SECJTAG FLASH(SJF) USER'S GUIDE (PRELIMINARY)

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SJF2440 can program SMDK2440 flash memory (K9S1208,Intel E28F128,AMD29LV800BB) through JTAG port and read/write data from/to a specified address.

SJF2440 VERSION HISTORY

Version	Description
0.1	- K9S1208 programming is supported. - AMD 29LV800BB programming is supported. - Intel E28F128 StrataFlash programming is supported. - External peripherals (PD6710,CS8900A and etc) read/write is supported .

INSTALLING GIVEIO.SYS

In windows NT/2000/XP, any application can't access the I/O such as the parallel port. So, GIVEIO.SYS enables SJF.exe to access the parallel port without any memory fault. In windows 95/98, GIVEIO.SYS isn't needed.

For Windows* 2000, use the following procedure:

1) Login as administrator
2) Copy the giveio.sys file to %systemroot%\system32\drivers.
3) Choose Control Panel, and choose Add/Remove Hardware.
4) Select 'Add/Troubleshoot a device'
5) Select 'Add a new device' and choose Next, and select 'No, I want to select the hardware from a list'
6) Select Other devices and choose 'Have Disk...'.
7) Choose 'Browse...', locate the folder where giveio.inf file.
8) Complete the remained process.

For Windows* NT, use the following procedure:

1) Login as administrator.
2) Open a DOS command window.
3) Copy giveio.sys to %systemroot%\system32\drivers.
4) Install the driver using the instdrv utility specifying the driver name and the FULL PATH NAME to the giveio.sys file.

```
instdrv giveio c:\winnt\system32\drivers\giveio.sys
```

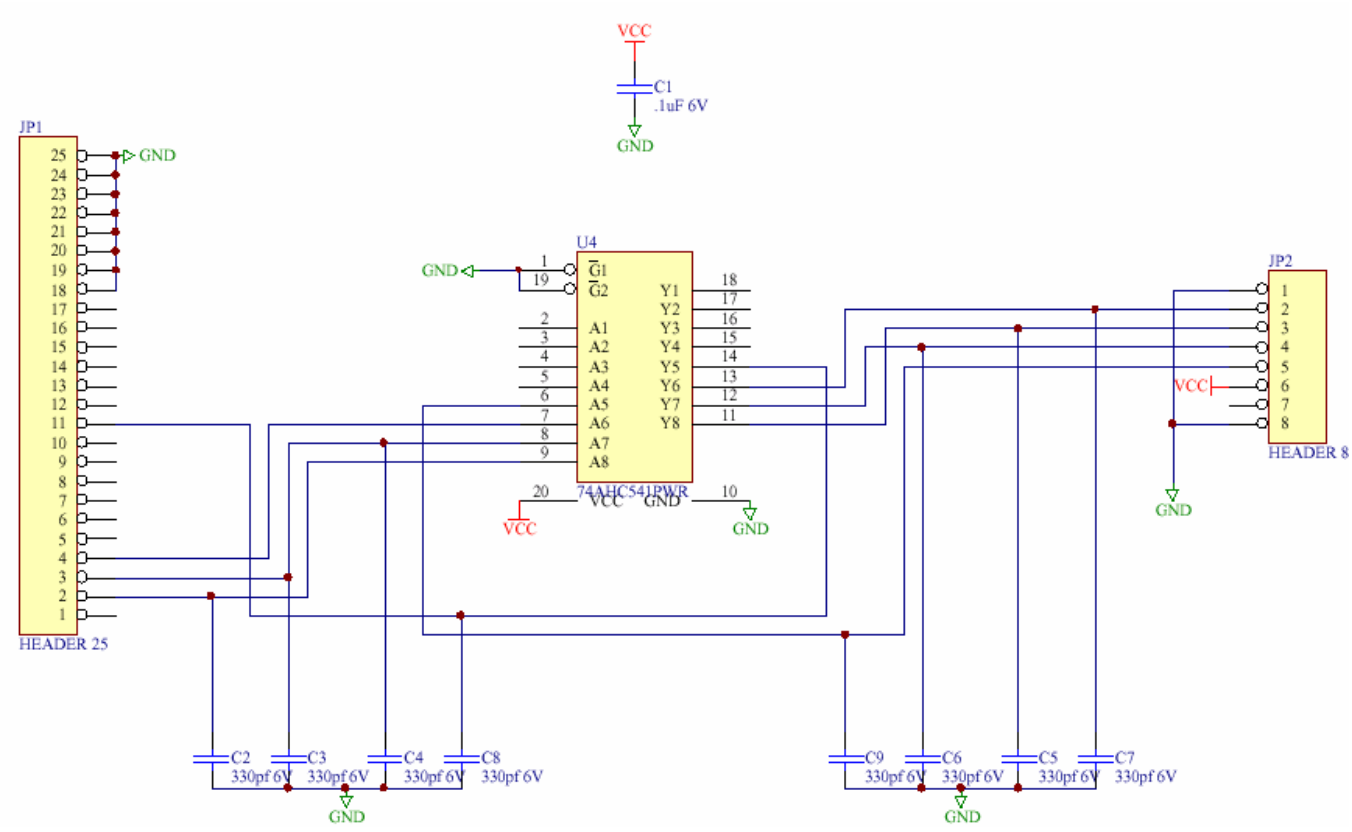
5) To enable the driver to start automatically each time you boot, use the following procedure:
   - Choose Settings and choose Control Panel.
   - Choose Devices, select giveio from the list, and choose Startup.
   - Select Startup Type Automatic from the Device menu.

