Electronic scale circuit description of SDC5LB

MCU CIRCUIT

The MCU circuit composed of U4 HT82K95E, R6, R7, R8, C5, C6, C7, C8, C9, C10. The MCU read the vale from the A/D converter circuit and calculate the weight value, and then send to the vale to PC via USB interface, the MCU receive also the command or data from PC.

AMPLIFIER CIRCUIT

The amplifier circuit composed of the part1 of the OP amp U4 LM324, R9, R10, R11, R12, C11, C12, C13. The normal output of the amplifier is from 1.50V to 3.50V, the gain of the amplifier can be adjusted by changing the R11 value.

A/D CONVERTER CIRCUIT

The A/D converter circuit composed of the part2&3&4 of the OP amp U4 LM324, R13, R14, R15, R16, R17, C14, C15, C16, D1, D2, Q3. The A/D converter circuit general PWM signal, the frequency of PWM clock is about 23Hz, the high level width of PWM signal will be changed when changing the input analog voltage.

EEPROM CIRCUIT

U2 HT24LC04 save the calibration data of the load cell.

POWER CIRCUIT

U1 provide 4.4V voltage to MCU and OP, etc.