Update AV8003 MAIN CPU's software procedure by FDT

Update MAIN CPU's software to internal Flash-ROM.

Update software for MAIN CPU

NECESSARY EQUIPMENT

The following items are required for updating. Windows PC (OS: Windows2000 or WindowsXP) with Serial port. RS-232C Dsub-9 pin cable (female to female/straight type) Flash Development Toolkit 4.01 (the rest is FDT) or latest version (fdtv401r00.exe or latest version) **NOTE:** The updating is not possible in FDT3.xx to the main microprocessor of AV8003. (e.g. FDT3.06) Use RS232C Dsub-9 pin cable (female to female/straight type) to connect PC and the RS-232C port in rear panel of the unit, when updating MAIN CPU

[A] SOFTWARE (fdtv401r00.exe) DOWNLOADS AND INSTALLS PROCEDURE

[A-1] DOWNLOADS OF THE SOFTWARE

Refer to page 14 of SR8001 service manual, and change to "fdtv401r00.exe" from "fdtv306r00.exe".

[A-2] INSTALLS OF THE SOFTWARE

Refer to page 33 of SR8001 service manual, and change to "fdtv401r00.exe" from "fdtv306r00.exe".

[B] UPDATE SOFTWARE

[B1-1] The writing software setup procedure

- 1. Launch the Flash Development Toolkit v4.01 (FDT)
- NOTE: Please refer to "[A] SOFTWARE (fdtv401r00.exe) DOWNLOADS AND INSTALLS PROCEDURE",

when you do not install FDT.

2. Click Start, Programs, Renesas, Flash Development Toolkit 4.01 and Flash Development Toolkit

4.01.

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3. Check the Create a new project workspace, and click the OK.

NOTE: It is needs setup for AV8003 When you have already setup, please advance to "[B1-2] Writing

Procedure for MAIN CPU".



4. AV8003_MAIN is inputted into the Workspace Name.

(It is simultaneously inputted into Project Name.)

Click the **OK**.

New Project Workspace		? 🗙
Projects		
FDT Project Generator	Workspace Name: AV8003_MAIN	
	Project Name: AV8003_MAIN	
	Directory: C#Program Files#Renesas#FDT4.01#Workspaces#	Browse
	CPU family: All Flash Devices	
	Tool chain:	
Properties	1	
	ОК	キャンセル

5. Input the Filter "M3087".

Then, selected "M3087BFK ".

And	Click the Nex	t.		
hoose De	vice And Kernel			×
The FLASH Der Select the deui Filte : M3087	velopment Toolkit supports a se you wich to use with this	a number of Renesa project from the list	FLASH devices. below.	Other
Туре	Full Name	Kernel Version	Info	
M32C M32C M32C M32C M32C M32C M32C Generic BOOT	M30873FH M30876FJ M30876FJ M30879FJ M30879FL M30879FL M30879FL M30879FL M30879FL M30879FL M30878FL Device Generic BOOT Dev	1100 1100 1100 1100 1100 1100 1100 110	Ţ	_
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6. Choose the **Serial port number** in the Select Port. And click the **Next**.

COLUMN STATE	The FLRSH Development Toolkit supports connection through the standard PG Serial port and the USB port. Use this page to select
Workspace Telephone	the project is created
Device Junger	Select port
La su	Select as interface type to connect to the target device with. Normally
Dever Press	this will be "Direct Connection" or simply left blank.
Draw and	Select Interface
And and a second second	
	(夏3回) (264回) 林中:中日

7. Un-check the **Use Default**, and choose the **57600** in Recommended Speeds.

Click the Next.

Constant States	The FLASH Development Toolkit can connect to your device is a muster of different ways. All the options on this page may be chosed after the Project has been created.
Di Digtari	Select Correction (* DOOT Item (* DDDT Tractor Item)
Converties	In BOOT Program wode the device mouth in FLKSH prior to connection. The Tookin downlads programming terms to the device as respond. The Recommended Speed anthrop is based on the current device and olds. The user new sites reput there seen, if this is supported by the formed log the state based.
Dryw.drift Disco.woo Algorithm P	 Peccenerated Speech: [5300] ★ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □

Check the Automatic in Protection.
 Check the Advanced in Messaging.
 Click the Finish.

WIND STREET	The FLASH Development Toolkit offers a device protection system plas an advanced messaging level for use with hardware and kerne development.
Workshield Ball	What level of device protection would you like?
Deplay	Protector Patamate Cheractive Chore
Converting	When programming the device, any blocks found to have been well previously will automatically be encode What level of messaging would you like? Hexaging
Drive link	C Standard F Advanced
B Datavast	The Toolk it will deplay vertices rescapes viewwer it is communicating with fire Target device. This mode is useful for Interface hardware development, and Kernel development.

[B1-2] Writing Procedure for MAIN CPU

- 1. Connect the RS-232C on rear panel of the unit and the Serial Port of windows PC with RS-232C cable.
- Launch the Flash Development Toolkit (FDT), When FDT is not launch.
 When FDT is already launch, please advance to step No.7.
- Click Start, Programs, Renesas, Flash Development Toolkit 4.01 and Flash Development Toolkit 4.01.