INSTALLING JTAG DONGLE

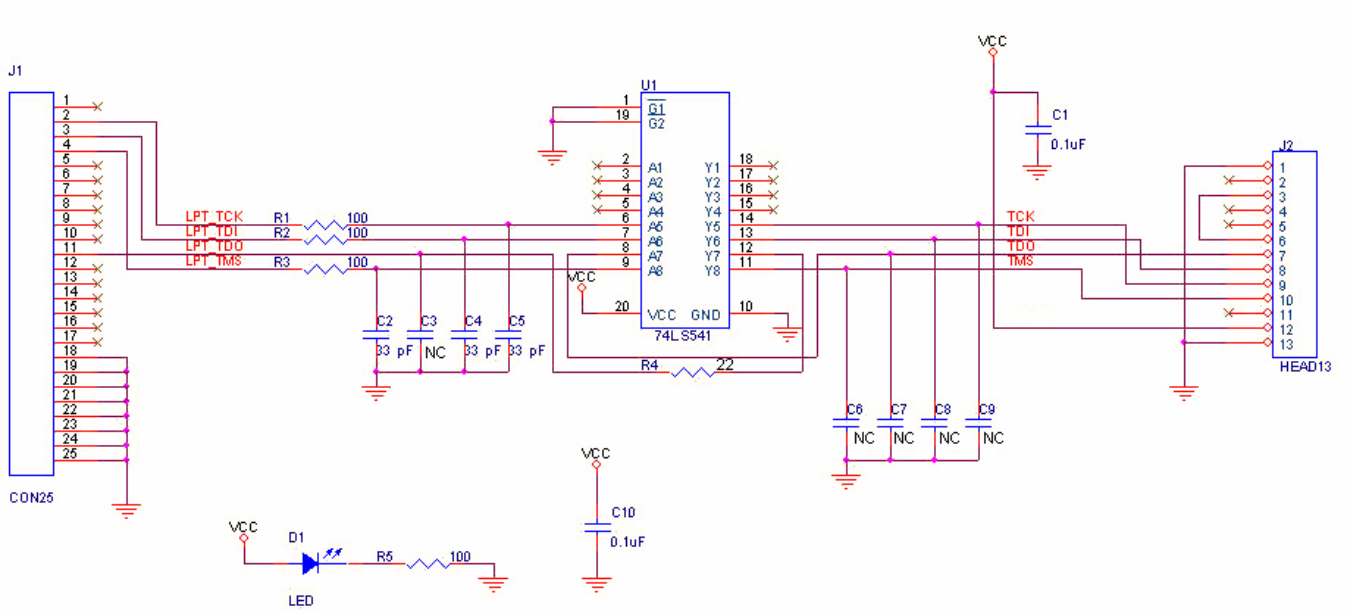
The JTAG dongle is JTAG programming cable, which is connected to the PC parallel port.

