

FD6818B Registers Definition

2025/1/11

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Registers' Definition

Register		Default	Description
REG_00	<15>	0	Soft Reset.1=Reset; 0=Normal.
REG_02	<15>	Read Only	FSK Tx Finished Interrupt.
	<14>		FSK FIFO Almost Empty Interrupt Enable.
	<13>		FSK Rx Finished Interrupt Enable.
	<12>		FSK FIFO Almost Full Interrupt.
	<11>		DTMF/5TONE Found Interrupt.
	<10>		CTCSS/CDCSSTail Found Interrupt.
	<9>		CDCSS Found Interrupt.
	<8>		CDCSS Lost Interrupt.
	<7>		CTCSS Found Interrupt.
	<6>		CTCSS Lost Interrupt.
	<5>		VoX Found Interrupt.
	<4>		VoX Lost Interrupt.
	<3>		Squelch Found Interrupt.
	<2>		Squelch Lost Interrupt.
	<1>		FSK Rx Sync Interrupt.
REG_07	<15:0>		<p>When <15:13>=0 for CTC1 <12:0>=CTC1 frequency control word = freq(Hz)* 20.64888 for XTAL 13M/26M or = freq(Hz)*20.97152 for XTAL 12.8M/19.2M/25.6M/38.4M</p> <p>When<15:13>=1 for CTC2(Tail 55Hz Rx detection) <12:0>=CTC2(should below 100Hz)frequency control word = 25391/freq(Hz) for XTAL 13M/26M or = 25000/freq(Hz) for XTAL 12.8M/19.2M/25.6M/38.4M</p> <p>When <15:13>=2 for CDCSS 134.4Hz <12:0>=CDCSS baud rate frequency (134.4Hz) control word = freq(Hz)*20.64888 for XTAL 13M/26M or = freq(Hz)*20.97152 for XTAL 12.8M/19.2M/25.6M/38.4M</p> <p>When<15:13>=3 for CTC3(Tail 62Hz Rx detection) <12:0>=CTC3(should below 100Hz)frequency control word = 25391/freq(Hz) for XTAL 13M/26M or = 25000/freq(Hz) for XTAL 12.8M/19.2M/25.6M/38.4M</p>
REG_08	<15>		1 = CDCSS high 12bit , 0=CDCSS low 12bit
	<11:0>		CDCSS high/low 12bit code
REG_09	<15:0>		DTMF/SelCall Symbol Coefficient for Detection.
			<15:12>=Symbol Number
			<7:0>=Coefficient.

Register		Default	Description	
REG_0A	<7>	Read Only	GPIO7 (PIN25) Input Indicator.	1=High; 0=Low.
	<6>		GPIO6 (PIN26) Input Indicator.	
	<5>		GPIO5 (PIN27) Input Indicator.	
	<4>		GPIO4 (PIN28) Input Indicator.	
	<3>		GPIO3 (PIN29) Input Indicator.	
	<2>		GPIO2 (PIN30) Input Indicator.	
	<1>		GPIO1 (PIN31) Input Indicator.	
	<0>		GPIO0 (PIN32) Input Indicator.	
REG_0B	<12>	Read Only	DTMF/5Tone found.(1表示有解码到)	
	<11:8>		DTMF/5Tone Code Received.	
	<7>		FSK Rx Sync Negative has been Found.	
	<6>		FSK Rx Sync Positive has been Found.	
	<4>		FSK Rx CRC Indicator.1=CRC Pass; 0=CRC Fail.	
REG_0C	<15>	Read Only	CDCSS negative code received	
	<14>		CDCSS positive code received	
	<13:12>		CTCSS Phase Shift Received. 00=No phase shift , 10= CTCSS0 180°phase shift 01=CTCSS0 120°phase shift, 11= CTCSS0 240°phase shift	
			<11>:CTC2(55Hz) received <10>:CTC1 received	
	<4>		CTC3(62Hz) received	
	<2>		VoX Indicator 0: No ,1: Yes	
	<1>		Squelch result output. 1=Link; 0=Loss	
	<0>		Interrupt Indicator.1=Interrupt Request; 0=No Request.	
	REG_0D		<15>	Read Only
<10:0>		Frequency Scan High 16 bits.		
REG_0E	<15:0>	Read Only	Frequency Scan Low 16 bits. = REG_0D<10:0><<16 + REG_0E<15:0>, unit is 10Hz	
REG_10		0x0038	Rx AGC Gain Table[0]. (Index Max->Min is 3,2,1,0,-1) NA Gain Short. 11=0dB; 10=-11dB; 01=-16dB; 00=-19dB. LNA Gain 111=0dB; 110=-2dB; 101=-4dB; 100=-6dB; 011=-9dB; 010=-14dB; 001=-19dB; 000=-24dB. MIXER Gain 11=0dB; 10=-3dB; 01=-6dB; 00=-8dB. PGA Gain 111=0dB; 110=-3dB; 101=-6dB; 100=-9dB; 011=-15dB; 010=-21dB; 001=-27dB; 000=-33dB.	
	<9:8>			
	<7:5>			
	<4:3>			
	<2:0>			
REG_11	<15:0>	0x025A	Rx AGC Gain Table[1].	Same as REG_10.
REG_12	<15:0>	0x037B	Rx AGC Gain Table[2].	
REG_13	<15:0>	0x03DE	Rx AGC Gain Table[3].	
REG_14	<15:0>	0x0000	Rx AGC Gain Table[-1].	

