1、先要使用跳帽将 BTO 和 BT1 分别接到 GND 上,如下图所示:



2、找到 STM32F103C8T6 最小系统板 SWD 接口,如下图所示:



- 3、将 ST-LINK 下载器的 3.3V、DIO、CLK、GND 引脚和 SWD 接口引脚一一对应连接起来
- 4、打开 KEIL 工具软件,点击如下图所示按钮:

File	Edit	View	Project	Flash	Debug	Peripherals	Tools	SVCS	Window	Help				
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5、 在弹出的界面里点击 Debug 按钮, 然后在 Use 里选择 ST-LINK Debugger, 如下图所示:

W Options for Target 'TEMPLET'		X
Device   Target   Output   Listing   User   C/C++   Asm	Linker Debug Utilities	
C Use Simulator with restrictions Settings	● Use: ST-Link Debugger	✓ Settings
Limit Speed to Real-Time	Signum Systems JTAGjet J-LINK / J-TRACE Cortex	<b>^</b>
✓ Load Application at Startup ✓ Run to main() Initialization File:	✓ Load A NULink Debugger Initializatio SiLabs UDA Debugger	main()
Restore Debug Session Settings         Image: Section of the section	ST-Link Debugger         CMSIS-DAP Debugger         Models Cortex-M Debugger         PEMicro Debugger         Image: Strategy of the st	Edit
CPU DLL: Parameter:	Driver DLL: Parameter:	
SARMCM3.DLL -REMAP	SARMCM3.DLL	
Dialog DLL: Parameter:	Dialog DLL: Parameter:	
DCM.DLL -pCM3	TCM.DLL -pCM3	
Warn if outdated Executable is loaded Manage Component Vie	Warn if outdated Executable is loaded	
OK Can	Defaults	Help

6、将 STM32F103C8T6 最小系统板上电,然后点击 Use 旁边的 Settings 按钮,弹出如下界面,

则说明 ST-LINK 下载器连接成功:

Debug  Trace  Flash Download  Debug Adapter Unit: ST-LINK/V2	SW Device IDCODE Device Name SWDIO 0x1BA0 ARM CoreSight SW-DP	Move Up
Serial 53FF71067766485259261681 Version: V2 FW: V2J31S7 Check version on sta Target Com Port SW Clock Req: 4 MHz Selecter 4 MHz	▲utomatic Dete <mark>连接成功</mark> : ⑦ Manual Configurati Device Name: Add Delete Update IR len: ▲P:	Down
Debug Connect & Reset Options Connect: Normal Veset: Autodet V Reset after Conn Stop after	Cache Options Etect  Cache Code Cache Memory Cache Memory Cache Memory Cache Memory	

- 7、点击确定,再点击 OK 保存设置。
- 8、程序编译成功后,就可以使用 SWD 方式进行下载了。