Because we can't get 74AHC541, 74LS541 is used instead. So, some circuit is modified from the original dongle circuit from http://www.lart.tudelft.nl/projects/jtag/. (This dongle can be also used for SA-1110.)

It's recommended to refer to the original JTAG dongle circuit. If you can't get 74AHC541, refer to our schematic circuit. If you are using our schematic, the cable length should not be longer than 1m.



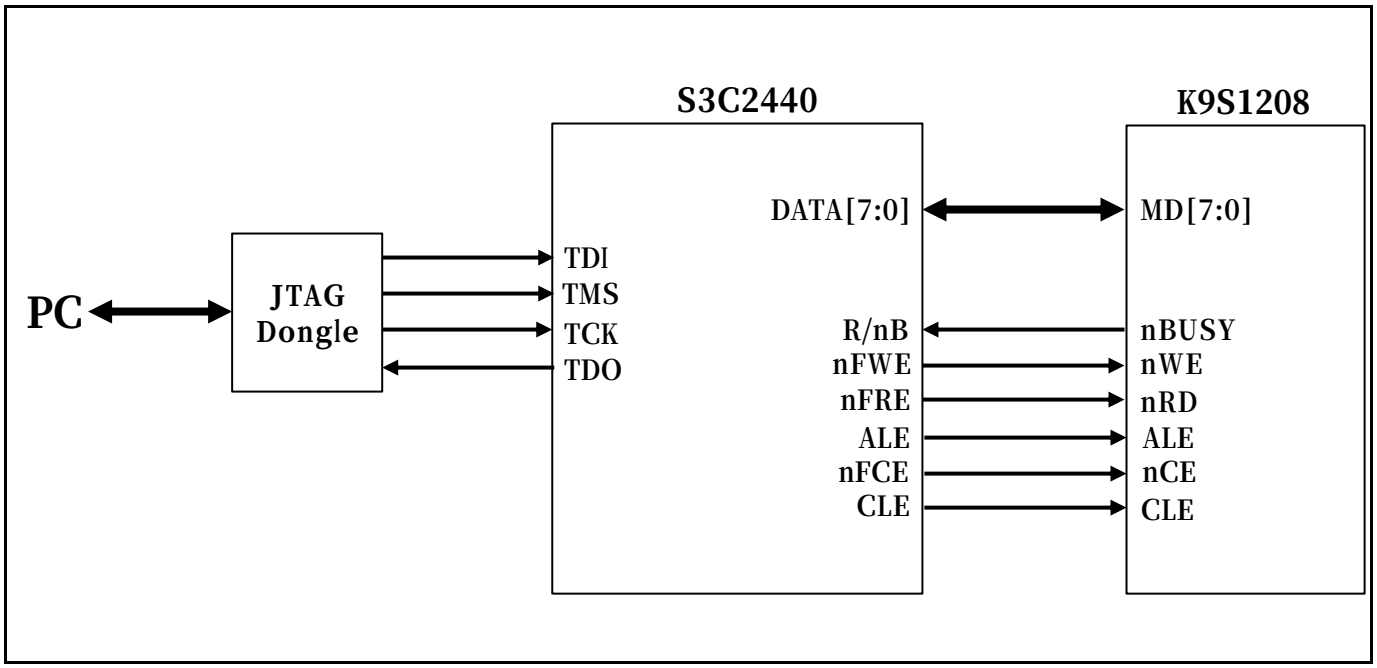
Holly Gates' Schematics for the JTAG Dongle (http://www.lart.tudelft.nl/projects/jtag/)