Register		Default	Description	
REG_19	<15:0>	1	Automatic MIC PGA Gain Controller (MIC AGC) Disable. 1=Disable; 0=Enable.	
REG_1A	<15:12>	0b0101	Crystal vReg Bit.	
	<11:8>	0b1000	Crystal iBit.	
REG_1C	<8:6>	0B000	Filter_bw_bit	
	<5:3>	0B000	Filter_if_bit	
REG_1D	<15:0>	0x2AAB	IF Selection. (if REG_43<5>=1, IF *=2;) 0=Zero IF; 0x871c~=5.64kHz IF; 0x2aab~=8.46kHz IF; 0xa666~=5.08kHz IF; 0x4924~=7.25kHz IF; 0xc5d1~=4.62kHz IF; 0x6800~=6.35kHz IF; 0xe555~=4.23kHz IF;	
REG_1F	<3:0>	0b1000	PLL CP bit.	
REG_24	<5>	0	DTMF/SelCall Enable. 1=Enable; 0=Disable.	
	<4>	1	DTMF or SelCall Detection Mode. 1=for DTMF; 0=for SelCall.	
	<3:0>	0xE	Max Symbol Number for SelCall Detection.	
REG_28	<11:9>	0b101	Rx DCC Filter(HPF1) 000=Bypass DC filter.	
	<8>	0	Rx AF Noise Gate Enable.	
	<7:0>	0	Rx AF Noise Gate Level.	
REG_29	<11:9>	0b011	Tx DCC Filter(HPF1) 000=Bypass DC filter.	
REG_2A	<13:8>	0x10	Noise Gate Time Constant. <div> <div><5:3>for Release</div> <div><2:0>for</div> <div>000=0 ms 100=48 ms</div> <div>001=6 ms 101=96 ms</div> <div>010=12 ms 110=192 ms</div> <div>011=24 ms 111=384 ms</div> </div>	
REG_2B	<10>	0	Disable AFRxHPF 300filter.	0=Enable; 1=Disable
	<9>	0	Disable AF RxLPF3K filter.	
	<8>	0	Disable AF Rx de-emphasisfilter.	
	<2>	0	Disable AFTxHPF300filter.	
	<1>	0	Disable AFTxLPF1filter.	
	<0>	0	Disable AFTxpre-emphasisfilter.	
REG_2C	<14:12>	0b011	AF Amplitude Detection Frame Length,(after Pre/De-emphasis) 000=0 ms 001=4 ms , 010=8 ms ,011=16 ms.....111=28 ms	
	<11:6>	0b010001	Pre/De-emphasis DRC Time Constant. <div> <div><5:3>for Release Time.</div> <div><2:0>for Attack Time.</div> <div>000=0 ms 100=48 ms</div> <div>001=6 ms 101=96 ms</div> <div>010=12ms 110=192 ms</div> <div>011=24 ms 111=384 ms</div> </div>	

