

14353120. 14M1. 焦. 30号

1. We set AFSEL to 1, for using an I/O pin as a UART function.
2. Pushing the switch means true state and creates a low voltage to computer; ~~Releasing~~ Releasing the switch means false state and creates a high voltage to the computer.

3. It means logic 1 output will make Blue LED be on; It means logic 0 output will make Blue LED be on.

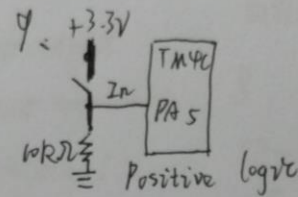
4. In the ^{condition} ~~position~~ of the question, when the ~~the~~ C bit is set, ^{C=1} ~~V~~ means that the result of the addition is unsigned overflow.

5. In the ^{condition} ~~position~~ of the question, when V bit is set, ^{V=1} ~~V~~ means that the result of the addition is signed overflow.

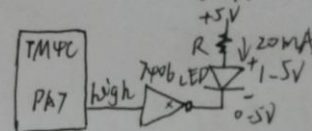
6. In the ^{condition} ~~position~~ of the question, when C bit is set, C=0 means that the result of the subtraction is unsigned overflow.

7. In the condition of the question, when V bit is set, V=1 means that the result of the subtraction is signed overflow.

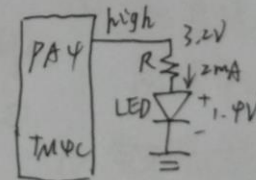
8. If the subroutine ~~needs~~ itself calls another subroutine, it needs to save and restore LR.



$$10. R = \frac{(5V - 1.5V - 0.5V)}{20 \times 10^{-3} A} = 150 \Omega$$



$$11. R = \frac{3.2V - 1.4V}{20 \times 10^{-3} A} = 90 \Omega$$



12.

Base address is	0x4000.4000
Offset for bit 7	0x200
PA7	0x4000.4200