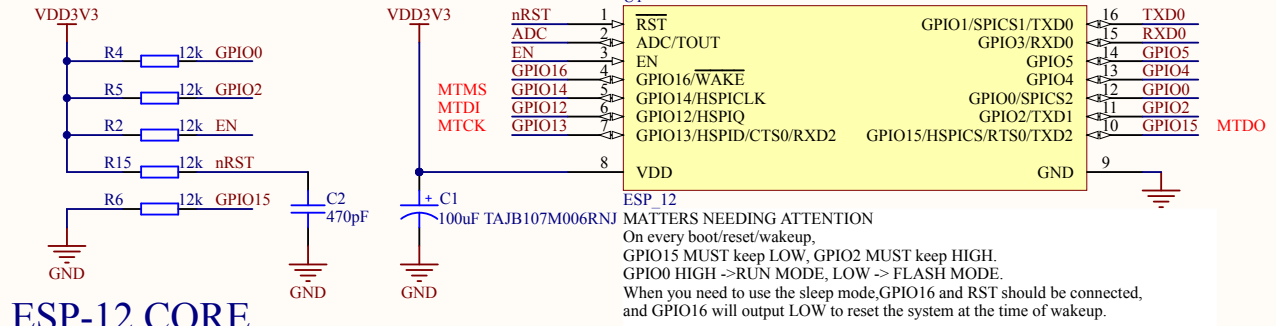
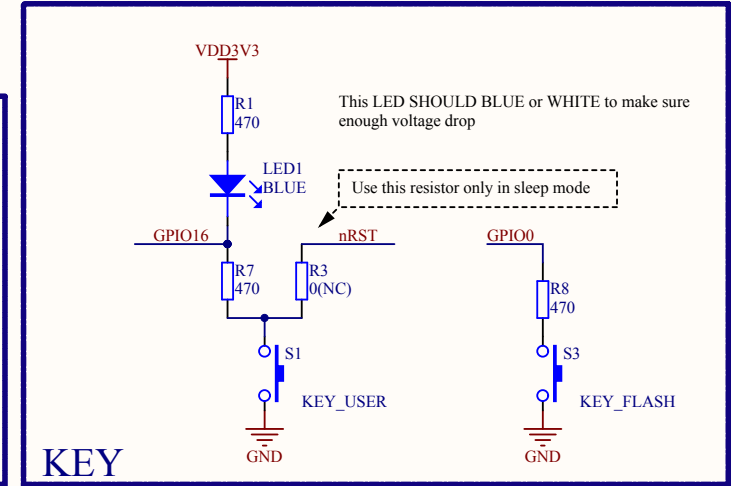


NODE MCU ESP12

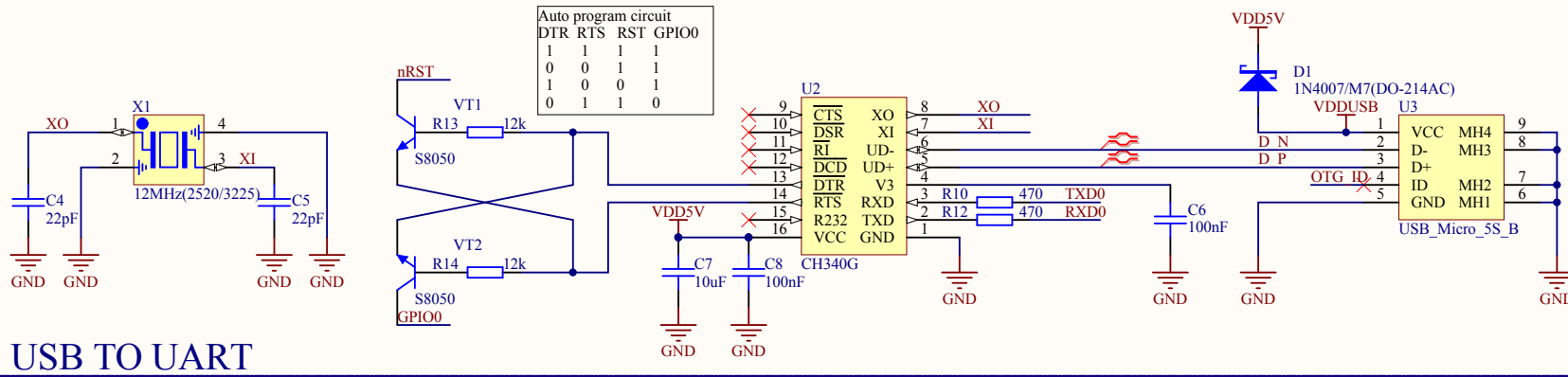


ESP-12 CORE

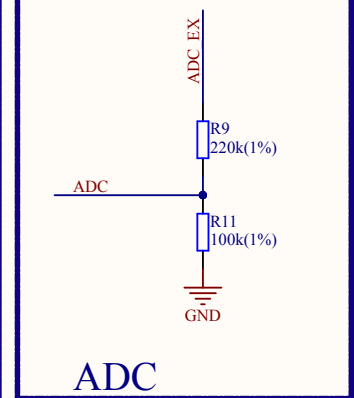
MATTERS NEEDING ATTENTION
 On every boot/reset/wakeup,
 GPIO15 MUST keep LOW, GPIO2 MUST keep HIGH.
 GPIO0 HIGH -> RUN MODE, LOW -> FLASH MODE.
 When you need to use the sleep mode, GPIO16 and RST should be connected,
 and GPIO16 will output LOW to reset the system at the time of wakeup.