Register		Default	Description	
REG_2C	<5:0>	34	Pre-emhpasis Gain(dB) 24=0dB , 25=1dB, 34=10dB	
REG_2E	<14:13>	0	CTCSS滤波器带宽 00:260Hz 01:242Hz 10:212 11:187Hz	
REG_2F	<13:8>	24	De-emhpasis Gain(dB) 24=0dB,25=1dB,34=10dB	
	<7:5>	0b110	Tx Soft Limiter Factor 000=bypass ... 111=hard limit	
	<4:0>	24	Tx Soft Limiter Threshold 0= 0.5 31=0.99	
REG_30	<15>	0	VCO Calibration Enable. 1=Enable, 0=Disable	
	<13:10>	0	Rx Link Enable (include LNA/MIXER/PGA/ADC). 1111=Enable, 0000=Disable	
	<9>	0	AF DAC Enable. 1=Enable, 0=Disable.	
	<7:4>	0	PLL/VCO Enable.1111=Enable, 0000=Disable	
	<3>	0	PA Gain Enable. 1=Enable, 0=Disable	
	<2>	0	MIC ADC Enable. 1=Enable, 0=Disable	
	<1>	0	Tx DSP Enable. 1=Enable, 0=Disable	
	<0>	0	Rx DSP Enable. 1=Enable, 0=Disable	
REG_31	<3>	0	Enable Compander Function.1= Enable; 0=Disable	
	<2>	0	Enable VOX detection.1=Enable; 0=Disable	
	<1>	0	Enable Scramble Function.1=Enable; 0=Disable	
	<0>	0	Enable AM. 1=Enable; 0=Disable	
REG_32	<15:14>	0b00	Frequency Scan Time. 00=0.2sec; 01=0.4sec; 10=0.8sec; 11=1.6sec	
	<0>		Frequency Scan Enable.1=Enable; 0=Disable.	
REG_33	<15>	1	GPIO7 (PIN25) Output Disable.	1=Output Disable; 0=Output Enable.
	<14>	1	GPIO6 (PIN26) Output Disable.	
	<13>	1	GPIO5 (PIN27) Output Disable.	
	<12>	1	GPIO4 (PIN28) Output Disable.	
	<11>	1	GPIO3 (PIN29) Output Disable.	
	<10>	1	GPIO2 (PIN30) Output Disable.	
	<9>	1	GPIO1 (PIN31) Output Disable.	
	<8>	1	GPIO0 (PIN32) Output Disable.	
	<7>	1	GPIO7 (PIN25) Output Value.	1= High when Output Enable 0= Low when Output Enable.
	<6>	1	GPIO6 (PIN26) Output Value.	
	<5>	1	GPIO5 (PIN27) Output Value.	
	<4>	1	GPIO4 (PIN28) Output Value.	
	<3>	1	GPIO3 (PIN29) Output Value.	
	<2>	1	GPIO2 (PIN30) Output Value.	
	<1>	1	GPIO1 (PIN31) Output Value.	
	<0>	1	GPIO0 (PIN32) Output Value.	

