

```
1  #ifndef NRF24
2  #define NRF24
3
4  #include "nRF24L01_Definitions.h"
5  #include <stdint.h>
6  #include <stdbool.h>
7  #include <util/delay.h>
8
9  #define LOW 0
10 #define HIGH 1
11
12 #define nrf24_ADDR_LEN 5
13 #define nrf24_CONFIG ((1<<EN_CRC)|(0<<CRCO))
14
15 #define NRF24_TRANSMISSION_OK 0
16 #define NRF24_MESSAGE_LOST 1
17
18 void nrf24_init();
19 void nrf24_rx_address(uint8_t* adr);
20 void nrf24_tx_address(uint8_t* adr);
21 void nrf24_config(uint8_t channel, uint8_t pay_length);
22 bool nrf24_checkRegister(uint8_t reg, uint8_t desiredValue, uint8_t len);
23 bool nrf24_checkConfig();
24 bool nrf24_checkAvailability();
25
26
27 uint8_t nrf24_dataReady();
28 uint8_t nrf24_isSending();
29 uint8_t nrf24_getStatus();
30 uint8_t nrf24_rxFifoEmpty();
31
32 void nrf24_send(uint8_t* value);
33 void nrf24_getData(uint8_t* data);
34
35 uint8_t nrf24_payloadLength();
36
37 uint8_t nrf24_lastMessageStatus();
38 uint8_t nrf24_retransmissionCount();
39
40 uint8_t nrf24_payload_length();
41
42 void nrf24_powerUpRx();
43 void nrf24_powerUpTx();
44 void nrf24_powerDown();
45
46 uint8_t spi_transfer(uint8_t tx);
47 void nrf24_transmitSync(uint8_t* dataout, uint8_t len);
48 void nrf24_transferSync(uint8_t* dataout, uint8_t* datain, uint8_t len);
49 void nrf24_configRegister(uint8_t reg, uint8_t value);
50 void nrf24_readRegister(uint8_t reg, uint8_t* value, uint8_t len);
51 void nrf24_writeRegister(uint8_t reg, uint8_t* value, uint8_t len);
52
```

---

```
53 extern void nrf24_setupPins();
54
55 extern void nrf24_ce_digitalWrite(uint8_t state);
56
57 extern void nrf24_csn_digitalWrite(uint8_t state);
58
59 extern void nrf24_sck_digitalWrite(uint8_t state);
60
61 extern void nrf24_mosi_digitalWrite(uint8_t state);
62
63 extern uint8_t nrf24_miso_digitalRead();
64
65 #endif
66
```