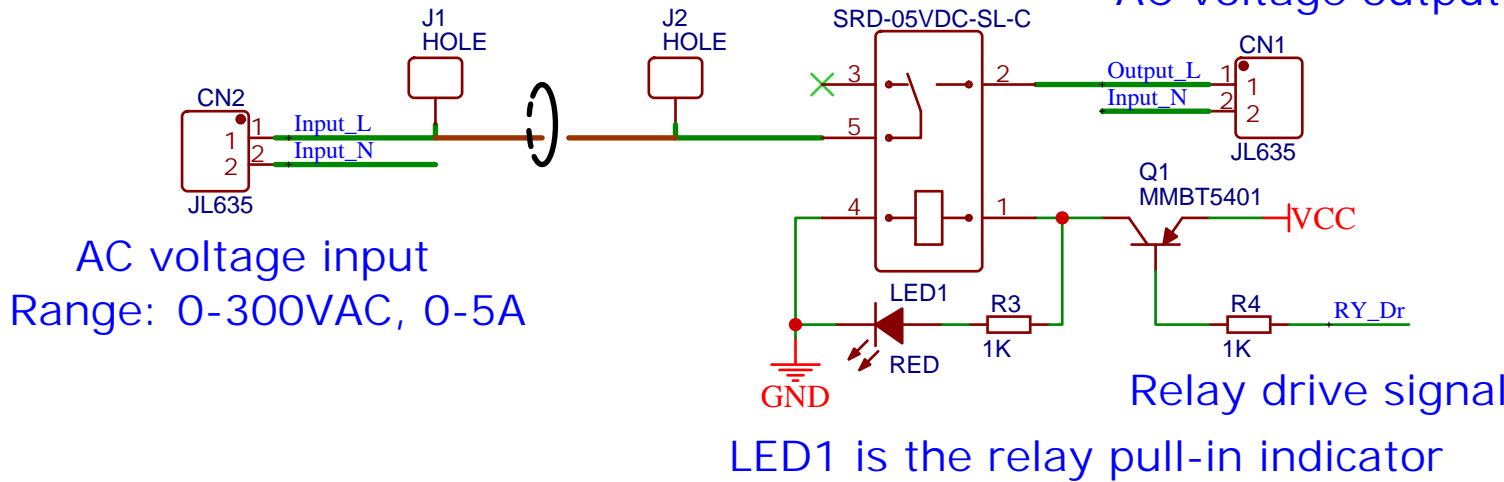


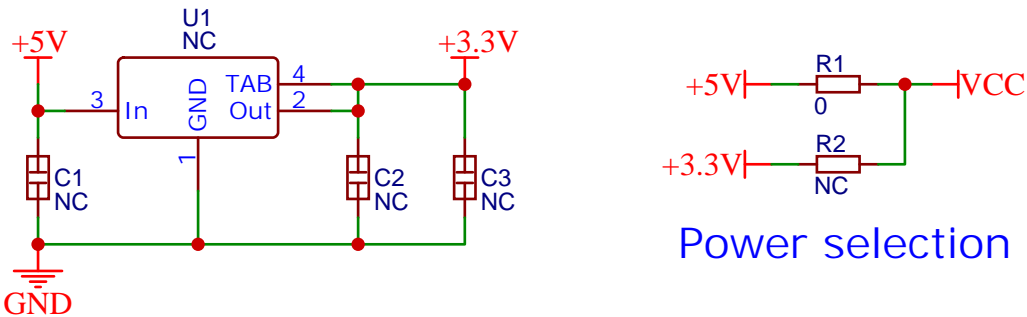
Module function:

- 1. Use HLW8032 chip to collect the voltage, current and active power of alternating current, And can calculate the apparent power, power factor and cumulative power consumption from the collected data;
- 2. Choose 5V version and 3V version to meet the needs of different microcontrollers;
- 3. The AC circuit to be tested and the control circuit are all electromagnetically isolated, safe and reliable, with high precision;

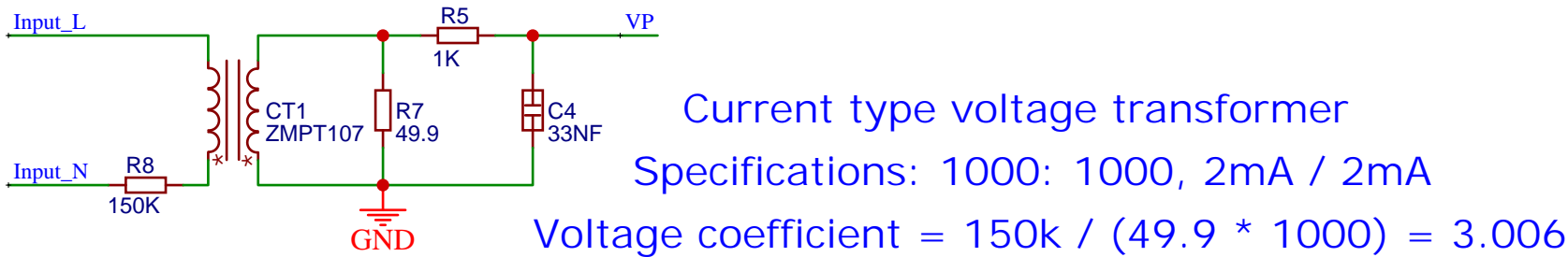
Relay control on and off  
AC voltage output



