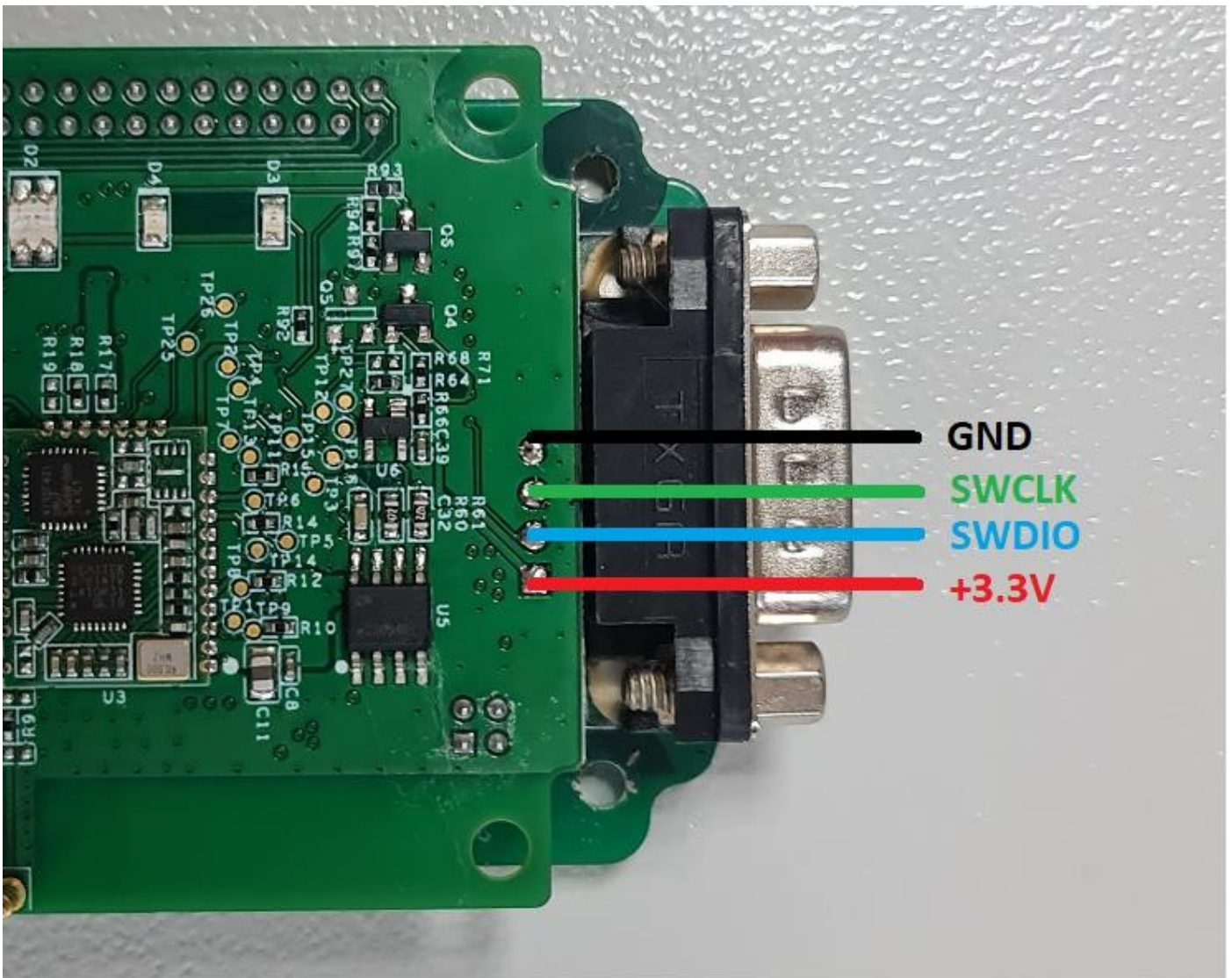


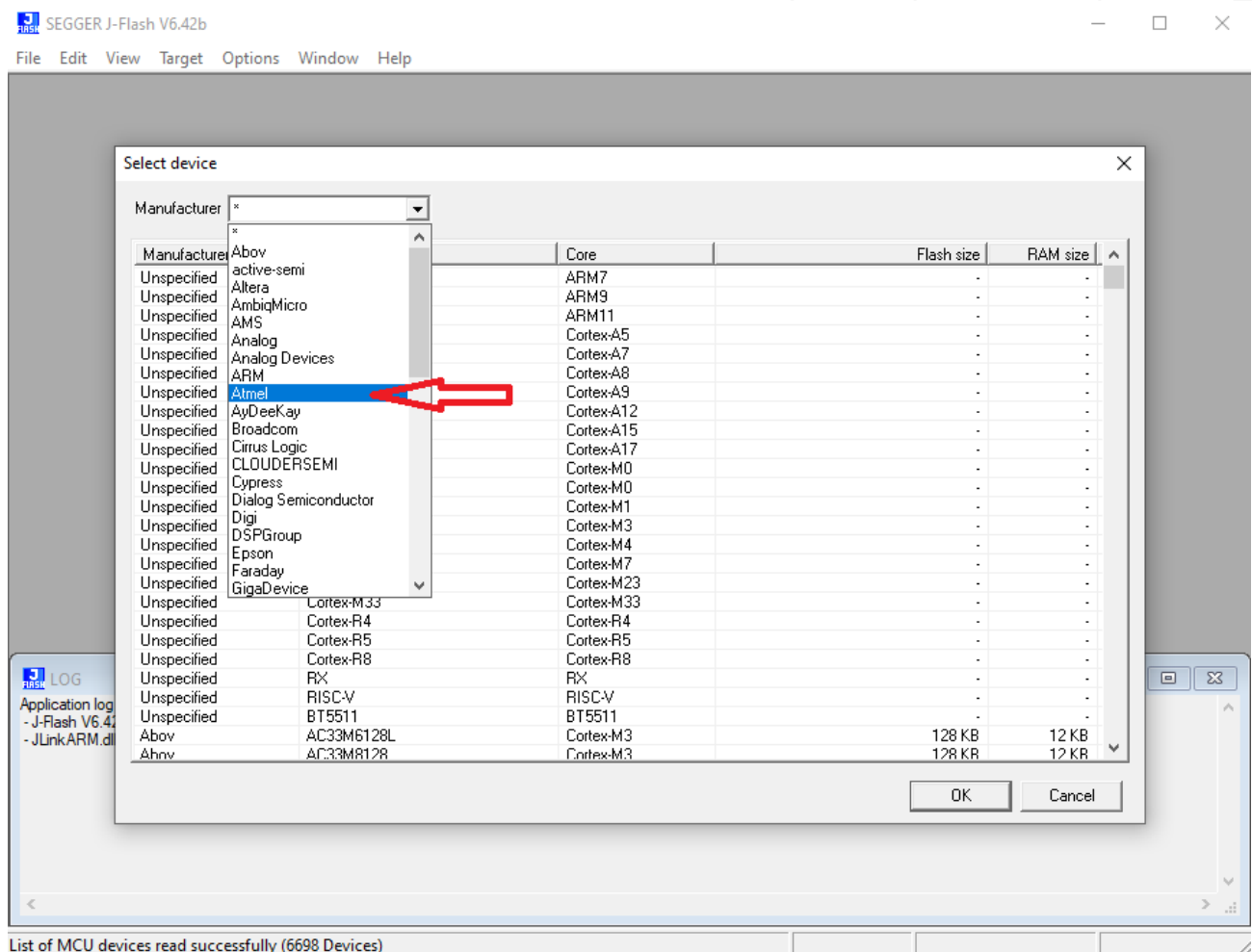
