Control system of traffic light.....

1. Requirements

As the crossroad, the south and north is ${\sf B}$ direction, and the east and west is A direction.

- Step 1: If red light in B direction is lit, then red, green and yellow light in direction A will be lit in turn.
- Step 2: If red light in A direction is lit, then red, green and yellow light in direction B will be lit in turn.
- Step 3: repeat step 1 and 2 circularly

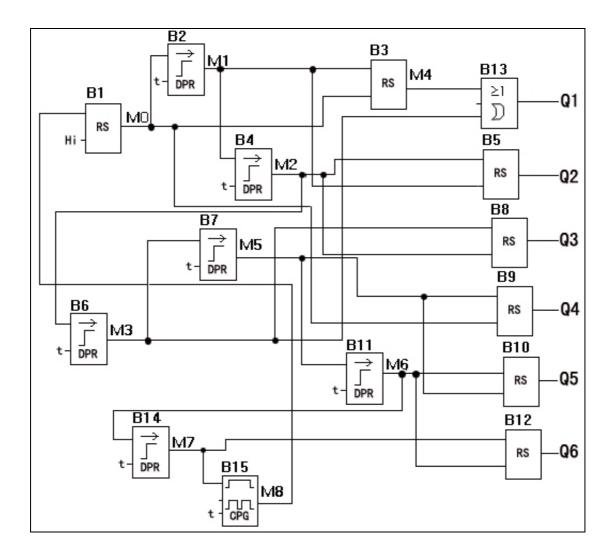
(Note: work time of each light need to be adjusted)

2. Components used

Input		Output
	Q1	red light for A direction
	Q2	green light for A direction
	Q3	yellow light for A direction
	Q4	red light for B direction
	Q5	green light for B direction
	Q6	yellow light for B direction

3. Advantages and Specialties

Fewer components are necessary than the traditional solutions.



4. Software Circuit Diagram