How to upgrade ARAID 2200 HIC 2103 firmware by Flash Magic V0.93

The "Flash Magic" communicates with ARAID 2200 via RS-232 connection to upgrade ARAID 2200's H.I.C. (Human Interface Cpu) LPC2103's firmware.



(1) Please insert the Jumper to the proper position (J4) as picture 1.

(picture 0: Only J7 is inserted)

(picture 1: J4 inserted, and remain J7)

(2) Remove both Upper and Lower Trays from ARAID 2200.

Connect the "R1" from real panel to a PC. This is a RS-232 communication. Once jumper J4 is inserted, turn the power on, the front panel LCD will show as picture 2.



(picture 2)

(3) Launch the "Flash Magic" software from the STAR menu, see picture 3. If this is the first time for you to use the Flash Magic, please read another Accordance's document – "Flash Magic User's Guide - English" first.



(picture 3)

(4) After execute Flash Magic, the window will show up as picture 4. Make sure all 5 parameters are properly chosen (such as COM port, Baud Rate is 38400, Device is LPC2103, Interface is [ISP], Osc Freq is 12 MHz) and check box (Erase all Flash+Code Rd Port) is checked.

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<u>File ISP Options Tools H</u> elp		
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Step 1 - Communications	Step 2 - Erase	
COM Port: COM 1	Erase block 0 (0x0000	I-OxOFFF)
Baud Rate: 38400 👻	Erase block 1 (0x1000 Erase block 2 (0x2000	I-Ox1FFF)
Device: LPC2103	Erase block 3 (0x3000	HOX3FFF)
Interface: None (ISP)	Erase block 5 (0x5000	-0x5FFF)
Oscillator Erea (MHa): 12,000000	Erase all Flash+Coo	le Rd Prot
Step 3 - Hex File Hex File: C:\Users\user\Desktop\20070801-2-5 Modified:星期四 八月 2,2007 下名	7443.hex	Browse
	F 01.51	
Step 4 - Options	Step 5 - Start	
Step 4 - Options Verify after programming Fill unused Flash Gen block checksums Execute	Step 5 - Start	Start
Step 4 - Options Verify after programming Fill unused Flash Gen block checksums Execute Rotating, fully customizable, remotely updated Interapplication! www.embeddedhints.com	Prot	Start

(picture 4)

How to upgrade ARAID 2200 HIC 2103 firmware by Flash Magic

(5) Select "Read Device Signature" under ISP which make sure if system catch 2103 or not. See as picture 5.

[ISP] Options Tools Help	/
Blank Check	
ap Read Security	Step 2 - Erase
Read Device Signature Boot Vector and Status Byte Display Memory Erase Flash Erase Flash Pages Verify Execute Reset	rase block 0 (0x0000-0x0FFF) rase block 1 (0x1000-0x1FFF) rase block 2 (0x2000-0x2FFF) rase block 3 (0x3000-0x3FFF) rase block 4 (0x4000-0x4FFF) rase block 4 (0x4000-0x4FFF) rase block 5 (0x5000-0x5FFF) Erase all Flash+Code Rd Prot Erase blocks used by Hex File
ep ≽ Go	
ex 💖 Start Bootloader	43.hex Browse
Read Clocks	01:51 more info
Cvclic Redundancy Check	Step 5 - Start!
Very Read MISR Fill Serial Number Enable SoftICE Additional Security Bits	tStart
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(6) When there's a value show up on "**Device ID**" column of "**Device Signature window**", it means system catches 2103, see as picture 6.

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File ISP Options To	ols Help			
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Step 1 - Communications		Step 2 - Erase		
COM Port: COM	1 🚽	Erase block 0 (0)	(0000-0x0FFF)	
Baud Rate: 3840	0 🚽	Erase block 1 (0)	2000-0x2FFF)	=
Device: LP	Device Signature	X	000-0x3FFF) 000-0x4FFF)	
Interface: No	Manufacturer ID: 0x		000-0x5FFF1	*
Oscillator Freq. (MHz): 12	Device ID 1: 0x		ed by Hex File	
	Device ID 2: 0x			
Step 3 - Hex File	Device ID: 0x	327441		
Hex File: C:\Users\user\			Browse	e
Modified: 星期	Bootloader Ver:	2.2	nore info	
Step 4 - Options		Close	Part!	
Verify after programming	0		Start	1.
Fill unused Flash		-		
Execute				
Technical on-line articles ab	out 8051 and XA prod	ramming		
i comincar ori fine articles ab		, strating		
www.esacademy.com/taq/c	locs			
		b		(picture 6)

(7) Upgrading file is as .hex. Click "Start" to execute the upgrading process, see picture 7.