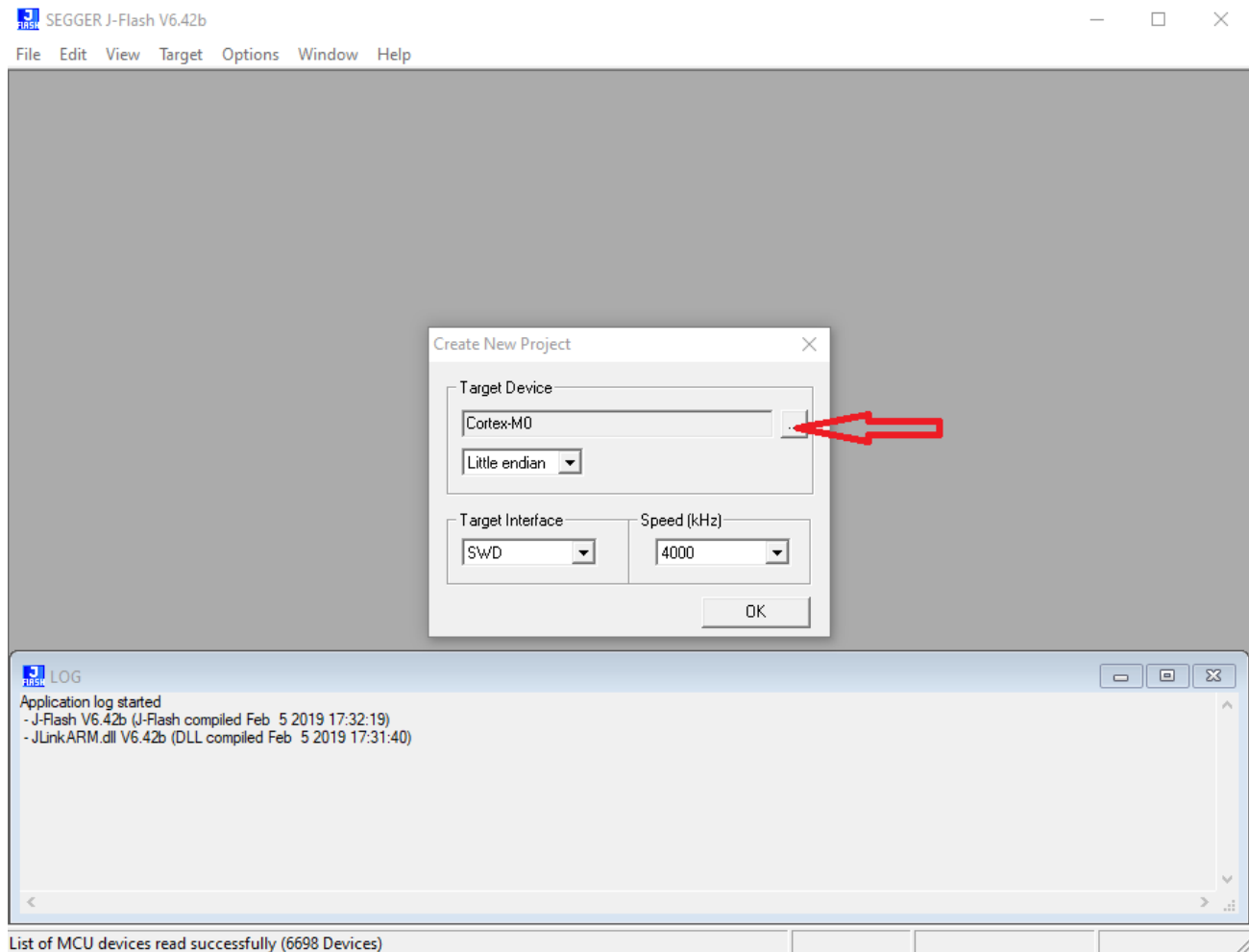
## Programming THINKDIAG 2 , DBSCAR VII using J-link programmer.

