# Etude de cas

| | NRF 51 | NRF24LE1 |
|---|---|---|
| Traitement | 32-bit ARM® Cortex™ M0 32-bit processor | 8 bits |
| Protocole | Enhanced ShockBurst | Enhanced ShockBurst (ESB) - packet buffering, packet acknowledgement and automatic retransmission of lost packets. But : CRC must be enabled when Enhanced ShockBurst™ is enabled |
| Trames utilisés | Payload de 32-byte (limitation), mais peut aller jusqu'à 256 byte | Payload de 32 bits (4 bits) |
| Portée | | 100m libre, 20m urbain |
| Consommation | The specified current consumption is 0.6uA for System Off mode and no RAM retention, low voltage mode it is 1.6uA | 8 mA - 12mA (1µA en standby) |
| Alimentation | Low power : 1.75 -> 1.95 (average = 1.8), else average = 3 | an operating range of 1.9 to 3.6V for Vcc (the chip will be run at 3.3V in most circumstances). |
| Multi pipe ? | None | Yes, a set of six parallel data pipes with unique addresses |
| Fréquence | frequency band at 2.400 to 2.4835 GHz, 1 MHz non-overlapping channel spacing at 1 Mbps and 250 kbps, 2 MHz non-overlapping channel spacing at 2 Mbps | bandwidth of less than 1 MHz at 250kbps, 1Mbps and a bandwidth of less than 2 MHz at 2Mbps, 2.400 GHz to 2.525 GHz |
| Autres informations | 2.4 GHz RF transceiver is designed and optimized to operate in the worldwide ISM frequency band at 2.400 to 2.4835 GHz | 2.4 GHz RF transceivers, set of peripherals including: SPI, 2-wire, UART, 6 to 12 bit ADC, PWM and an ultra-low power analog comparator for voltage level system wake-up. |
| Number of I²C | | |
| Number of SPI | | |

Low power voltage mode on NRF51 chips, **Est-ce assez pour utiliser toutes nos fonctions?**

**REF :**


**http://infocenter.nordicsemi.com/pdf/nRF51822_PS_v3.1.pdf**

PDF www.nordicsemi.com/chi/content/.../nRF24LE1_Product_Specification_rev1_6.pdf