PTX board based on ATMega328P & nRF24L01+

Configuration :
Reg 0 = 0xFE ; masks off, CRC 16 Pwr on Tx
Reg 1 = 0x3F ; all auto ack
Reg 2 = 1 ; P0 receive (ack)
Reg 3 = 3 ; Addr 5 Bytes long
Reg 4 = 0x45 ; 1250µs / 5 retr
Reg 5 = 0x4C ; Ch 76
Reg 6 = 2 ; 1Mbps -12dB
Reg 0x1C = 0 ; fixed payload lenght (4 Bytes)
Reg2 0x1D = 0 ; no feature

Addresses :
Reg 0x0A = 0x65646f4e32 ; edoN2 (ack)
Reg 0x0B to 0x0F = don't care
Reg 0x10 = 0x65646f4e32 ; edoN2
It should match with PRX Pipe 1 but I do have no communication.

I can write and read registers back, meaning my spi works fine.

Before Payload writing :
Status = 00001110 ; TX not full, RX empty
FIFOstatus = 00010001 ; TX empty, RX empty

After Payload writing :
Status = 00001110 ; TX not full, RX empty
FIFOstatus = 00000001 ; TX not empty, RX empty

Write status with 0b01110000 to clear interrupt flags.

After 20µs pulse on CE pin :
Status = 00011110 ; Max RT, RX empty
FIFOstatus = 00000001 ; TX not empty, RX empty.

After 3 loops, I get TX FIFO full…

PRX does not receive any packet and then does not ack. ☹

Questions :

Why Max RT is asserted as soon as CE pulse returns low ?

Is it normal to clear a flag by writing 1 ?

Where is my fault(s) ?

PRX Arduino Nano running GetStarted sketch :

RF24/examples/GettingStarted

Which radio is this? Enter '0' or '1'.
radioNumber = 0
*** PRESS 'T' to begin transmitting
SPI Speedz = 10 Mhz
STATUS = 0x0e RX_DR=0 TX_DS=0 MAX_RT=0 RX_P_NO=7 TX_FULL=0
RX_ADDR_P0-1 = 0x65646f4e31 0x65646f4e32
RX_ADDR_P2-5 = 0xc3 0xc4 0xc5 0xc6
TX_ADDR = 0x65646f4e31
RX_PW_P0-6 = 0x04 0x04 0x04 0x04 0x04 0x04
EN_AA = 0x3f
EN_RXADDR = 0x02
RF_CH = 0x4c
RF_SETUP = 0x03
CONFIG = 0x0f
DYNPD/FEATURE = 0x00 0x00
Data Rate = 1 MBPS
Model = nRF24L01+
CRC Length = 16 bits
PA Power = PA_LOW
ARC = 0

This is a copy of the monitored report.

When I run 2 arduinos Nano with that sketch, 1 beeing PTX other beeing PRX, I have transmission with ack, demonstrating the 2 transceivers are OK.

Thank you for supporting me.

Best regards

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