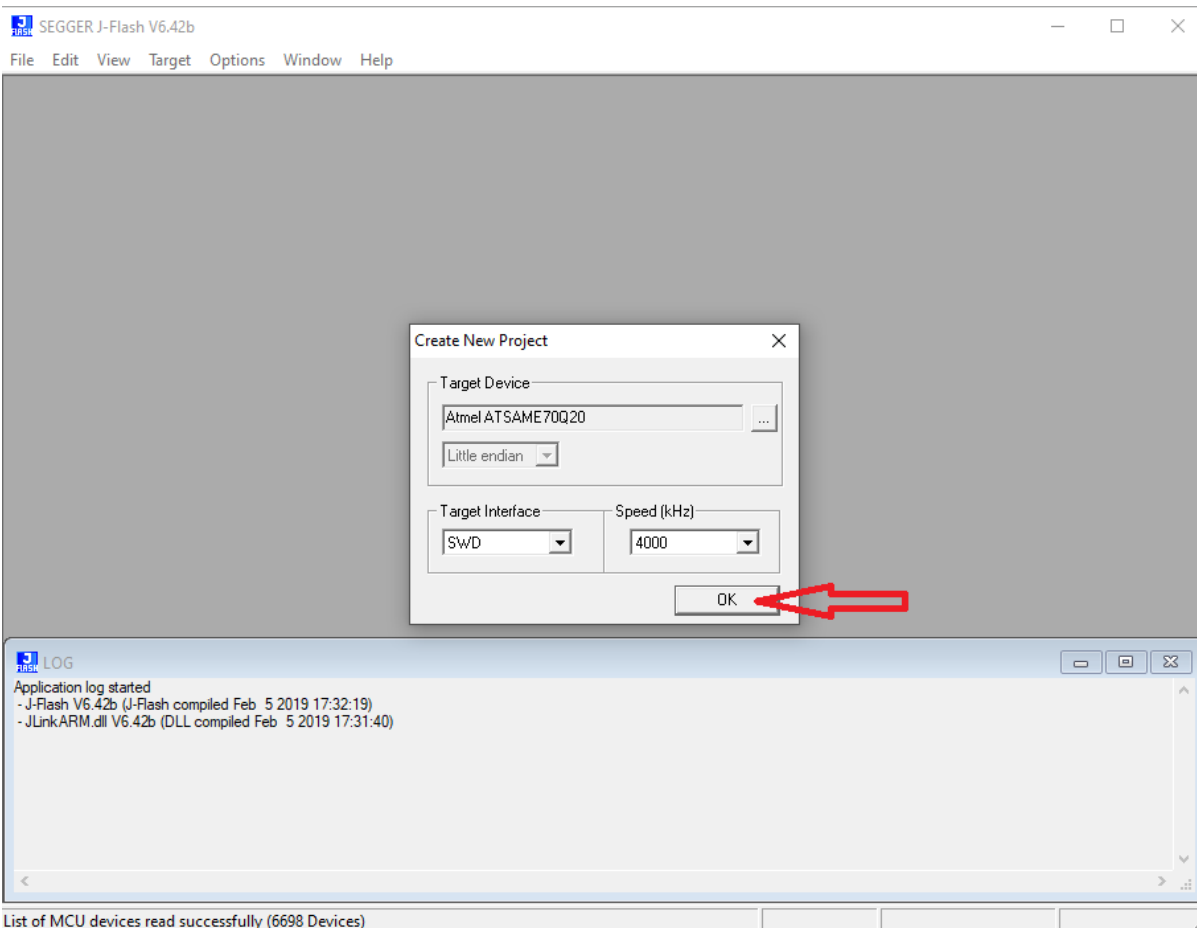
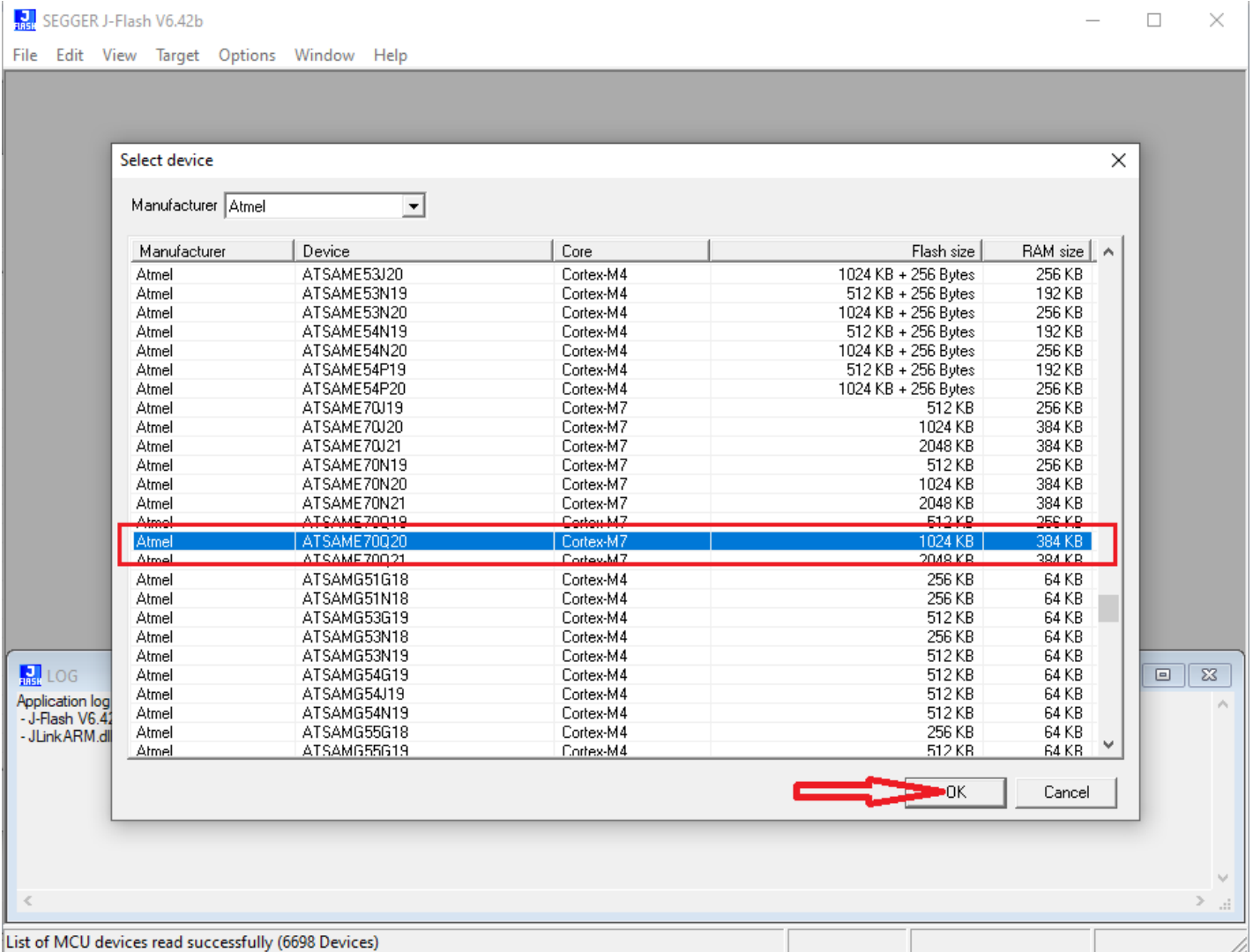


