179F11x or μ PD179F12x, set the target system power supply voltage to 2.7 V or higher; otherwise, the debugger does not start.

[Workaround]

There is no workaround.

[Correction]

Because this is caused by a specification, it is no longer handled as a restriction but handled as a caution, and its description has been moved to *Cautions in Operating Precautions*.

No. 85 Restriction on uninstalling a USB driver <Common>

[Description]

If the USB driver for the previous version (NEC Tools32 environment) is uninstalled after the USB driver included with ID78K0-QB V3.00 is installed, the USB driver added to the system is deleted. As a result, the emulator cannot be detected.

This does not occur when the USB driver included with ID78K0-QB V3.00 is uninstalled after the USB driver of the next version is installed.

[Workaround]

Start "Add/Remove Programs" or "Add or Remove Programs" in Control Panel and re-install the USB driver included with ID78K0-QB V3.00.

Be sure to uninstall the USB driver for the previous version (NEC Tools32 environment) before installing the USB driver included with ID78K0-QB V3.00.

[Correction]

This item is no longer handled as a restriction but handled as a note on the uninstallation procedure, and its description has been moved to *Cautions in Operating Precautions*.

No. 86 The subclock setting is not saved when a project is saved <IECUBE>

[Description]

Even if the subclock setting is specified in the Configuration dialog box before saving a project, the project is saved with the same subclock setting as the main clock setting.

[Workaround]

Open the project file and change the subclock setting in the Configuration dialog box.

[Correction]

This issue has been corrected in V3.10.

No. 87 Variable written as *structure.member* cannot be converted <Common>

[Description]

The "." operator of *structure.member* cannot be converted.

```
struct S {
    int x;
    int y;
} subj,*p_subj;
```

```
void main()
{
    p_sobj = &sobj;
    sobj.x = 1;★
    p_sobj->x = 2;
}
```

Conversion of the variable marked with ★ fails.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V3.10.

No. 88 Restriction on using `xtime -gobreak <Common>`

[Description]

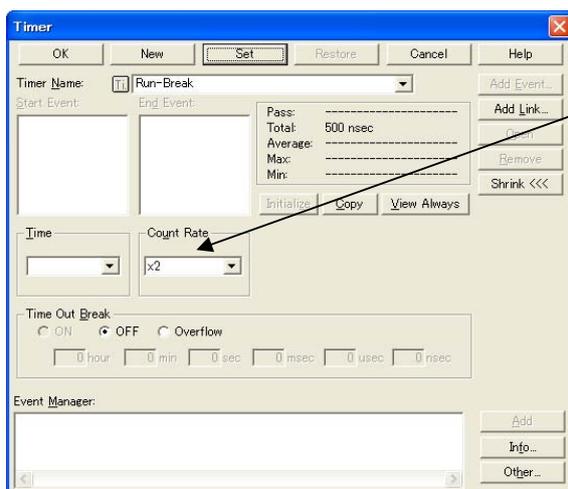
When `xtime -gobreak` is executed, the measured time is displayed as a clock count instead of in ns.

[Workaround]

The clock count displayed after the execution of `xtime -gobreak` is not the actual execution time. The actual time varies depending on the count rate (resolution) specified in the Timer dialog box. The execution time can be calculated by using the following expression:

Execution time = Count rate set in the timer dialog box × displayed clock count

| Measurable Execution Time | Measurable Execution Count |
|---|----------------------------|
| 1 min 25 sec max. (resolution 20 ns) | 4,294,967,295 max. |
| 48 h 50 min max. (in 2K division, resolution 41 μs) | (32 bits) |



×1: Minimum resolution 20 ns (initial value)
 ...
 ×2048: Maximum resolution 41 ns

Example When the measurement result is 500 ns
`xtime -gobreak 25 clocks: ×1 (25 × 20 = 500 ns)`
`xtime -gobreak 12 clocks: ×2 (12 × 40 = 480 ns)`
`xtime -gobreak 6 clocks: ×4 (6 × 80 = 480 ns)`
`xtime -gobreak 3 clocks: ×8 (3 × 160 = 480 ns)`
`xtime -gobreak 1 clock: ×16 (1 × 320 = 320 ns)`
`xtime -gobreak 0 clocks: ×32Note`
`xtime -gobreak 0 clocks: ×64Note`

Note Unmeasurable because the resolution is out of range

[Correction]

This issue has been corrected in V3.10.