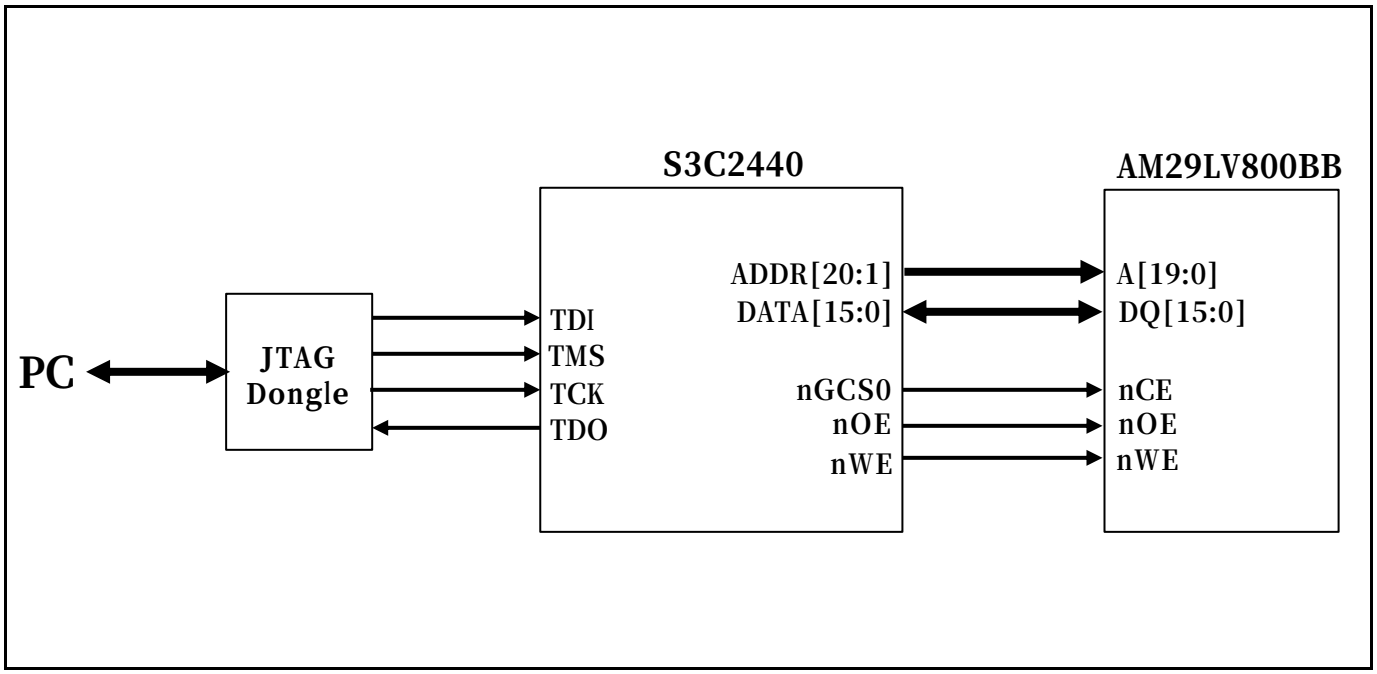
Modified Schematic for the JTAG Dongle Circuit Using 74LS541

