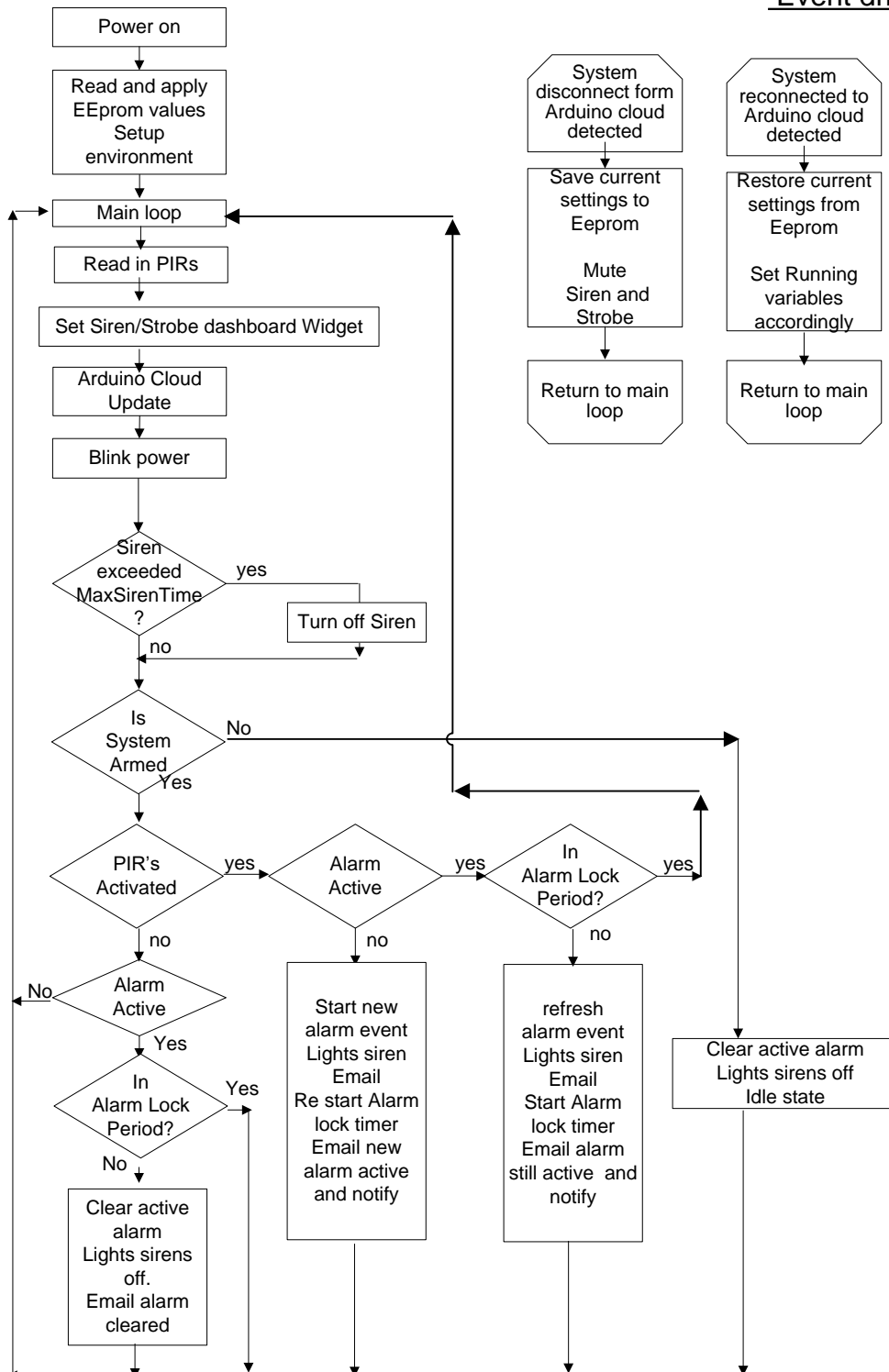
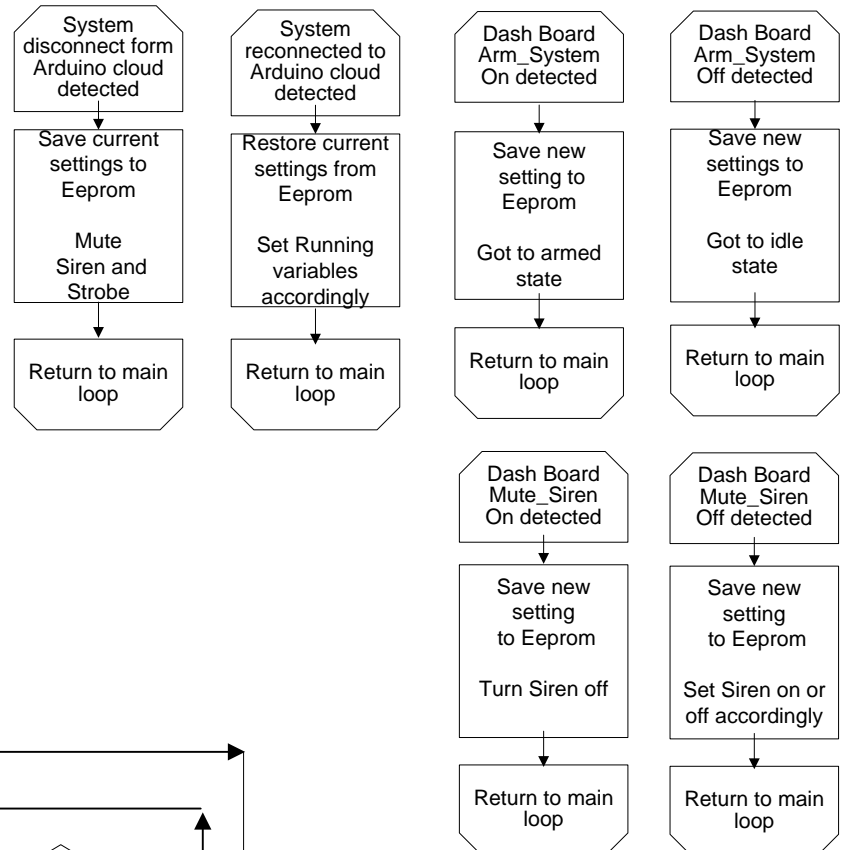


Software flow diagram



Asynchronous Event driven function



Operation

There are effectively three inputs to the alarm system

1. Dash board System_Arm switch, that switches alarm from the idle state to the armed state
2. Dash board Mute_Siren when on disables the siren. Logical state of the siren is not effected.
3. The sensor input (PIRs) these are logically just one input, If the system is in the armed state and any Sensor comes on an alarm will be triggered.

There are several built in software timers that determine system behaviour the durations are controlled by variables in the software at compile time.

1. When an alarm is triggered at timer starts that holds the system in the 'Alarmed State' until the timer expires or the system is disarmed. Variable AE_Hold sets the duration on the hold period. (default 10 minutes)
2. The duration the siren can sound is limited, for each alarm even, for regulatory and common sense reasons The MaxSireTime sets the duration.(default 180000ms) 3 minutes
3. In addition to timer 2 above there is a lock out period after the siren has stopped sounding until it can sound again. Variable Siren_Lockout sets the duration. (default 900000ms) 15 minutes.