No. 89 The debugger operation becomes very slow under certain conditions <Common>

[Description]

When debugging a project that includes a blank .C or .ASM file (including a file that contains only comments), the operation of the debugger might become very slow.

[Workaround]

There is no workaround.

[Correction]

This issue has been corrected in V3.10.

No. 90 Restriction on address specification by using the debugger <Common>

[Description]

When an address is specified by the debugger using the format of "variable name" + "numeric value", 0T to 9T are not recognized as numeric values and addresses that contain these values become invalid.

Example: When "0T" is used in the Watch window

The screenshot shows the debugger interface with the Memory and Watch windows. The Watch window lists the following variables and their values:

| Variable | Value |
|-------------|--------|
| hensuu1 | 0x1122 |
| hensuu2 | 0x3344 |
| hensuu2+1 | 0x33 |
| hensuu2+1T | ? |
| hensuu2+10 | 0x55 |
| hensuu2+10T | 0x66 |
| hensuu3 | 0x7788 |

The callout box provides the following mapping:

| Variables | Corresponding address |
|--------------|-----------------------|
| hensuu1: | FB78, FB79 |
| hensuu2: | FB7A, FB7B |
| hensuu2+1: | FB7B |
| hensuu2+1T: | Illegal address |
| hensuu2+10: | FB8A |
| hensuu2+10T: | FB84 |
| hensuu3: | FB7C, FB7D |

[Workaround]

Use "0 to 9" instead of "0T to 9T".

[Correction]

This issue has been corrected in V3.10.

No. 91 Starting the debugger by using a new login name <MINICUBE, MINICUBE2>

[Description]

After logging onto Windows as a new user and starting the debugger for the first time, projects cannot be opened from the Configuration dialog box.

[Workaround]

Open a project from the File menu of the debugger, not from the Configuration dialog box.

[Correction]

This issue has been corrected in V3.10.

No. 92 Restrictions on Main Clock setting "System", 8.00MHz, 16.00MHz <MINICUBE2>

[Description]

When opening the project file which set Main Clock setting "System" as 8.00MHz or 16.00MHz in Configuration dialogue, Main Clock is operated by 4.00MHz.

[Workaround]

There is no workaround.

[Correction]

This will be corrected in V3.21

No. 93 Restrictions on CPU break in sub-clock operation <Common>

[Description]

When CPU operates by sub-clock, and Monitor Clock setting in the Configuration dialogue is set as "System", an error may occur or drawing speed may become slow at CPU breaks.

[Workaround]

Set Monitor Clock as "User" to avoid an error at CPU break.

[Correction]

This will be corrected in V3.21

No. 94 Restrictions about ADCR/ADCRH indication in sub-clock operation <Common>

[Description]

When CPU operates by sub-clock, an error may occur to show ADCR/ADCRH in the SFR window.

[Workaround]

Please do not show ADCR/ADCRH in the SFR window. Follow the below procedure.

- (1) Right-click on the SFR window and choose [View].
- (2) SFR Select window is opened.
- (3) Choose ADCR/ADCRH and push "hide button".
- (4) Check if ADCR/ADCRH is moved to "No Display" area, and push "OK" button.

[Correction]

Under study

No. 95 Restrictions on the setting of 16-bit timer X0/X1 compare registers 0 to 3 for 78K0/Ix2

<MINICUBE2>

[Description]

When debugging 78K0/Ix2 using MINICUBE2, 16-bit timer X0/X1 compare registers 0 to 3 (TX0CR0, TX0CR1, TX0CR2, TX0CR3, TX1CR0, TX1CR1, TX1CR2, TX1CR3) cannot be changed.

Lower 8-bit will be 00H.

[Workaround]

There is no workaround.

[Correction]

This will be corrected in V3.21