HARDWARE INTERFACE FOR FLASH PROGRAMMING USING SJF2440

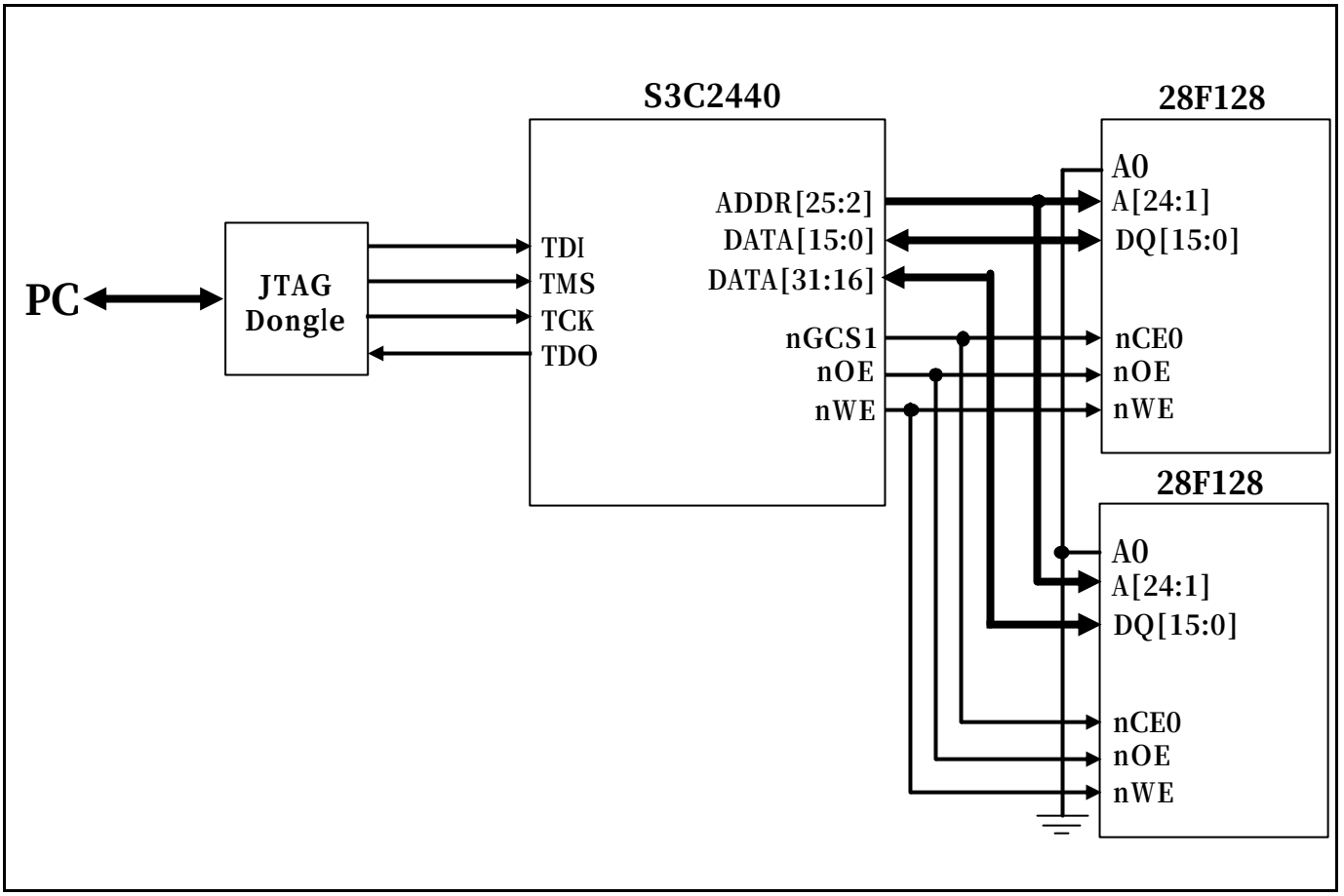
When you program flash memory using SJF2440, you should consider following hardware interface.



