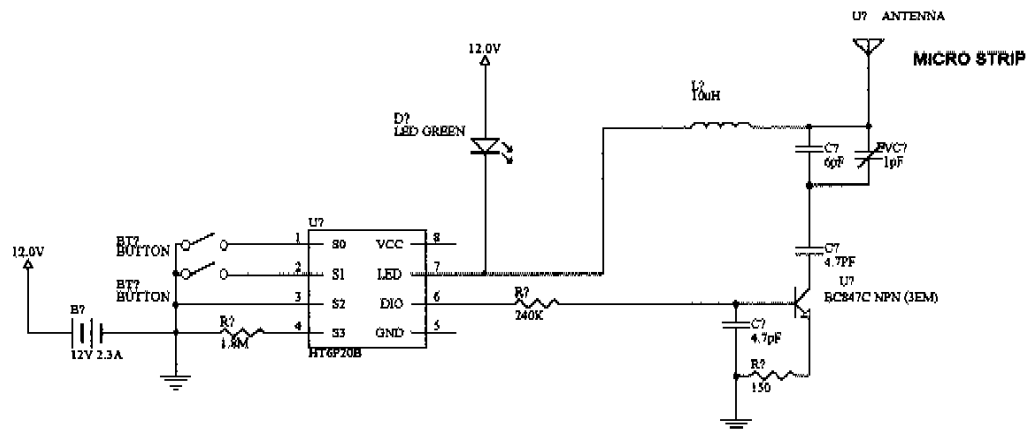


# OXE KETX



**NOTE:**  
THIS CIRCUIT WILL BE ACTIVATED EACH TIME ONE OF THE BUTTONS IS CLOSED.  
THE TUNED FREQUENCY IS SET TO 303.0MHZ AND THE DUTY CYCLE IS AT 33%.

Each ID is made of 24 bits. One third of each bit is always hi and one third is always lo.  
Each ID bit is 1200uS for a total of  $24 * 1200 = 28800uS$ . The break separating the data frames is 12000uS. So the total transmission frame is 40800uS.  
The maximum transmission frame duty cycle is  $19200uS / 40800$  (47%).  
The minimum transmission frame duty cycle is  $9600 / 40800$  (23%).  
This affords the following:

If 100% of the 24 data bits are coded yields a 47% transmission frame duty cycle and 16+m IDs.  
If 50% of the 24 data bits are coded yields a 38% transmission frame duty cycle and 12+m IDs.  
If 33% of the 24 data bits are coded yields a 31% transmission frame duty cycle and 8+m IDs.  
If 30% of the 24 data bits are coded yields a 30% transmission frame duty cycle and 4+m IDs.  
If 23% of the 24 data bits are coded yields a 28% transmission frame duty cycle and 3+m IDs.  
If 0% of the 24 data bits are coded yields a 23% transmission frame duty cycle and 0 IDs.

Therefore 30% data frame duty cycle will allow for 1 to 5 bits of the 24 data bits to be hi at any time.

