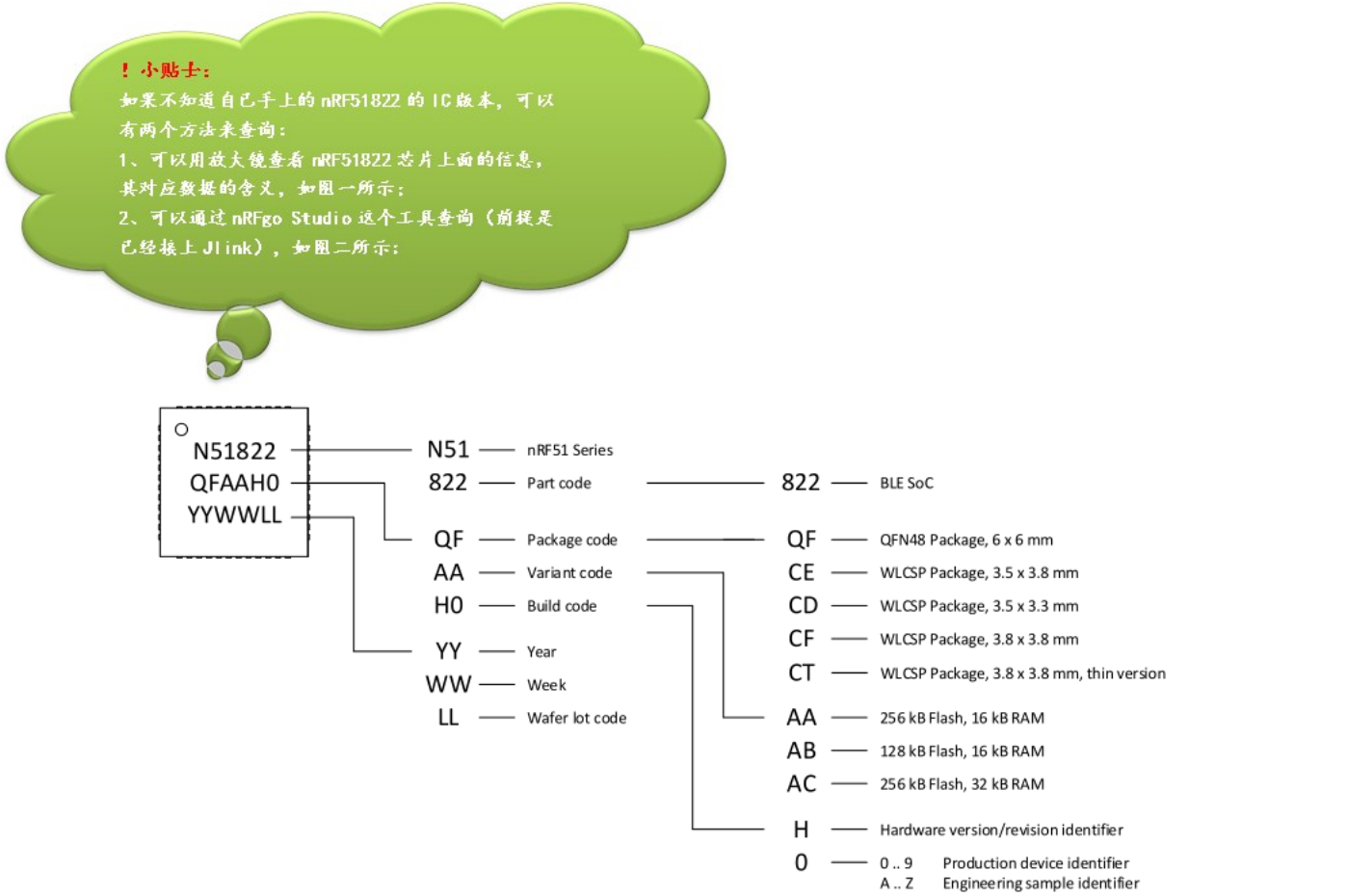


# Nordic的51822中的SDK与SoftDevice的对应关系

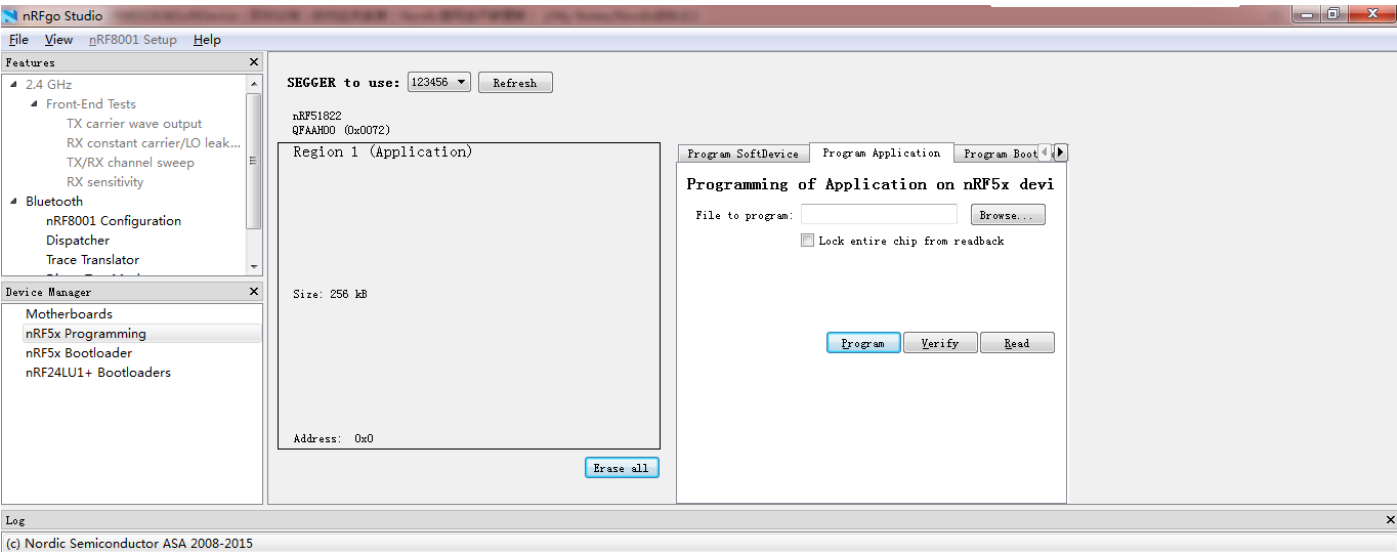
## 一、前言

Nordic的BLE，它们的协议栈与SDK的版本比较多，对于新手来说会分不清它们之间的关系，从而导致不知道该如何正确地选择哪个协议栈版本，接下来我会用几个表格或图片来理清它们之间的关系。

## 二、nRF51822的IC版本



(图1)



(图2)

以下是nRF51822芯片表面上编号信息的IC版本、Flash以及RAM大小对应关系

nRF51822 IC revision <sup>1)</sup>	Packet variant <sup>2)</sup>	Build code <sup>2)</sup>	Package	Flash [kB] <sup>1)</sup>	RAM [kB] <sup>1)</sup>
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1	QF AA	CA	QFN48	256	16
		CO		128	
	QF AB	AA			
		AO			
	CE AA	BA	WLCSP	256	
		BO			
2	QF AA	FAO	QFN48	256	16
		GCO			
		Gx0 <sup>3)</sup>		128	
	QF AB	Bx0 <sup>3)</sup>			
	CE AA	CAO	WLCSP		
		DAO			
		Dx0 <sup>3)</sup>			
3	QF AA	Hx0 <sup>3)</sup>	QFN48	256	16
	QF AB	Cx0 <sup>3)</sup>		128	
	QF AC	Ax0 <sup>3)</sup>		256	32
	CD AB	Ax0 <sup>3)</sup>	WLCSP	128	16
	CE AA	Ex0 <sup>3)</sup>		256	
	CF AC	Ax0 <sup>3)</sup>			32

Table 1. nRF51822 IC revision overview

1) nRF51 IC revision, RAM size and Flash size can be retrieved by calling the nrf\_ic\_info\_get function in the ic\_info library in nRF51 SDK 8.1.0+

2) Packet variant and build code can be read from markings on top of the nRF51 IC.

3) The x in the build code could be A..Z for engineering release, or 0..9 for production release. (HWID is given for x = 0, if X ≠ 0 the HWID will be different).