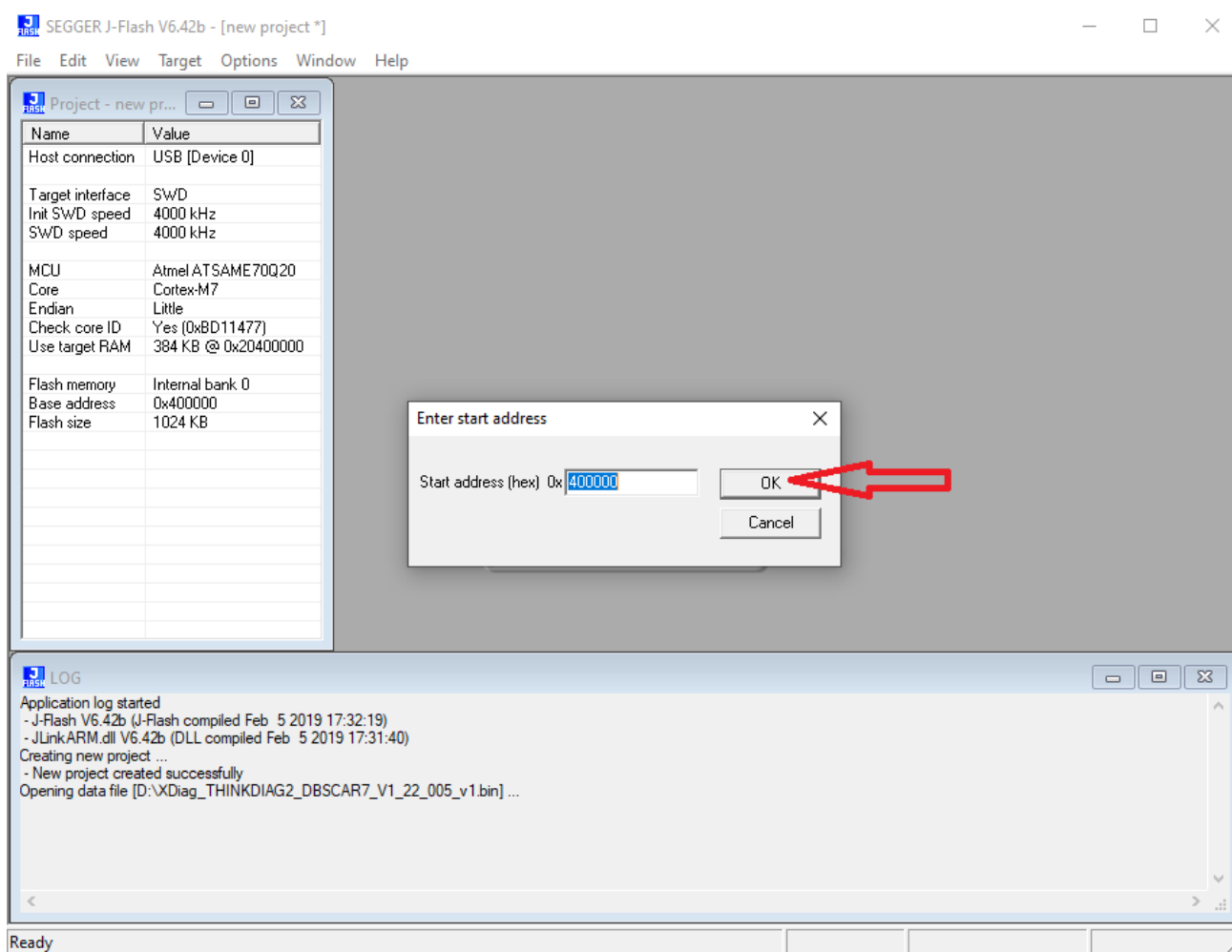
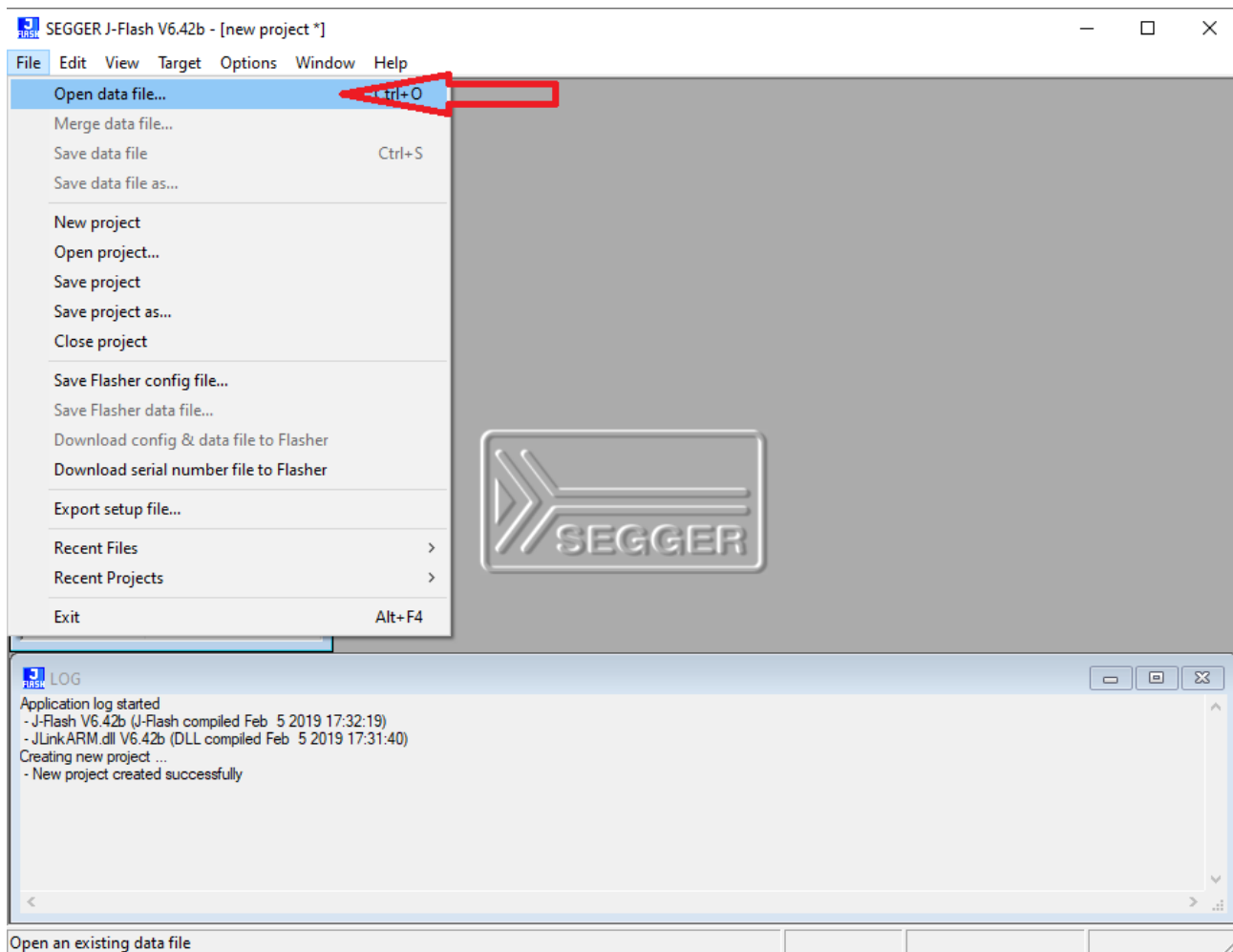
VTref	1	2	NC
Not used	3	4	GND
Not used	5	6	GND
SWDIO	7	8	GND
SWCLK	9	10	GND
Not used	11	12	GND
SWO	13	14	*
RESET	15	16	*
Not used	17	18	*
5V-Supply	19	20	*