Hardware Interface for K9S1208 NAND Flash Programming



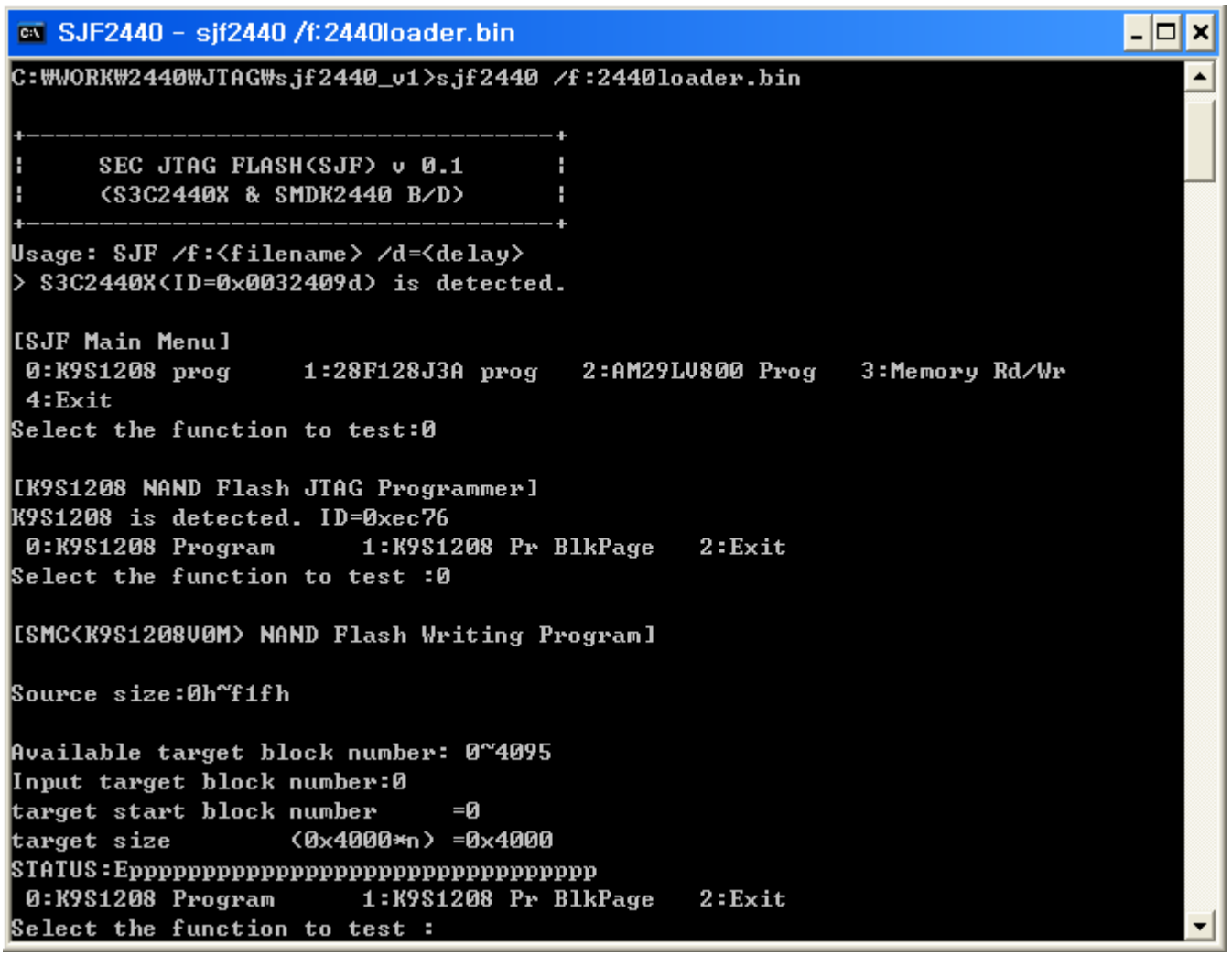
Hardware Interface for AM29LV800BB NOR Flash Programming