4. Check the Browse to another project workspace, and click OK.



5. Choose **AV8003_MAIN.AWS** in AV8003_MAIN folder under workspase folder.

And Click the Open.

Open Works	pace		? 🗙
ファイルの場所型:	C AV8003_MAIN	- 🕈 🖬 -]-
C AV8003_MAIN	AWS		
 ファイル名(N):	AV8003_MAIN.AWS		開<(@)
ファイルの種類(工):	FDT Workspaces (*.aws)	- 4	-10-01

6. Right button of mouse click on the AV8003_MAIN, and select the Add Files in a menu.



7. Browse and choose the av8003_rom_0xxxxx.mot, and click the Add.

Add File(s)				? 🔀
ファイルの場所①:	🚞 main	•	(=	💣 🎟 •
[™] av8003_rom_0	803241.mot			
ファイル名(N):	av8003_rom_0803241.mot		- (Add
ファイルの種類(工):	Project Files		•	キャンセル
	🥅 Relative Path			

Update MAIN CPU's software to internal Flash-ROM

- 8. Connect RS-232C on the rear panel of the unit and Serial Port of windows PC with RS-232C cable.
- 9. Insert a thin rot to the hole near the REMOTE terminal and push the switch (SW10) inside to turn on the switch.



Push switch (SW10)

Hole of rear panel

10. Connect the mains cord into the unit. And press the **POWER ON/OFF** or **STANDBY** button for turn on the unit.

NOTE: When the unit is into boot mode, STANDBY LED is not lights.

PAV8003_MAIN - Flash Deve	elopment Toolkit	(Unsupported I	Freeware Version)	
<u>File Edit View Project Tools Window</u>	Device Help			
	Connect to Device	Ctrl+Alt+C	Σ 😫 🕨 🗳 🗶	
∭w w w ∏Derauk → II	Frase FLASH Blocks	Otrl+Alt+E		
	評談 Blank Check	Ctrl+Alt+B		
AV8003_MAIN	💞 Upload Image	Ctrl+Alt+U		
B B-Record Files	Download Active File	Ctrl+Alt+P		
av8003_rom	∑ FLASH Checkgum	Ctrl+Alt+S		
	🔮 Go From Address	Ctrl+Alt+G		
	▶ <u>B</u> un	Ctrl+Alt+R		
	🍣 Block Loc <u>k</u> ing	Ctrl+Alt+L		
	Cancel Operation	Ctrl+Break		
	Configure Flash Project	Alt+Shift+R		
First Development Toolkit and flash pr FDT API initialized version 4, 01, 00, 010	er /	provided without supp	ort	
	~			1940
FDT Connect to the device			UCP OFF	ING //

11. Click the **Device** in the menu bar and select the **Connect to Device**.

12. Click the Device in the menu bar and select the Erase FLASH Blocks.



 $13. \ \mbox{Click}$ the Select All and Erase.

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- 🗹 EB15	0×00F50000	0x00F5FFFF	64 K	Unknown	Unlocked		
- 🗹 EB14	0×00F60000	0x00F6FFFF	64 K	Unknown	Unlocked		
EB13	0×00F70000	0x00F7FFFF	64 K	Unknown	Unlocked		
- EB12	0x00F80000	0x00F8FFFF	64 K	Unknown	Unlocked		
- 🗹 EB11	0×00F90000	0x00F9FFFF	64 K	Unknown	Unlocked		
- EB10	0×00FA0000	0x00FAFFFF	64 K	Unknown	Unlocked		
- 🗹 EB9	0×00FB0000	0x00FBFFFF	64 K	Unknown	Unlocked		
EB8	0x00FC0000	0x00FCFFFF	64 K	Unknown	Unlocked		
- EB7	0×00FD0000	0x00FDFFFF	64 K	Unknown	Unlocked		
EB6	0×00FE0000	0x00FEFFFF	64 K	Unknown	Unlocked		
EB5	0x00FF0000	0x00FF7FFF	32 K	Unknown	Unlocked	×	

14. Press right button of mouse on the av8003_rom_0xxxxx.mot, and select the Download File in a

menu.



15. Software is written into the MAIN CPU.

The writing of software takes about 2 minutes.

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16. Click the **Device** in the menu bar and select the **Disconnect**.

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17. Check the **Do Noting** and click the **OK**

Block Locking						
On Disconnect						
Lock State At Connection	State At Disconnect		What should FDT do by default			
🖃 🛄 M3087BFK		~	when disconnecting from a			
🖻 🛄 User Flash			device with locking ability?			
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18. Click the File and select the Exit in menu.

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- M2K k programmed in 115 seconds Image successfully written to device						
Disconnected						
(FDT] AV8003_MAIN / Find in Files /						
Exit FDT - you will be prompted to say	ve modified documents	UCP OFF	INS /			

- 19. Press the POWER ON/OFF button for turn off the unit. (Except U1B)
- 20. Disconnect the mains cord and RS-232C cable from the unit.
- 21. Insert a thin rot to the hole and push the switch inside to turn off the switch.