Use Flash.exe Can open Project TD2.jflash instead create new project.







SEGGER J-Flash V6.42b - [new project \*]

File Edit View Target Options Window Help

Project - new

Host connection

Target interface

Init SWD speed

SWD speed

MCU

Core

Endian

Check core ID

Use target RAM

Flash memory

Base address

Flash size

Internal bank 0

0x400000

1024 KB

Connect

Disconnect

Test

Production Programming

Manual Programming

Address: 00000

x1 x2 x4

	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	ASCII	
00000	28	66	42	20	2F	F3	40	00	2B	F3	40	00	2D	F3	40	00	<fB / .e.+.e.-.e.
000010	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	00	00	00	00	+.e.+.e.+.e.+.e.
000020	00	00	00	00	00	00	00	00	00	00	00	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
000030	2B	F3	40	00	00	00	00	00	2B	F3	40	00	C9	C3	40	00	+.e.+.e.+.e.+.e.
000040	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
000050	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
000060	2B	F3	40	00	00	00	00	00	0D	D6	40	00	71	D6	40	00	+.e.+.e.+.e.+.e.
000070	D5	D6	40	00	2B	F3	40	00	D7	8C	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
000080	39	D7	40	00	9D	D7	40	00	2B	F3	40	00	2B	F3	40	00	9.e.+.e.+.e.+.e.
000090	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
0000A0	2B	F3	40	00	2B	F3	40	00	CD	C3	40	00	7F	8D	40	00	+.e.+.e.+.e.+.e.
0000B0	2B	F3	40	00	1B	D4	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
0000C0	2B	F3	40	00	2B	F3	40	00	FB	DB	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
0000D0	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
0000E0	77	D4	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	w.e.+.e.+.e.+.e.
0000F0	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
000100	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
000110	2B	F3	40	00	00	00	00	00	00	00	00	00	00	00	00	00	+.e.+.e.+.e.+.e.
000120	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
000130	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
000140	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
000150	2B	F3	40	00	00	00	00	00	00	00	00	00	00	00	00	00	+.e.+.e.+.e.+.e.
000160	00	00	00	00	00	00	00	00	F0	B5	03	AF	4D	F8	04	BD	+.e.+.e.+.e.+.e.
000170	88	B0	44	F2	00	04	00	20	C4	F2	06	04	AD	F8	1C	00	..D.+.e.+.e.+.e.