Hardware Interface for 28F128 x 2 STRATA Flash Programming

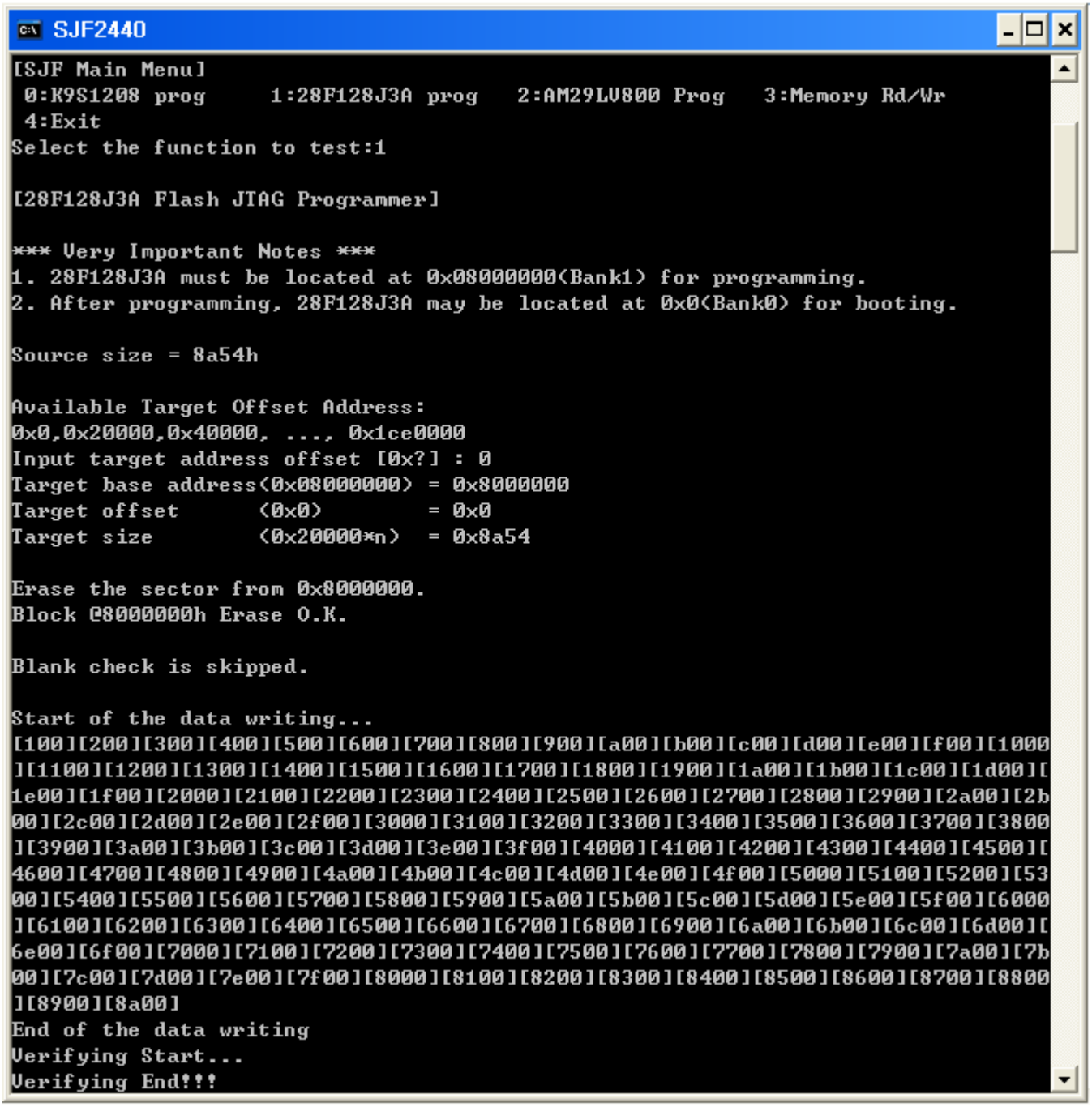
TO PROGRAM BOOT LOADER CODE ON K9S1208 NAND FLASH

1) Prepare your own boot loader image.(For example, 2440loader.bin is used here)
2) Run SJF.exe in the DOS command window as following example.
   `SJF2440 /f:2440loader.bin`
3) Type as follows