Register		Default	Description	
REG_34	<15:12>	0x0	GPIO3 (PIN29) Output Type Selection. 0=High/Low 1=Interrupt 2=Squelch 3=VoX 4=CTCSS/CDCSS Compared Result 5=CTCSS Compared Result 6=CDCSS Compared Result 7=Tail Detected Result 8=DTMF/5Tone Symbol Received Flag 9=CTCSS/CDCSS Digital Wave Others=Reserved	
	<11:8>	0x0	GPIO2 (PIN30) Output Type Selection.	Reference REG_34<15:12>
	<7:4>	0x0	GPIO1 (PIN31) Output Type Selection.	
	<3:0>	0x0	GPIO0 (PIN32) Output Type Selection.	
REG_35	<15:12>	0x0	GPIO7 (PIN25) Output Type Selection.	
	<11:8>	0x0	GPIO6 (PIN26) Output Type Selection.	
	<7:4>	0x0	GPIO5 (PIN27) Output Type Selection.	
	<3:0>	0x0	GPIO4 (PIN28) Output Type Selection.	
REG_36	<15:8>	0	PA Biasoutput 0~3.2V. 0x00=0V ----0xFF=3.2V	
	<7>	0	PACTL output; 1=Enable , 0=Disable(Output 0 V)	
	<5:3>	0b111	PA Gain1 Tuning.111(max)->000(min)	
	<2:0>	0b111	PA Gain2 Tuning.111(max)->000(min)	
REG_37	<15>	0	DSP Enable.	
	<14:12>	0b001	DSP Voltage Setting.	
	<11>	1	ANA LDO Selection.1=2.7v, 0=2.4v	
	<10>	1	VCO LDO Selection.1=2.7v, 0=2.4v	
	<9>	1	RF LDO Selection.1=2.7v, 0=2.4v	
	<8>	1	dac_drv2_en	
	<7>	0	ANA LDO Bypass. 1=Bypass, 0=Enable.	
	<6>	0	VCO LDO Bypass. 1=Bypass, 0=Enable.	
	<5>	0	RF LDO Bypass. 1=Bypass, 0=Enable.	
	<4>	0	ANA LDO Enable 1=Enable, 0=Disable.	
	<3>	0	RF LDO Enable 1=Enable, 0=Disable.	
	<2>	0	VCO LDO Enable 1=Enable, 0=Disable.	
	<1>	0	XTAL Enable. 1=Enable, 0=Disable.	
	<0>	0	Band-Gap Enable. 1=Enable, 0=Disable.	
REG_38	<15:0>	0x3A98	Frequency(Hz)= (freq_hi16<<16 + freq_lo16)*10	
REG_39	<15:0>	0x0271		

Register		Default	Description	
REG_3B	<15:0>	0x5880	Crystal Frequency Low-16bits. LSB->5Hz	
REG_3C	<15:8>	0x4F	Crystal Frequency High-8bits.	
	<7:6>	0b10	Crystal Frequency Mode Selection. 00~=13MHz; 01~=19.2MHz; 10~=26MHz; 11~=38.4MHz	
REG_3E	<15:0>	36458	Band Selection Threshold. ~=VCO Max Frequency(Hz)/96/640	
REG_3F	<15>	0	FSK Tx Finished Interrupt Enable.	1=Enable 0=Disable.
	<14>	0	FSK FIFO Almost Empty Interrupt	
	<13>	0	FSK Rx Finished Interrupt Enable.	
	<12>	0	FSK FIFO Almost FullInterrupt Enable.	
	<11>	0	DTMF/5TONE Found Interrupt Enable.	
	<10>	0	CTCSS/CDCSSTail Found Interrupt	
	<9>	0	CDCSS Found Interrupt Enable.	
	<8>	0	CDCSS Lost Interrupt Enable.	
	<7>	0	CTCSS Found Interrupt Enable.	
	<6>	0	CTCSS Lost Interrupt Enable.	
	<5>	0	VoX Found Interrupt Enable.	
	<4>	0	VoX Lost Interrupt Enable.	
	<3>	0	Squelch Found Interrupt Enable.	
	<2>	0	Squelch Lost Interrupt Enable.	
	<1>	0	FSK Rx Sync Interrupt Enable.	
REG_40	<12>	1	Enable RF TxDeviation.	
	<11:0>	0x4D0	RF Tx Deviation Tuning 0=min; 0xFFF=max (Apply for both in-band signal and sub-audio signal).	
REG_43	<14:12>	0b100	RF filter bandwidth (Apass=0.1dB) if REG_43<5>=1, RF filter bandwidth *=2; 000 = 2 kHz 100 = 4kHz 001 = 2.5 kHz 101 = 4.5 kHz 010 = 3 kHz 110 = 5.0kHz 011 = 3.5 kHz 111 = 5.5kHz	
	<11:9>	0b000	RF filter bandwidth when signal is weak (Apass=0.1dB) If REG_43<5>=1, RF filter bandwidth *=2; 000 = 2 kHz 100 = 4kHz 001 = 2.5 kHz 101 = 5.0 kHz 010 = 3 kHz 110 = 5.0kHz 011 = 3.5 kHz 111 = 4 kHz	
	<8:6>	0b001	AFTxLPF2 filter Band Width (Apass=1dB) Selection. 000 = 3 kHz , 100 = 5.5 kHz 001 = 2.5 kHz, 101 = 5.0 kHz 010 = 2.75 kHz, 110 = 4.5 kHz 011 = 3.5 kHz, 111 = 4 kHz	

