



A7325

2.4GHz FSK/GFSK RF Transmitter

[0]: Disable. [1]: Enable.

FS: Filter select. The filter shape is gaussian filter (BT=0.7).

[0]: disable. [1]: enable.

FDP [2:0]: Frequency deviation power setting. Recommend FDP = [110]

Refer to TX Register II (16h)

9.2.23 TX Register II (TX2 at address 16h)

Name	R/W	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
TX2	W	FD7	FD6	FD5	FD4	FD3	FD2	FD1	FD0
Reset		1	1	0	0	0	0	0	0

FD [7:0]: Frequency deviation setting.

TX modulation frequency deviation = $F_{PFD} * 127 * 2^{FDP[2:0]} * (FD[4:0] + 1) / 2^{25}$

Where F_{PFD} , the PLL comparison frequency, is equal to crystal frequency * (DBL+1) / ((RRC [1:0]+1).

Data Rate (Kbps)	F_{PFD}	FDP [2:0]	FD[7:0]	Fdev (KHz)
<= 50Kbps	16MHz	110	0x1F	124
500K ~ 50Kbps	16MHz	110	0x2F	186
2M / 1Mbps	16MHz	110	0x80	500

9.2.24 Delay Register I (DELAY1 at address 17h)

Name	R/W	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Delay	W	DPR2	DPR1	DPR0	TDL1	TDL0	PDL2	PDL1	PDL0
Reset		0	0	0	1	0	0	1	0

DPR [2:0]: Delay scale. Recommend DPR = [000].

TDL [1:0]: Delay for TX settling from WPLL to TX.

Delay = $20 * (TDL[1:0] + 1) * (DPR[2:0] + 1)$ us.

DPR [2:0]	TDL [1:0]	WPLL to TX	Note
000	00	20 us	
000	01	40 us	
000	10	60 us	Recommend
000	11	80 us	

PDL [2:0]: Delay for TX settling from PLL to WPLL.

Delay = $10 + 20 * (PDL[2:0] + 1) * (DPR[2:0] + 1)$ us.

DPR [2:0]	PDL [2:0]	PLL to WPLL (LO freq. fixed)	PLL to WPLL (LO freq changed)	Note
000	001	10 us	50 us	
000	010	10 us	70 us	Recommend
000	011	10 us	90 us	
000	100	10 us	110 us	