LOG

Application log started

- J-Flash V6.42b (J-Flash compiled Feb 5 2019 17:32:19)

- JLinkARM.dll V6.42b (DLL compiled Feb 5 2019 17:31:40)

Creating new project ...

- New project created successfully

Opening data file [D:\XDiag\_THINKDIAG2\_DBSCAR7\_V1\_22\_005\_v1.bin] ...

- Data file opened successfully (131072 bytes, 1 range, CRC of data = 0x34C9C114, CRC of file = 0x34C9C114)

Erase, program and verify target

SEGGER J-Flash V6.42b - [new project \*]

File Edit View Target Options Window Help

Project - new pr...

Host connection

Target interface

Init SWD speed

SWD speed

MCU

Core

Endian

Check core ID

Use target RAM

Flash memory

Base address

Flash size

USB [Device 0]

SWD

4000 kHz

4000 kHz

Atmel ATSAME70Q20

Cortex-M7

Little

Yes (0xBD11477)

384 KB @ 0x20400000

Internal bank 0

0x400000

1024 KB

Address: 0x400000

x1 x2 x4

Address	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	ASCII
400000	28	66	42	20	2F	F3	40	00	2B	F3	40	00	2D	F3	40	00	<fB / .e.+.e.-.e.
400010	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	00	00	00	00	+.e.+.e.+.e.+.e.
400020	00	00	00	00	00	00	00	00	00	00	00	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
400030	2B	F3	40	00	00	00	00	00	2B	F3	40	00	C9	C3	40	00	+.e.+.e.+.e.+.e.
400040	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
400050	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
400060	2B	F3	40	00	00	00	00	00	0D	D6	40	00	71	D6	40	00	+.e.+.e.+.e.+.e.
400070	D5	D6	40	00	2B	F3	40	00	D7	8C	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
400080	39	D7	40	00	9D	D7	40	00	2B	F3	40	00	2B	F3	40	00	9.e.+.e.+.e.+.e.
400090	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
4000A0	2B	F3	40	00	2B	F3	40	00	CD	C3	40	00	7F	8D	40	00	+.e.+.e.+.e.+.e.
4000B0	2B	F3	40	00	1B	D4	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
4000C0	2B	F3	40	00	2B	F3	40	00	FB	DB	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
4000D0	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
4000E0	77	D4	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	w.e.+.e.+.e.+.e.
4000F0	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
400100	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
400110	2B	F3	40	00	00	00	00	00	00	00	00	00	00	00	00	00	+.e.+.e.+.e.+.e.
400120	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
400130	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
400140	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+.e.+.e.+.e.+.e.
400150	2B	F3	40	00	00	00	00	00	00	00	00	00	00	00	00	00	+.e.+.e.+.e.+.e.
400160	00	00	00	00	00	00	00	00	F0	B5	03	AF	4D	F8	04	BD	+.e.+.e.+.e.+.e.
400170	88	B0	44	F2	00	04	00	20	C4	F2	06	04	AD	F8	1C	00	..D.+.e.+.e.+.e.

J-Flash

Programming target memory...

Programming range 0x0040D800 - 0x0040DFFF (2 KB)

42%

Cancel

LOG

- CPU is running at 120000 kHz.

- Start of erasing sectors

- Blank checking 0x00400000 - 0x00403FFF

- Erasing range 0x00400000 - 0x00403FFF ( 2 Sectors, 16 KB)

- Blank checking 0x00404000 - 0x0041FFFF

- Erasing range 0x00404000 - 0x0041FFFF ( 1 Sector, 112 KB)

- End of erasing sectors

- Start of flash programming

- Programming range 0x00400000 - 0x00403FFF ( 2 Sectors, 16 KB)

- Programming range 0x00404000 - 0x0041FFFF ( 1 Sector, 112 KB)

Ready

Connected

Core Id: 0x0BD11477

Speed: 4000 kHz



SEGGER J-Flash V6.42b - [new project \*]

File Edit View Target Options Window Help

Project - new pr... D:\XDiag\_THINKDIAG2\_DBSCAR7\_V1\_22\_005\_v1.bin

Name Value

Host connection USB [Device 0]

Target interface SWD

Init SWD speed 4000 kHz

SWD speed 4000 kHz

MCU Atmel ATSAME70Q20

Core Cortex-M7

Endian Little

Check core ID Yes (0xBD11477)