Register		Default	Description
REG_43	<5:4>	0b00	BW Mode Selection. 00=12.5k; 01=6.25k; 10=25k/20k
	<2>	0	Gain after FM Demodulation.1=6dB; 0=0 dB.
REG_44	<15:0>	0x9009	300Hz AF Response coefficient for Tx.
REG_45	<15:0>	0x31A9	300Hz AF Response coefficient for Tx.
REG_46	<10:0>	0x50	Voice Amplitude Threshold for VOX=1 detect
REG_47	<13>	1	AF Output Inverse Mode.1=Inverse
	<11:8>	0x1	AFOutputSelection. 0x0=Mute; 0x1=Normal AF Out; 0x2=Tone Out for Rx (Should enable Tone1 first); 0x3=Beep Out for Tx (Should enable Tone1 first and set REG_03[9]=1 to enable AF; 0x6=CTCSS/CDCSS Out for Rx Test; 0x8=FSK Out for Rx Test; Others=Reserved;
	<0>	0	AF Tx Filter Bypass All.1=Bypass All AF Tx filter; 0=Normal.
REG_48	<9:4>	0x3C	AF Rx Gain2. -28dB~3.5dB, 0.5dB/step.
	<3:0>	0b1111	AF DAC Gain (after Gain1 and Gain2). 1111=max; 0000=min; about 2dB/step
REG_49	<15:14>	0b00	High/Low Lo Selection. 0X=Auto High/Low Lo; 10=Low Lo; 11=High Lo.
	<13:7>	0x50	RF AGC High Threshold. LSB->1dB
	<6:0>	0x30	RF AGC Low Threshold. LSB->1dB
REG_4D	<7:0>	0x20	Glitch threshold for Squelch =0
REG_4E	<15:12>	0b0110	Squelch=1 Delay Setting.
	<11:8>	0b1111	Squelch=0 Delay Setting.
	<7:0>	0x08	Glitch threshold for Squelch =1
REG_4F	<14:8>	0x2F	Ex-noise threshold for Squelch =0
	<6:0>	0x2E	Ex-noise threshold for Squelch =1
REG_50	<15>	0	Enable AF Tx Mute (for DTMF Tx or other applications). 1=Mute; 0=Normal
REG_51	<15>	0	Tx CTCSS/CDCSS; 1=Enable ,0=Disable
	<14>	0	1= GPIO0 (PIN2) Input for CDCSS; 0=Normal Mode.
	<13>	0	Transmit CDCSS code 0=negative,1=positive
	<12>	0	CTCSS/CDCSS mode selection.1=CTCSS, 0=CDCSS
	<11>	0	CDCSS 24/23bit selection. 1=24bit, 0=23bit
	<10>	0	1050HzDetectionMode. 1=1050/4 Detect Enable, CTC1 should be set to 1050/4 Hz
	<9>	0	Auto CDCSS Bw Mode. 1=Disable; 0=Enable.
	<8>	0	Auto CTCSS Bw Mode. 0=Enable; 1=Disable
	<6:0>	0	CTCSS/CDCSS Tx Gain1 Tuning.0=min; 0x7F=max

