Operating
For MVC100

MicroVision Co., Ltd.

Document Information

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(☎) +82-2-3283-0101, (✉) sale@microvision.co.kr

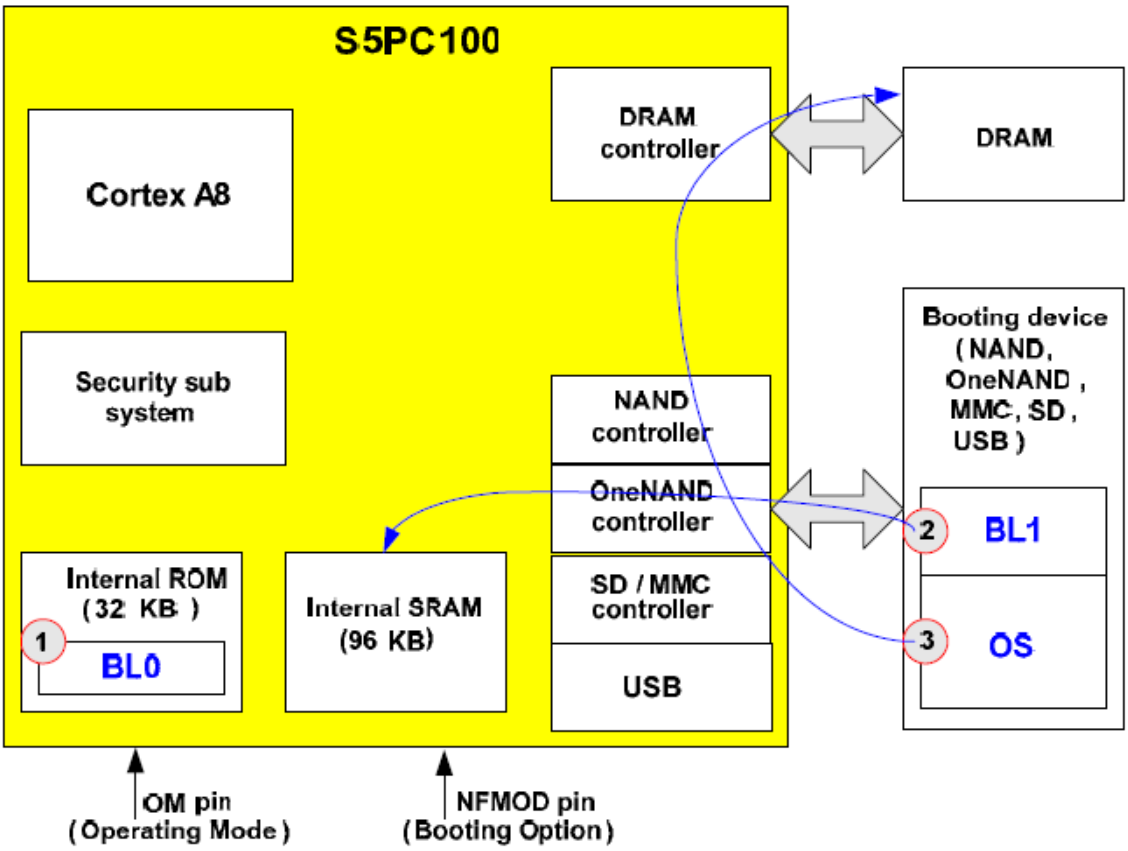
http://www.microvision.co.kr, http://www.mvtool.co.kr

Room #610, Hanshin IT Tower 235, Guro3-dong, Guro-gu, Seoul, Korea.

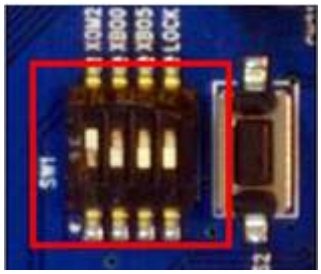
Contents

1. To setup Boot Mode

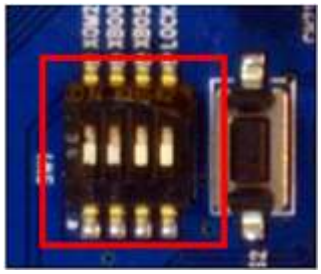
MVC100 was designed that can boot USB Cable, SD CARD, NAND Flash. It included in CPU 32KB ROM and 96KB SRAM so that can program without JTAG emulator by itself.



