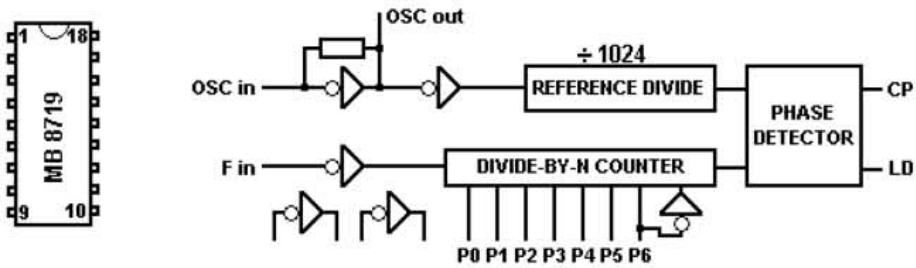
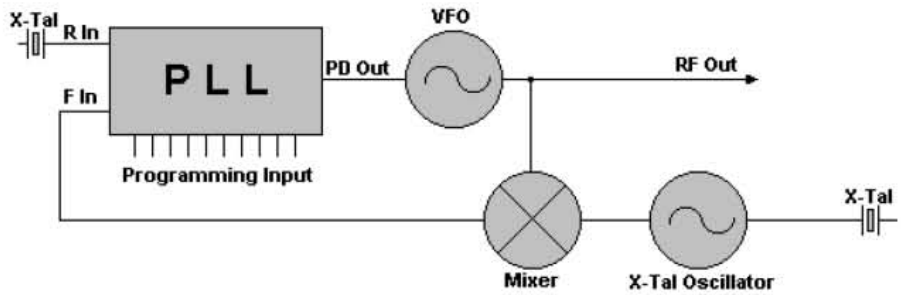
MB8719 MB8734 RCI8719 PLL Synthesizer



Overview

This PLL-circuit use a 6 bit (MB8734 and RCI8719) or 7 bit (MB8719) BCD binary programmable divide-by-N counter.

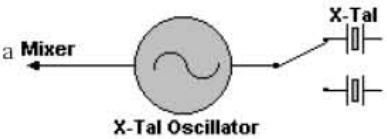
Down-converting of the frequency to the divider



This PLL Circuit use a Mixer and a X-Tal Oscillator to convert the output frequency f_{OUT} to the f_{IN} to the PLL Circuit.

The X-Tal frequency is $f_{XTAL} = f_{OUT} - f_{IN}$

The output frequency can be changed by changing the mixing-xtal or add a new mixing-xtal to the oscillator.



Pin	Name	Description
1	Out	Inverter out
2	In	Inverter in
3	Out	Inverter out
4	In	Inverter in
5	CP	Charge Pump
6	LD	Loop Detect
7	OSC in	Oscillator input
8	OSC out	Oscillator output
9	V_{DD}	Positive Power Supply
10	P6	Programmable inputs (Binary) (Only MB8719)
11	P5	Programmable inputs (Binary)
12	P4	Programmable inputs (Binary)
13	P3	Programmable inputs (Binary)
14	P2	Programmable inputs (Binary)
15	P1	Programmable inputs (Binary)
16	P0	Programmable inputs (Binary)
17	F in	Frequency input
18	V_{SS}	GND Ground

TRUTH TABLE FOR RCI8719 AND MB8734

P5	P4	P3	P2	P1	P0	Divide by N
0	0	0	0	0	0	0 + 128
0	0	0	0	0	1	1 + 128
0	0	0	0	1	0	2 + 128
0	0	0	0	1	1	3 + 128
0	0	0	1	0	0	4 + 128
-	-	-	-	-	-	-
-	-	-	-	-	-	-
1	1	1	1	1	1	64 + 128

TRUTH TABLE FOR MB8719

P6	P5	P4	P3	P2	P1	P0	Divide by N
0	0	0	0	0	0	0	0 + 128
0	0	0	0	0	0	1	1 + 128
0	0	0	0	0	1	0	2 + 128
0	0	0	0	0	1	1	3 + 128
0	0	0	0	1	0	0	4 + 128
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
0	1	1	1	1	1	1	64 + 128
1	0	0	0	0	0	0	0 + 64
1	0	0	0	0	0	1	1 + 64
1	0	0	0	0	1	0	2 + 64
1	0	0	0	0	1	1	3 + 64
1	0	0	0	1	0	0	4 + 64
1	-	-	-	-	-	-	-
1	-	-	-	-	-	-	-
1	1	1	1	1	1	1	64 + 64

Uniden AM/FM/SSB Chassis