Flow Chart for Pulse Generator Program.

Two analog input are used, one to read a potentiometer which provides the ON time setting, and the other to read a potentiometer to provide the repetition frequency setting.

The values read from the potentiometers are used to look up values from tables. These values are loaded into the respective Timers to generate the ON time and repetition frequency. 

Timer 0 (8 bit) is used to generate the ON time portion of the pulse output, Timer 1 (16 bit) is used to set the period (and hence the repetition frequency of the pulse output).

Refer to the datasheet for the PIC 12F683 processor for details on the configuration of the Timer and A/D features.