Register		Default	Description
REG_52	<15>	0	Enable 120/180/240 degree shift CTCSS or 134.4Hz Tail when CDCSS mode. When Rx, you can set this bit=1 to clear CTCSS Phase Shift Detect. 0=Normal, 1=Enable
	<14:13>	0b00	CTCSS tail mode selection (only valid when REG_52<15>=1). 00= for 134.4Hz CTCSS Tail when CDCSS mode. 01= CTCSS0 120°phase shift, 10= CTCSS0 180°phase shift,11= CTCSS0 240°phase shift
	<12>	0	CTCSS Detection Threshold Mode, 1=~0.1%; 0=0.1 Hz
	<11:6>	0x0A	CTCSS found detect threshold.
	<5:0>	0x0F	CTCSS lost detect threshold.
REG_53	<13:8>	0x11	ALC Time Constant.<5:3>for Release Time,<2:0>for Attack Time 000= 0 ms 100=48ms 001=6 ms 101=96ms 010=12ms 110=192ms 011=24ms 111=384ms
	<4:2>	4	ALC Amplitude Detection Frame Length 000=0 ms 011=8ms 001=2ms 100=14ms 010=4ms
REG_54	<15:0>	0x9009	300Hz AF Response coefficient for Rx.
REG_55	<15:0>	0x31A9	300Hz AF Response coefficient for Rx.
REG_58	<15:13>	0	FSK Tx Mode Selection. 000 for FSK1.2K and FSK2.4K Tx; 001 for FFSK1200/1800 Tx; 011 for FFSK1200/2400 Tx; 101 for NOAA SAME Tx
	<12:10>	0	FSK Rx Mode Selection. 000 for FSK1.2K, FSK2.4K Rx and NOAA SAME Rx; 111 for FFSK1200/1800 Rx; 100 for FFSK1200/2400 Rx;
	<9:8>	0	FSK Rx Gain.
	<5:4>	0	FSK Preamble Type Selection.11=0xAA,10=0x55 ,00=0xAA or 0x55 due to the MSB of FSK Sync Byte 0.
	<3:1>	0	FSK Rx Band Width Setting. 100 for FSK 2.4K and FFSK1200/2400; 000 for FSK 1.2K; 001 for FFSK1200/1800; 010 for NOAA SAME Rx
	<0>	0	FSK Enable. 1=Enable; 0=Disable.

Register		Default	Description
REG_59	<15>	0	Clear TX FIFO, 1=clear
	<14>	0	Clear RX FIFO, 1=clear
	<13>	0	1=Enable FSK Scramble
	<12>	0	1=Enable FSK RX
	<11>	0	1=Enable FSK TX
	<10>	0	1=Invert FSK data when RX
	<9>	0	1=Invert FSK data when TX
	<7:4>	0	FSK Preamble Length Selection 0 = 1 byte; 1=2 bytes; 2=3 bytes; ...; 15=16 bytes.
	<3>	0	FSK Sync Length Selection. 0=2 bytes (FSK Sync Byte 0,1) 1=4 bytes (FSK Sync Byte 0,1,2,3)
REG_5A	<15:8>	0x85	FSK Sync Byte 0 (Sync Byte 0 first, then 1,2,3)
	<7:0>	0xCF	FSK Sync Byte 1
REG_5B	<15:8>	0xAB	FSK Sync Byte 2
	<7:0>	0x45	FSK Sync Byte 3
REG_5C	<6>	1	CRC Option Enable. 1=Enable; 0=Disable.
REG_5D	<15:8>	0x0F	FSK Data Length(Byte)Low 8bits(Total 11 bits). For example, 0xF means 16 bytes length.
	<7:5>	0	FSK Data Length(Byte)High 3bits(Total 11 bits).
REG_5E	<9:3>	64	FSK Tx FIFO (Total 128 Words) Almost Empty Threshold.
	<2:0>	4	FSK Rx FIFO (Total 8 Words) Almost Full Threshold.
REG_5F	<15:0>	x	FSK Word Input/Output.
REG_62	<14:8>	Read Only	Signal Strength after RxADC. Lsb->dB
REG_63	<7:0>	Read Only	Glitch Total Number within about 10ms
REG_64	<15:0>	Read Only	Voice Amplitude Out.
REG_65	<6:0>	Read Only	Ex-noiseindicator, dB/step. >10kHz AF
REG_66	<14:8>	Read Only	UpperChannelRelativePowerStrength
	<6:0>		LowerChannel RelativePowerStrength
REG_67	<8:0>	Read Only	0.5dB/step, RSSI (dBm) \sim REG_67<8:0>/2 – 160.
REG_68	<15>	Read Only	CTCSS Scan Indicator. 1=Busy; 0=Found.
	<12:0>		CTCSS Frequency. Frequency(Hz) = REG_68<12:0>/20.64888 for 13M/26M XTAL and = REG_68<12:0>/20.97152 for 12.8M/19.2M/25.6M/38.4M XTAL
REG_69	<15>	Read Only	CDCSS Scan Indicator. 1=Busy; 0=Found.
	<14>		23 or 24 bit CDCSS Indicator. 1=24 bit; 0=23 bit.
	<11:0>		CDCSS High 12 bits.
REG_6A	<11:0>	Read Only	CDCSS Low 12 bits.
REG_6E	<15:9>	Read Only	AF Freq Out, Nout. $\text{Freq} = \text{Nout} * 25390.625 / \text{Rout}$ Or $\text{Freq} = \text{Nout} * 25000 / \text{Rout}$ for 19.2M/38.4M
	<8:0>		AF Freq Out, Rout. $\text{Freq} = \text{Nout} * 25390.625 / \text{Rout}$ Or $\text{Freq} = \text{Nout} * 25000 / \text{Rout}$ for 19.2M/38.4M

