

GINA 2011 RF Module Data Specification Guide

RF Module PINOUTS			
H=3v L=.5v or less O = out put from Module I = input to Module			
24	PA_PE	I	Enable TX amplifier .normally set to H
25	6.0v	I	Using TX final AMP stage and RX LNA.It is required 650mA current when TX is on.20mA for RX is on.
26	TR_SW	I	Control antenna switch H for TX. L for Receive.
27	PE1	I	power enable control for HFA 3783,3683(PE1 pin)
28	PE2	I	power enable control for HFA 3783,3683(PE2 pin)
29	SCLK_RF_IF	I	clock to program PLL for HFA3783(pin18)3683(pin23)
30	SD_RF_IF	I	data to program PLL for HFA3783(pin19) ,3863(pin22)
31	NOT USE		
32	RX_CLK	O	Receive clock out from HFA3861 (pin52)
33	MD_RDY	O	Data packet ready from HFA3861 (pin54)
34	TX_DATA	I	Transmit data to HFA3861 (pin58)
35	CCA	O	Clear Channel Assessment out from HFA3861(pin60)
36	TX_PE	I	HFA3861(pin62) transmitter control. Active H
37	RESET_BB	I	Reset for HFA3861(pin63)
38	NOT USE		
39	S_CLK	I	Clock for programming HFA3861(pin4)
40	BB_R/W	I	Input to HFA3861(pin5) for programming
41	CS_BB	I	Chip select input to HFA3861(pin6) for programming
42	NOT USE		
43	NOT USE		
44	NOT USE		
45	NOT USE		
46	NOT USE		
47	NOT USE		
48	NOT USE		
49	6.0v	I	Same voltage as pin 25
50	6.0v	I	Same voltage as pin 25

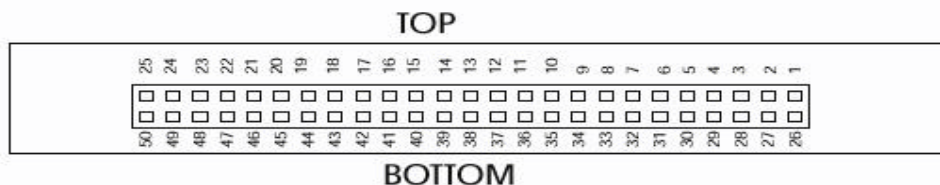
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10/2001 rev.4

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Connector Layout



LED Indicator

3 LED indicator

Module has 3 different LED located inside of shield case.

Power on RED color LED

TX on RED color LED

RX condition by GREEN color LED.-----sharing CCA output from HFA3861.

4 Antenna connector

Module has two antenna connector located on right side and left side.

Marked "A" on Right side

Marked "B" on Left side

NOTE: You can program and select A or B by HFA3861B CR9 and CR40. This will depend upon how you elect to configure your system either for a single antenna or diversity antenna.