来源:

[http://infocenter.nordicsemi.com/topic/com.nordic.infocenter.nrf51/dita/nrf51/compatibility\\_matrix/nRF51822\\_ic\\_revision\\_overview.html#cp=2\\_0\\_1](http://infocenter.nordicsemi.com/topic/com.nordic.infocenter.nrf51/dita/nrf51/compatibility_matrix/nRF51822_ic_revision_overview.html#cp=2_0_1)

三、nRF51822的IC版本、SDK及Soft Device的对应关系

nRF51 IC rev.	nRF51 SDK <sup>1)</sup>	S110 SD <sup>2)</sup>	S110 SDS <sup>3)</sup>	S120 SD <sup>2)</sup>	S120 SDS <sup>3)</sup>	S130 SD <sup>2)</sup>	S130 SDS <sup>3)</sup>	S210 SD <sup>2) 4)</sup>	S210 SDS <sup>3)</sup>	S310 SD <sup>2) 5)</sup>	S310 SDS <sup>3)</sup>
1	4.4.2	5.2.1 <sup>6)</sup>	1.1	–	–	–	–	2.0.0 <sup>7)</sup>	1.0	–	–
2	4.4.2	5.2.1	1.1	–	–	–	–	3.0.0	1.2	–	–
	5.2.0	6.0.0	1.2					3.0.0	1.2	1.0.0	1.0
		6.2.1									
	6.1.0	7.x.x	1.3	1.0.1	1.1			3.0.0	1.2	1.0.0	1.0
	–	8.0.0	2.0	2.x	2.1			4.0.1	2.0	2.0.1	2.0
3	–	5.2.1	1.1	–	–	–	–	–	–	–	–
	–	6.2.1	1.2	–	–	–	–	–	–	–	–
	6.1.0	7.x.x	1.3	1.0.1	1.1	–	–	3.0.0	1.2	1.0.0	1.0
	7.0.1					0.5.0– 1.alpha	0.5	4.0.1	2.0	–	–
	7.1.0									2.0.1	2.0
	7.2.0										
	8.0.0									0.9.0– 1.alpha	0.5

	8.1.0	8.0.0	2.0	2.x	2.1	1.0.0	1.0				
	9.0.0										
	10.0.0							5.0.0	3.0	3.0.0	3.0
	11.0.0-2.alpha	-	-	-	-	2.0.0-7.alpha	-	5.0.0	3.0	-	-
	11.0.0	-	-	-	-	2.0.0	2.0	-	-	-	-

Table 1. IC revisions, SDK, and SoftDevice compatibility matrix

- 1) At v11, the SDK has been renamed into nRF5 SDK, and it includes support for both nRF51 and nRF52.
- 2) SD = SoftDevice
- 3) SDS = SoftDevice Specification
- 4) ANT only SoftDevice. Only compatible with nRF51422 IC.
- 5) ANT and BLE combined SoftDevice. Only compatible with nRF51422 IC.
- 6) Valid for nRF51822 only.
- 7) Preprogrammed in factory.

来源：

[http://infocenter.nordicsemi.com/topic/com.nordic.infocenter.nrf51/dita/nrf51/compatibility\\_matrix/nRF51422\\_nRF51822\\_ic\\_rev\\_sdk\\_%20sd\\_comp\\_matrix.html?cp=2\\_0\\_3](http://infocenter.nordicsemi.com/topic/com.nordic.infocenter.nrf51/dita/nrf51/compatibility_matrix/nRF51422_nRF51822_ic_rev_sdk_%20sd_comp_matrix.html?cp=2_0_3)

### 三、补充

Nordic BLE协议栈、SDK的版本以及对应关系表官网会不断更新，其相对应的最新内容如下：

#### 1、BLE协议栈

[http://infocenter.nordicsemi.com/index.jsp?topic=%2Fcom.nordic.infocenter.nrf51%2Fdita%2Fnrf51%2Fcompatibility\\_matrix%2FnRF51822\\_ic\\_revision\\_overview.html&cp=2\\_0\\_1](http://infocenter.nordicsemi.com/index.jsp?topic=%2Fcom.nordic.infocenter.nrf51%2Fdita%2Fnrf51%2Fcompatibility_matrix%2FnRF51822_ic_revision_overview.html&cp=2_0_1)

#### 2、SDK

<https://www.nordicsemi.com/eng/nordic/Products/nRF5-SDK/nRF5-SDK-zip/54291>

#### 3、对应关系表

<http://infocenter.nordicsemi.com/index.jsp?topic=%2Fcom.nordic.infocenter.s132.api.v2.0.0%2Findex.html>