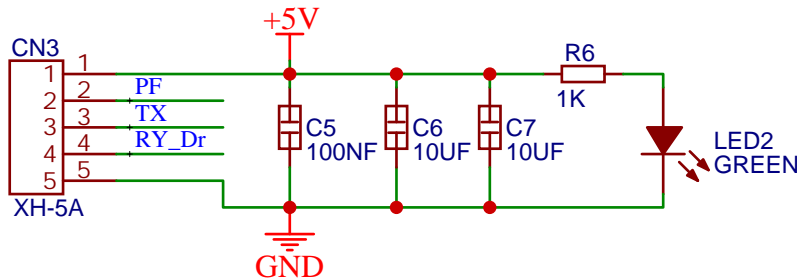
Model	RY1	U1	C1、C2	C3	R1	R2
3V MCU:	SRD-03	AMS1117-3.3	100NF	10UF	NC	0
5V MCU:	SRD-05	NC	NC	NC	0	NC



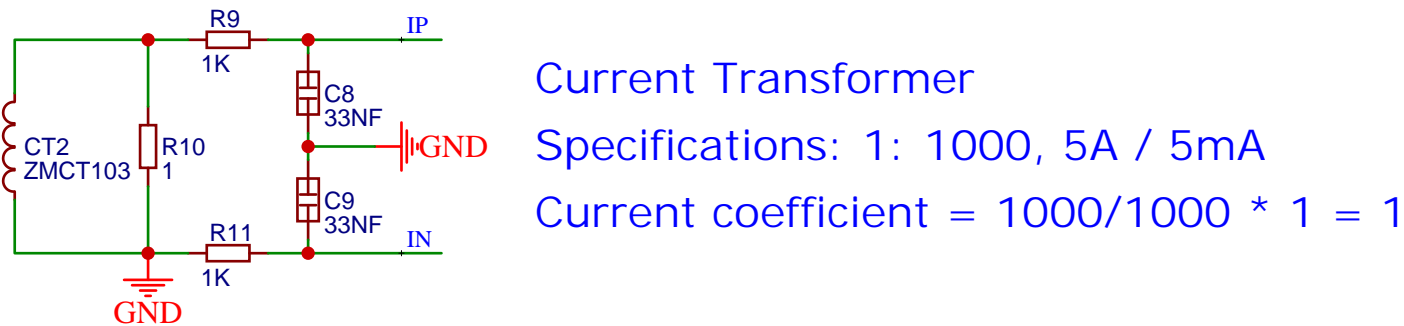
5V to 3.3V circuit, easy to use 3.3V MCU access



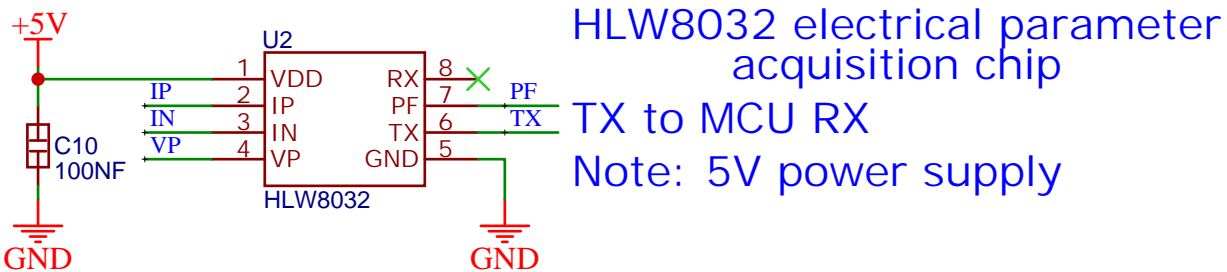
Current type voltage transformer  
Specifications: 1000: 1000, 2mA / 2mA  
Voltage coefficient =  $150k / (49.9 * 1000) = 3.006$



Connected to the MCU main control circuit,  
LED2 is the power indicator



Current Transformer  
Specifications: 1: 1000, 5A / 5mA  
Current coefficient =  $1000/1000 * 1 = 1$



HLW8032 electrical parameter acquisition chip  
TX to MCU RX  
Note: 5V power supply

TITLE: HLW8032 single-phase energy Meter (UART) module		REV: 1.0
Company:		Sheet: 1/1
Date:		Drawn By: