Product Selection Guide for Nordic nRF52 based modules					
Module	**1507-AL**	**1507-AX**	**1807-LR**	**1907-LL**	**1907-HT**
Nordic BLE Device	nRF52810	nRF52832	nRF52840	nRF52811	nRF52833
Processor	64 Mhz M4 Cortex	64 Mhz M4 Cortex w. Floating point	64 Mhz M4 Cortex w. Floating point	64 Mhz M4 Cortex	64 Mhz M4 Cortex w. Floating point
Flash	196 kB	512 kB	1048 kB	196 kB	512 kB
Ram	24 kB	64 kB	256 kB	24 kB	128 kB
32 Khz Crystal	Included	Included	Included	Included	Included
ARM Cryptocell			Yes		
Bluetooth Qualification	5.0	5.0	5.0	5.1	5.1
BT5.0 2 Mb data rate	yes	yes	yes	yes	yes
BT 5.0 long range			yes	yes	yes
BT 5.1 Direction finding				yes	yes
Programmable GPIOs	13	30	46	13	30
SPI, TWI, UART, PWM	yes	yes	yes	yes	yes
High Speed SPI			yes		yes
I2S, PDM	yes	yes	yes	PDM	yes
USB Peripheral			yes		yes
QSPI			yes		
ADCs	3	8	8	3	8
NFC Tag		yes	yes		yes
Other Protocols	ANT	ANT	ANT, Zigbee, Thread	ANT, Zigbee, Thread	ANT, Zigbee, Thread
Max Temperature	85ºC	85ºC	85ºC	85ºC	105ºC

Insight SIP offers a comprehensive range of modules based on the Nordic Semiconductor nRF52 family of device. All modules are in the same miniature 8 x 8 x 1 mm form factor and have a common core pinout (i.e. voltage supply, minimum i/o set, RF, Antenna etc). All have an integrated high performance miniature antenna.

We do not recommend our 13 Series or 09 Series for new designs, as the 15, 18 and 19 Series offer the latest generation technology and superior performance. However, our 09 and 13 series devices remain available for customers who have designed these in and wish to keep using them.

The above table highlights the key features of each device, to aid selection of candidate module for any application. We recommend looking at the data sheet for full details.

Bluetooth Qualification is the standard to which the module is qualified as defined by the Bluetooth SIG. This does not necessarily mean it has all the *features* of that specification, just that it conforms to it without errors.

Bluetooth Features refers to the features available on each module

This is a point of confusion, and many vendors do not distinguish clearly between these two things, so label a module "Bluetooth 5.0", even though it may have only Bluetooth 4.2 features, for example.