

# nRF52840开发环境搭建教程





## nRF52840开发环境搭建教程

#### 准备工作:

需要准备VS CODE,以及nRF Connect for Desktop V4.2.0,以及nRF-Command-Line-Tools-10.23.0-x64.exe软件,SDK我们使用nRF Connect SDK v2.4.2版本。

本文仅供参考,详细安装教程请参考https://www.nordicsemi.com

#### 相关链接:

nRF Command Line Tools: <u>https://www.nordicsemi.com/Products/Development-tools/nRF-</u> <u>Command-Line-Tools</u>

nRF Connect for Desktop V4.2.0: <u>https://www.nordicsemi.com/Products/Development-tools/nRF-Connect-for-Desktop</u>

#### 安装步骤:

1. 官网下载nRF-Command-Line-Tools,直接安装默认路径即可。

Choose platform	Selected version 10.23.0 Windows x86 64	
and version	nRF-Command-Line-Tools-10.23.0-x64.exe	
Choose your Desktop platform and select version (latest released version recommended)		
Windows x86 64 🗸 🗸 🗸		
8. a		

2. 打开nRF Connect,选择Toolchain Manager进行安装,注意:安装时有可能要用到魔法上网。



3. 打开的Toolchain Manager界面下载nRF Connect SDK v2.4.2

Toolchain Manager v1.2.5					×
SDK ENVIRONMENTS SETTINGS	ABOUT				
nRF Connect SDK v2.4.2		First steps	Open VS Code	•	
nRF Connect SDK v2.4.1			Install		
nRF Connect SDK v2.4.0			Install	*	
CLEAR LOG OPEN LOG FILE		AUTOS	ROLL LOG 💽 SF	IOW LOG	

4. 安装好之后,点击Open VS Code,第一次打开可能需要下载一些插件,都需要下载。

Toolchain Manager V1.2.5			_	U ~
SDK ENVIRONMENTS SETTINGS	ABOUT			
				1
nRF Connect SDK v2.4.2		First steps	Open VS Code	•
nRF Connect SDK v2.4.1			Install	•
nRF Connect SDK v2.4.0			Install	•
CLEAR LOG OPEN LOG FILE		AUTOS	ROLL LOG <u> </u> SI	HOW LOG

5. 当打开的Vs code出现以下界面,我们还需要在左边的扩展中下载nRF Connect for VS Code



6. 我们本次开发使用的2023.6.6版本,后续版本可能会影响操作工程导入的步骤



7. 导入SDK例程

¢	资源管理器 (Ctrl+Shift+E)	⑦ 工作区信任	G Welcome to nRF Connect	℅ New Application ×				
Q	✓ WELCOME							
ŕ	+ Open an existing application							
₽ <b>₽</b>	Create a new application				New Application			
2	Visit documentation				Application type ⑦			
× –	A <sup>2</sup> Give feedback Generate support information				<ul> <li>Freestanding</li> <li>Workspace</li> </ul>			
ß					Freestanding applications require and use a locally installed ne information	RF Connect SI	DK. <u>More</u>	
ା					nRF Connect SDK ⑦			
					nRF Connect Toolchain ®			
					2.4.0 (c:\ncs\toolchains\31f4403e35)			
					Application location (2)			
					d:\ebytework\temp\52840			
					Application template (2)			
					zenhvr/samples/drivers/uart/enho.bot		Browse	
					Application name 🕐			
					echo_bot			
						Create	Application	
	~ APPLICATIONS						1	
	you can open any folder that contains application source and have							
	it added here as an application.							
	Open Application							

8. 选择芯片型号

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Create a new application			Add Build Configuration 2. 现件性的	
Generate support information			Board Nerriton ⑦	
0			Nordic boards     All boards	
<i>A</i> ₽			Configuration () prj.conf	
			Kconfig fragments ⑦ No fragments ovailable 3. 配置文件	
			Extra CMake arguments ③ Add argument	
			build directory name (0) build	
3				
APPLICATIONS     Echo, bot     No build configurations Click to c			(MfR (All Conformation)	
Ø				

#### 9. 修改晶振源

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I NRF CONNECT		© prj.conf M ×			
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> NRF52840DK_NRF52840					
k≟ Build ar Debug	问题 输出 机化性制合 机铸 NRF TERMINAL				
B) Flash     By Cericetree Overlay file     Soverlay file	Execute debugger commands using "-exec Thread 4 received signal SIGTMAP, Trace [switching to Thread S36871409] arch_cpu_idle() at C:/ncs/V2.4.2/V2 135 cpusie 1 Kill the program being debugged/ (y or [Inferior 1 (Remote target) killed]			(when GDB is the debugger)	

### 10. 编译与烧录

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Duiki nRF52840 DK NRF 29 ····								
<ul> <li>&gt; €CH0_BOT build</li> <li>&gt; ₹3 Source files</li> <li>&gt; ₹3 Input files</li> <li>M CMakeList.bit A</li> <li>O pricooff M</li> </ul>								
> NBF52840DK NBF52840 > ACTIONS								
Debug								
Consideration C	Execute debugger Commands using Thread 4 received signal SIGTRA [Switching to Thread 336871400] arch_cpu_idle () at C:/ncs/v2.4 135 cpsie i							
@ #	Kill the program being debugged [Inferior 1 (Remote target) kil The program 'd:/ebytework/temp/	<pre>#? (y or n) [answered Y; iled] '52840/echo_bot/build/ze</pre>		with code 0 (0x00000000).		Building     来遊: nRF Connect for VS C	ode (8° 88)	C RCH

### 11. 之后重启模组即可使用

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RX: Echo: 123123	^	串口选择		
[2023-10-17 11:32:55.891]				~
TX: 123123		波特室	115200	~
[2023-10-17 11:32:55.999]				_
RX: Echo: 123123		停止位	1	~
[2023-10-17 11:32:56.044]		数据位	8	~
TX: 123123		核验位	None	~
[2023-10-17 11:32:56.155]		100 002 122		
RX: Echo: 123123		串口操作	● 打升	日串千
[2023-10-17 11:32:56.211]		保存窗口	吉玲	培助
TX: 123123				10.0A
[2023-10-17 11:32:56.325]				a ========
RX: Echo: 123123			100	WI#1+
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🔅 • www.openedv.com S:32 R:59	CTS=0 DSR=0 DCD=0	前时间 11:41	:49	



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