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Step 1 - Communications	Step 2 - Erase
COM Port: COM 1	Erase block 0 (0x0000-0x0FFF)
Baud Rate: 38400	Erase block 1 (0x1000-0x1FFF) Erase block 2 (0x2000-0x2FFF)
Device: LPC2103	Erase block 3 (0x3000-0x3FFF) Erase block 4 (0x4000-0x4FFF)
Interface: None (ISP)	Erase block 5 (0x5000-0x5FFF)
Oscillator Freq. (MHz): 12.000000	Erase blocks used by Hex File
Step 3 - Hex File	
Step 3 - Hex File Hex File: C:\Users\user\Desktop\2007(Modified: 星期四 , 八月 2, 20	0801-2-57443.hex Browse 007,下午 01:51 <u>more info</u>
Step 3 - Hex File Hex File: [C:\Users\user\Desktop\2007(Modified: 星期四,八月 2, 20 Step 4 - Options	0801-2-57443.hex Browse 007,下午 01:51 <u>more info</u> Step 5 - Start!
Step 3 - Hex File Hex File: C.\Users\user\Desktop\2007(Modified: 星期四, 八月 2, 20 Step 4 - Options 「 Verify after programming Set Code 「 Fill unused Flash 「 Gen block checksums 」 Execute	0501:2:57443.hex Browse 007, 下午 01:51 <u>more info</u> Step 5 - Start! le Read Prot <u>Start</u>
Step 3 - Hex File Hex File: C.\Users\user\Desktop\2007/ Modified: 星期四,八月 2, 20 Step 4 - Options Verify after programming □ Set Code Fill unused Flash □ Gen block checksums □ Execute On-Line training classes for microcontrolle Internetworking www.esacademy.com/fag/classes	0801-2-57443.hex Browse 007,下午 01:51 more info Step 5 - Start! le Read Prot Start ers and embedded networking and

(picture 7)

(8) The percentage of upgrading process will be showed as picture 8.

🌧 Flash Magic - Connected at 38400 bau	d. 🕞 🖸 🚾 🏹
<u>File ISP Options Tools H</u> elp	
	I 😨 😂
Step 1 - Communications	Step 2 - Erase
COM Port: COM 1	Erase block 0 (0x0000-0x0FFF)
Baud Rate: 38400 🚽	Erase block 2 (0x2000-0x2FFF)
Device: LPC2103	Erase block 3 (0x3000-0x3FFF) Erase block 4 (0x4000-0x4FFF)
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Step 3 - Hex File Hex File: C:\Users\user\Desktop\20070801-2-5 Modified:星期四,八月 2,2007,下名	Browse ¥ 01:51 more info
Step 4 - Options	Step 5 - Start!
 ✓ Verify after programming ✓ Set Code Read I ✓ Fill unused Flash ✓ Gen block checksums ✓ Execute 	Prot
Rotating, fully customizable, remotely updated Inte application! <u>www.embeddedhints.com</u>	ernet links. Embed them in your

(9) When "Finished" vocabulary shows up, it means the upgrading process is done, see as picture 9.

🐡 Flash Magic	
<u>File ISP Options Tools Help</u>	
Step 1 - Communications Step 2 - Erase	
COM Port: COM 1	
Baud Rate: 38400	
Device: LPC2103 Erase block 3 (0x3000-0x3FF) Erase block 4 (0x4000-0x4FF)	
Interface: None (ISP)	
Oscillator Freq. (MHz): 12.000000	
Step 3 - Hex File	
Hex File: C:\Users\user\Desktop\20070801-2-57443.hex Browse	
Step 4 - Options Step 5 - Start!	
 ✓ Verify after programming ✓ Set Code Read Prot ✓ Fill unused Flash ✓ Gen block checksums ✓ Execute 	
Visit the "Flash Magic" home page for info on the latest revision	
www.esacademy.com/software/flashmagic	
Finished 8	(nieture O)

(10) Removed Jumper J4 (as open).



(11) RS-232 communication for Araid Manager.