Register		Default	Description
REG_6F	<7:0>	Read Only	AF Tx/Rx Input Amplitude(dB)
REG_70	<15>	0	Enable TONE1 1=Enable; 0=Disable.
	<14:8>	0	TONE1 tuning gain
	<7>	0	Enable TONE2 1=Enable; 0=Disable.
	<6:0>	0	TONE2/FSK tuning gain
REG_71	<15:0>	0x8517	TONE1/Scramble frequency controlword. =freq(Hz)*10.32444 for XTAL 13M/26M or =freq(Hz)* 10.48576 for XTAL 12.8M/19.2M/25.6M/38.4M.
REG_72	<15:0>	0x2854	TONE2/FSK frequency controlword =freq(Hz)*10.32444 for XTAL 13M/26M or =freq(Hz)* 10.48576 for XTAL 12.8M/19.2M/25.6M/38.4M.
REG_73	<13:11>	0B000	Automatic Frequency Correction(AFC) Range Selection. 000=max; 111=min
	<4>	0	Automatic Frequency Correction(AFC) . 1=Disable; 0=Enable.
REG_74	<15:0>	0xF50B	3000Hz AF Response coefficient for Tx.
REG_75	<15:0>	0xF50B	3000Hz AF Response coefficient for Rx.
REG_78	<15:8>	0x48	RSSI threshold for Squelch=1, 0.5dB/step
	<7:0>	0x46	RSSI threshold for Squelch =0, 0.5dB/step
REG_79	<15:11>	8	VoX Detection Interval Time.
REG_7A	<15:12>	8	VoX=0 Detection delay, *128ms
REG_7B	<15:0>	0xAE34	RSSI Table
REG_7C	<15:0>	0x8000	RSSI Table
REG_7D	<6>	0	AF Level Controller(ALC) Disable. 1=Disable; 0=Enable.
	<5:0>	0x1C	MIC Sensitivity Tuning.
REG_7E	<15>	0	AGC Fix Mode. 1=Fix; 0=Auto.
	<14:12>	0b011	AGC Fix Index. 011=Max, then 010,001,000,111,110,101,100(min).
	<5:3>	0b101	DC Filter Band Width for Tx (MIC In). 000=Bypass DC filter;
	<2:0>	0b110	DC Filter Band Width for Rx (IF In). 000=Bypass DC filter;