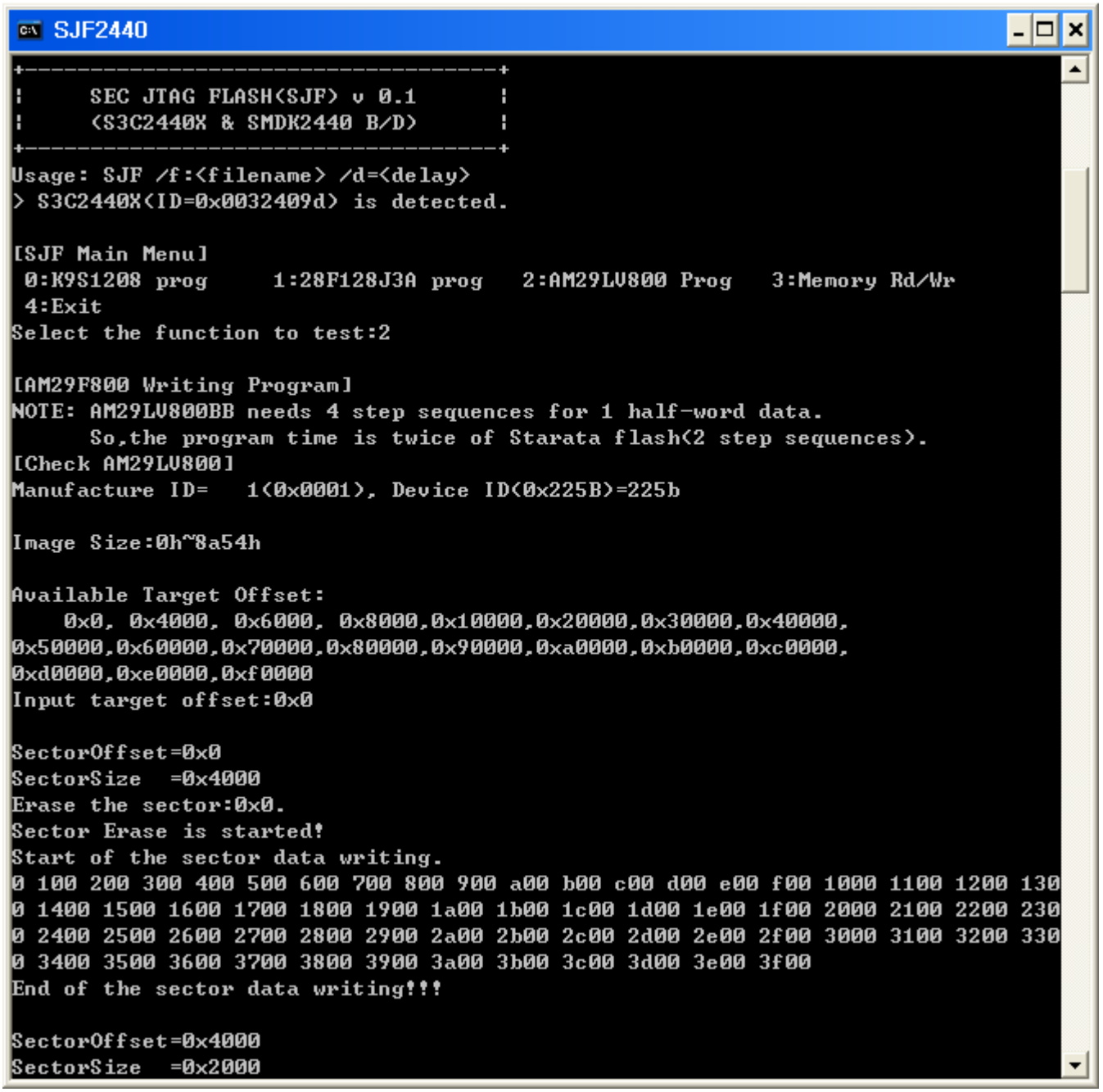
TO PROGRAM BOOT CODE ON 28F128 x 2 STRATA FLASH

1) Prepare your own boot loader image.(For example, u2440mon.bin is used here)
2) Run SJF.exe in the DOS command window as following example.
   `SJF2440 /f:u2410mon.bin`
3) Type as follows



TO PROGRAM BOOT CODE ON AM29LV800BB FLASH

1) Prepare your own boot loader image.(For example, u2440mon.bin is used here)
2) Run SJF.exe in the DOS command window as following example.
   `SJF2440 /f:u2440mon.bin`
3) Type as follows



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TO READ/WRITE A SPECIFIED ADDRESS OF THE EXTERNAL MEMORY BUS

1) SJF.exe in the DOS command window as following example.
   `SJF2440`
2) Refer to the following example is to read/write the PD6710 register in SMDK2440 board.