Use target RAM 384 KB @ 0x20400000

Flash memory Internal bank 0

Base address 0x400000

Flash size 1024 KB

Address: 0x400000 x1 x2 x4

Address	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	ASCII
400000	28	66	42	20	2F	F3	40	00	2B	F3	40	00	2D	F3	40	00	<fB / .e.+e.-.e.
400010	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	00	00	00	00	+e.+e.+e.+e.
400020	00	00	00	00	00	00	00	00	00	00	00	00	2B	F3	40	00	.....+e.
400030	2B	F3	40	00	00	00	00	00	2B	F3	40	00	C9	C3	40	00	+e.+e.+e.+e.
400040	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
400050	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
400060	2B	F3	40	00	00	00	00	00	0D	D6	40	00	71	D6	40	00	+e.+e.+e.+e.
400070	D5	D6	40	00	2B	F3	40	00	D7	8C	40	00	2B	F3	40	00	..e.+e.+e.+e.
400080	39	D7	40	00	9D	D7	40	00	2B	F3	40	00	2B	F3	40	00	9.e.+e.+e.+e.
400090	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
4000A0	2B	F3	40	00	2B	F3	40	00	CD	C3	40	00	7F	8D	40	00	+e.+e.+e.+e.
4000B0	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
4000C0	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
4000D0	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
4000E0	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
4000F0	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
400100	00	00	00	00	00	00	00	00	F0	B5	03	AF	4D	F8	04	BD	.....M...
400110	88	B0	44	F2	00	04	00	20	C4	F2	06	04	AD	F8	1C	00	..D....

J-Flash V6.42b

Target erased, programmed and verified successfully - Completed after 1.744 sec

OK

LOG

- Flash programming performed for 2 ranges (131072 bytes)
- 0x400000 - 0x403FFF ( 2 Sectors, 16 KB)
- 0x404000 - 0x41FFFF ( 1 Sector, 112 KB)
- Start of verifying flash
- End of verifying flash
- Start of restoring
- End of restoring
- Executing exit sequence ...
- De-initialized successfully
- Target erased, programmed and verified successfully - Completed after 1.744 sec

Ready Connected Core Id: 0x0BD11477 Speed: 4000 kHz

SEGGER J-Flash V6.42b - [new project \*]

File Edit View Target Options Window Help

Project - new pr... NKNDIAG2\_DBSCAR7\_V1\_22\_005\_v1.bin

Name Value

Host connection USB [Device 0]

Target interface SWD

Init SWD speed 4000 kHz

SWD speed 4000 kHz

MCU Atmel ATSAME70Q20

Core Cortex-M7

Endian Little

Check core ID Yes (0xBD11477)

Use target RAM 384 KB @ 0x20400000

Flash memory Internal bank 0

Base address 0x400000

Flash size 1024 KB

Address: 0x400000 x1 x2 x4

Address	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	ASCII
400000	28	66	42	20	2F	F3	40	00	2B	F3	40	00	2D	F3	40	00	<fB / .e.+e.-.e.
400010	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	00	00	00	00	+e.+e.+e.+e.
400020	00	00	00	00	00	00	00	00	00	00	00	00	2B	F3	40	00	.....+e.
400030	2B	F3	40	00	00	00	00	00	2B	F3	40	00	C9	C3	40	00	+e.+e.+e.+e.
400040	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
400050	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
400060	2B	F3	40	00	00	00	00	00	0D	D6	40	00	71	D6	40	00	+e.+e.+e.+e.
400070	D5	D6	40	00	2B	F3	40	00	D7	8C	40	00	2B	F3	40	00	..e.+e.+e.+e.
400080	39	D7	40	00	9D	D7	40	00	2B	F3	40	00	2B	F3	40	00	9.e.+e.+e.+e.
400090	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
4000A0	2B	F3	40	00	2B	F3	40	00	CD	C3	40	00	7F	8D	40	00	+e.+e.+e.+e.
4000B0	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
4000C0	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
4000D0	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
4000E0	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
4000F0	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	2B	F3	40	00	+e.+e.+e.+e.
400100	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	+e.+e.+e.+e.
400110	88	B0	44	F2	00	04	00	20	C4	F2	06	04	AD	F8	1C	00	.....M...

Connect

Disconnect

Test

Production Programming F7

Manual Programming

Secure Chip

Unsecure Chip

Check Blank F2

Erase Sectors F3

Erase Chip F4

Program F5

Program & Verify F6

Verify F8

Read back

Start Application F9

LOG

- Flash programming performed for 2 ranges (131072 bytes)
- 0x400000 - 0x403FFF ( 2 Sectors, 16 KB)
- 0x404000 - 0x41FFFF ( 1 Sector, 112 KB)
- Start of verifying flash
- End of verifying flash
- Start of restoring
- End of restoring
- Executing exit sequence ...
- De-initialized successfully
- Target erased, programmed and verified successfully - Completed after 1.744 sec

Start target application (uses RESET pin to start application) Connected Core Id: 0x0BD11477 Speed: 4000 kHz