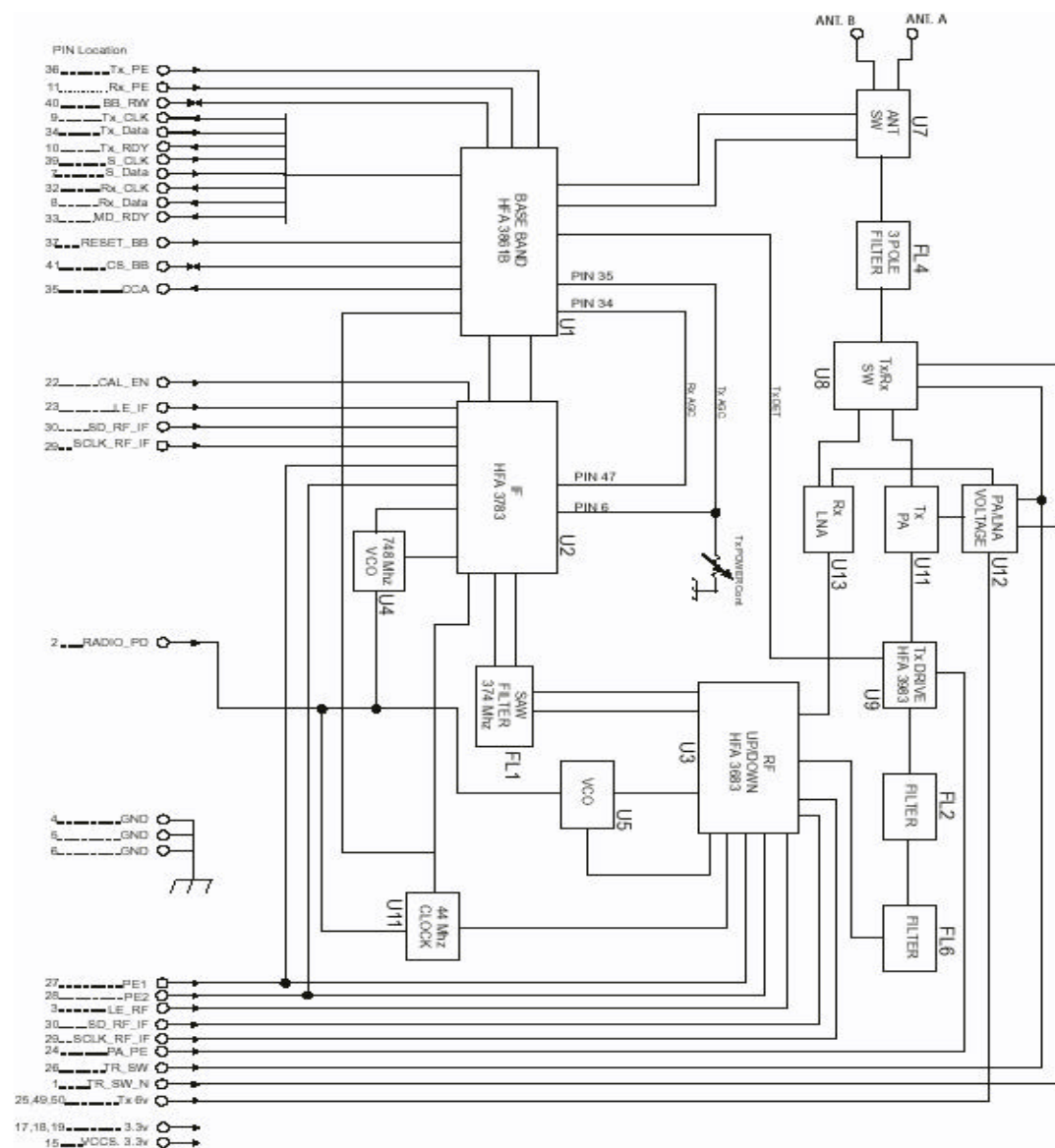
5 Technical information

GRE America Inc. cannot provide any schematic diagram (s) or component (s) specifications for any Customers / End Users for any reasons. GRE America will however provide a Block Diagram for reference and in order to familiarize you with the RF Module.

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RF Block Diagram.



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Typical Register Values

Transmitter Register Values

Typical Register value for Intersil Baseband HFA3861B "Transmitter" at 11 mbps

The image shows a software window titled "BaseBand Configuration" with a close button (X) in the top right corner. The window is divided into two main sections: "Control Registers" and "AGC Registers".

Control Registers: This section contains a grid of 64 registers, numbered 0 to 63. Each register is represented by a small box with its value inside. The values are as follows:

0	13	1	04	2	48	3	48	4	80	5	03	6	04	7	00
8	00	9	A0	10	B7	11	1B	12	00	13	00	14	00	15	5C
16	82	17	20	18	C4	19	17	20	0A	21	0F	22	20	23	0C
24	20	25	20	26	90	27	18	28	76	29	0A	30	24	31	C0
32	00	33	00	34	00	35	0C	36	26	37	5B	38	7F	39	29
40	0F	41	20	42	20	43	10	44	10	45	10	46	10	47	1E
48	1E	49	08	50	00	51	00	52	00	53	00	54	00	55	00
56	00	57	00	58	21	59	00	60	00	61	00	62	00	63	00

AGC Registers: This section contains a grid of 32 registers, numbered 0 to 31. Each register is represented by a small box with its value inside. The values are as follows:

0	0C	1	10	2	14	3	18	4	1C	5	20	6	24	7	28
8	2E	9	34	10	38	11	3C	12	3F	13	43	14	46	15	48
16	46	17	50	18	55	19	5A	20	63	21	6D	22	76	23	7F
24	7F	25	7F	26	7F	27	7F	28	7F	29	7F	30	7F	31	7F

At the bottom of the window, there are two rows of buttons: "Monitor", "Get", "Read" in the first row, and "Default", "Set", "Write" in the second row. The GRE logo is visible in the bottom right corner.

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Typical Register Values

Receiver Register Values

Typical Register value for Intersil Baseband HFA3861B "Receiver" at 11 mbps

The image shows a software window titled "BaseBand Configuration". It contains two sections: "Control Registers" and "AGC Registers". Each section displays a grid of 64 registers (0-63) with their corresponding hexadecimal values. At the bottom, there are buttons for "Monitor", "Get", "Read", "Default", "Set", and "Write". The GRE logo is also present in the bottom right corner.

Control Registers																																																															
0	13	1	04	2	48	3	48	4	80	5	03	6	04	7	00																																																
8	00	9	A0	10	B1	11	18	12	00	13	00	14	00	15	5C																																																
16	82	17	20	18	C4	19	17	20	0A	21	0F	22	20	23	0C																																																
24	2D	25	20	26	90	27	18	28	76	29	0A	30	24	31	C0																																																
32	00	33	00	34	00	35	0C	36	26	37	5B	38	7F	39	29																																																
40	0F	41	20	42	20	43	10	44	10	45	10	46	10	47	1E																																																
48	1E	49	08	50	00	51	1D	52	0A	53	04	54	00	55	02																																																
56	03	57	60	58	23	59	07	60	28	61	05	62	1C	63	2C																																																

AGC Registers																															
0	0C	1	10	2	14	3	18	4	1C	5	20	6	24	7	28																
8	2E	9	34	10	38	11	3C	12	3F	13	43	14	46	15	48																
16	46	17	50	18	55	19	5A	20	63	21	6D	22	76	23	7F																
24	7F	25	7F	26	7F	27	7F	28	7F	29	7F	30	7F	31	7F																

Buttons: Monitor, Get, Read, Default, Set, Write. GRE logo.

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