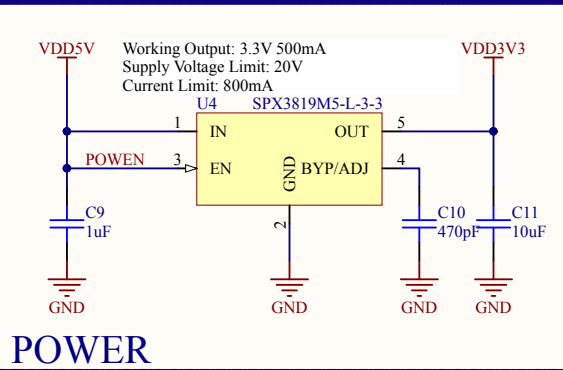
KEY



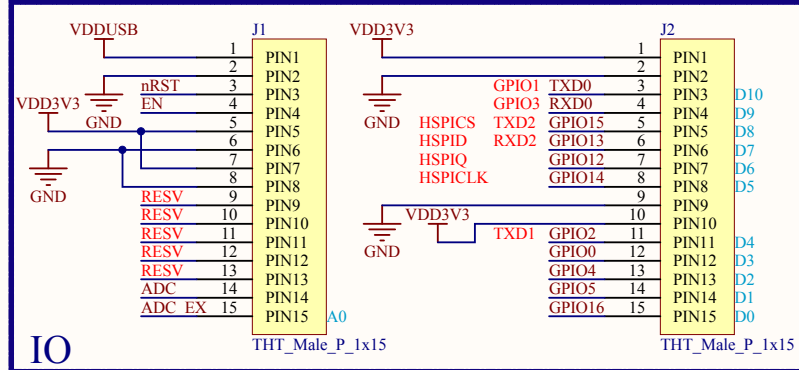
USB TO UART



ADC



POWER



IO

VER	DATE
0.9	20/11/2014
ORGANIZATION	
NODE MCU TEAM	
WEBSITE	
WWW.NODEMCU.COM	

Bill of Materials

NODE MCU ESP12

Source Data From: NODEMCU_ESP12.PrfPCB
 Project: NODEMCU_ESP12.PrfPCB
 Variant: None

Creation Date: 2014/12/28 15:13:54

Print Date: 28-Dec-14 3:14:03 PM

Footprint	Comment	LibRef	Designator	Description	Quantity
SMT_C_Tantalum_B	100uF TAJB107M006R NJ	SMT_C_Tantalum_B	C1	Capacitor, SM Tantalum; Body 3.5 x 2.8 mm (LxW typ)	1
SMT_C_0402	470pF	SMT_C_0402	C2, C10	Surface mount capacitor 0402	2
SMT_C_0402	22pF	SMT_C_0402	C4, C5	Surface mount capacitor 0402	2
SMT_C_0402	100nF	SMT_C_0402	C6, C8	Surface mount capacitor 0402	2
SMT_C_0402	10uF	SMT_C_0402	C7, C11	Surface mount capacitor 0402	2
SMT_C_0402	1uF	SMT_C_0402	C9	Surface mount capacitor 0402	1
SMT_DIODE_DO_214AC	1N4007/M7(DO-214AC)	SMT_DIODE_SCHOTTKY_DO_214AC	D1	Surface mount schottky diode DO-214AC(SMA) Package	1
THT_Male_P_1x15-2.54mm	THT_Male_P_1x15	THT_Male_P_1x15	J1, J2	THT Male pin header strip 1x15	2
SMT_LED_0603	BLUE	SMT_LED_0603	LED1	SMT LED	1
SMT_R_0402	470	SMT_R_0402	R1, R7, R8, R10, R12	Surface mount resistor 0402	5
SMT_R_0402	12k	SMT_R_0402	R2, R4, R5, R6, R13, R14, R15	Surface mount resistor 0402	7
SMT_R_0402	0(NC)	SMT_R_0402	R3	Surface mount resistor 0402	1
SMT_R_0402	220k(1%)	SMT_R_0402	R9	Surface mount resistor 0402	1
SMT_R_0402	100k(1%)	SMT_R_0402	R11	Surface mount resistor 0402	1
SMT_SW_PTS_820	KEY_USER	SMT_SW_PTS_820	S1	SMT Tactile ?Switch PTS 820 Series	1
SMT_SW_PTS_820	KEY_FLASH	SMT_SW_PTS_820	S3	SMT Tactile ?Switch PTS 820 Series	1
ESP_12	ESP_12	ESP_12	U1	ESP-12 Wi-Fi Module by AI-Thinker	1
SOP-16	CH340G	CH340G	U2	CH340G USB to serial (UART) bridge	1
USB_MICRO_5S_B	USB_Micro_5S_B	USB_Micro_5S_B	U3	USB micro female SMT with 4 fixed foot	1
SOT23-5	SPX3819M5-L-3-3	SPX3819	U4	500mA, Low-Noise LDO Voltage Regulator	1
SMT_TRIODE_NPN	S8050	SMT_TRIODE_NPN	VT1, VT2	Surface mount NPN transistor, package SOT-23	2
SMT_XTAL_2520	12MHz(2520/3225)	SMT_XTAL_PASSIVE	X1	Passive crystal	1

38

Approved	Notes