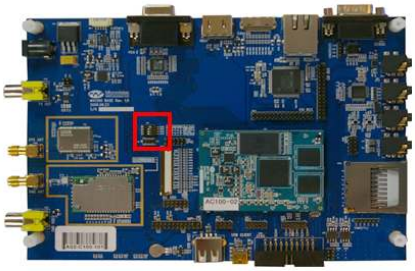
See picture under. You can select various booting mode controlling switch.



Automatic Power



unautomatic Power



Baud backside switch position

부트 모드 종류	
NAND Boot	X 0 0 0
SD Boot	X 0 1 1
USB Boot	X 1 X X

This is Power switch. By automatic power mode when it connected Power with Board. This is not to be uncomfortable.

You setup unautomatic Power, you would press this batten long.

2. JTAG

JTAG is interface to have test H/W and S/W. We have been using commonly to make sure to the work whether true or not and also S/W kernel, application for debugging but mostly H/W to be verification.

First, you have to make a script file for using JTAG emulator. You can make that refer to a boot loader startup source and a CPU datasheet.

One of reason making a script files that CPU different from memory bank and capacity SDRAM.

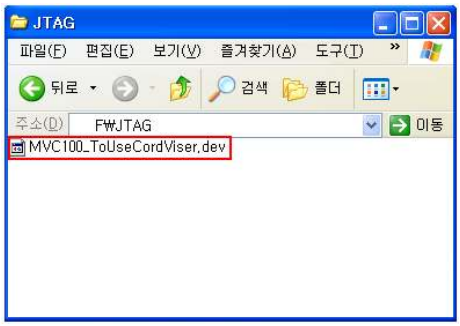
Register into the JTAG emulator program that's the script files so that JTAG emulator can be aware of board H/W, you can test SDRAM and Flash.

I did development using of CodeViser JTAG emulator. The script file is in CD /ICE fodder. If you use different from JTAG emulator, you would modify commands each.

Example)

CodeViser				Trace 32
0xE7000000	0x9	0x4	W	d.s SD:0xE7000000 %LE %LONG 0x9
0xe0100304	0x00010000	0x4	W	SD:0xe0100304 %LE %LONG 0x00010000
0xe0100304	0x00011000	0x4	W	d.s SD:0xe0100304 %LE %LONG 0x00011000

The script file is in CD /ICE fodder.

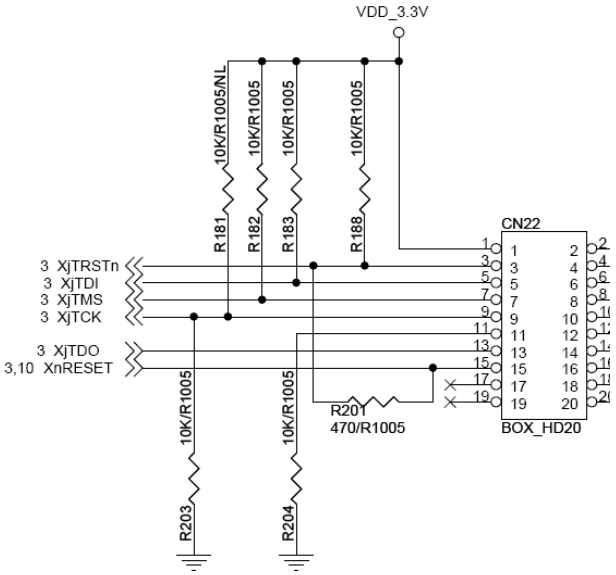


A script files

ARM standard and MVC100 JTAG 20 Pins are Schematic picture under. You have to connect number 15 "RESET" from CPU to JTAG and make sure whether pull up or pull down each pins.

Pin	ARM 20-Pin 2x10, 0.1" x 0.1"	
1	VTRef	10k pull-up
2	VSupply	(not used)
3	nTRST	10k pull-up
4	GND	
5	TDI	10k pull-up
6	GND	
7	TMS	10k pull-up
8	GND	
9	TCK	10k pull-up
10	GND	
11	RTCK	33 Ω series
12	GND	
13	TDO	33 Ω series
14	GND	
15	nSRST	10k pull-up
16	GND	
17	DBGRQ	10k pull-down (not used)
18	GND	
19	DBGACK	10k pull-down (not used)
20	GND	

Standard JTAG 20PINs



MVC100 JTAG