
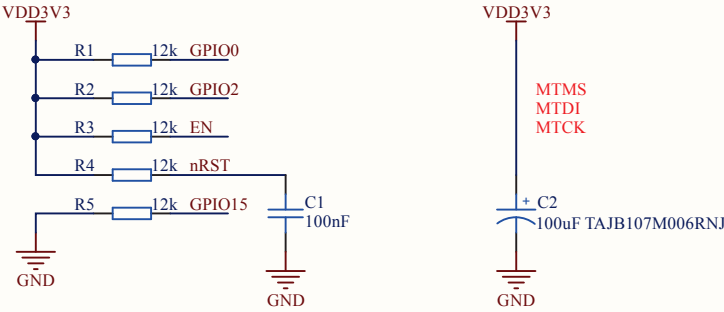


NODE MCU DEVKIT V1.0



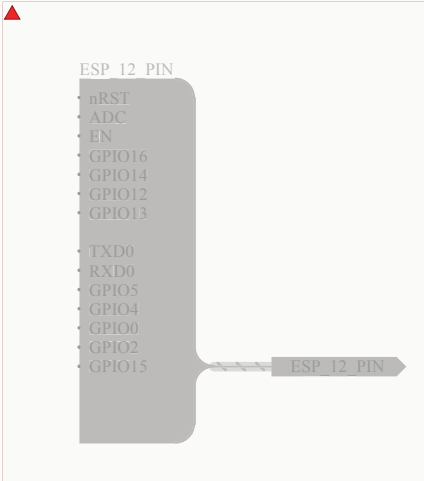
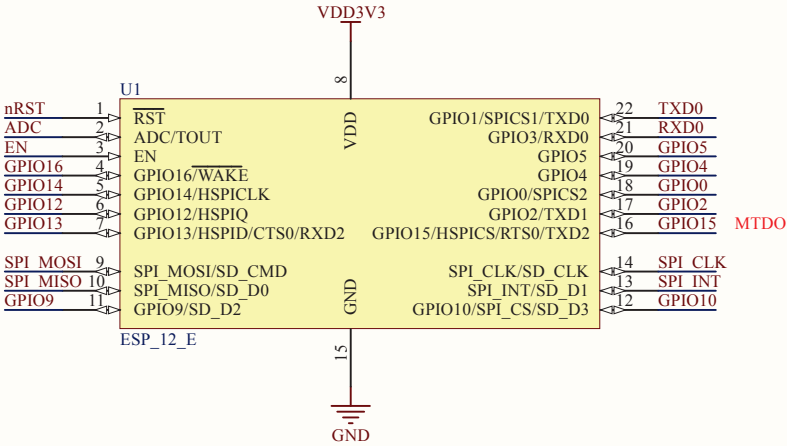
VER	DATE
1.0	25/01/2015
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WEBSITE	
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ESP-12 CORE



MATTERS NEEDING ATTENTION

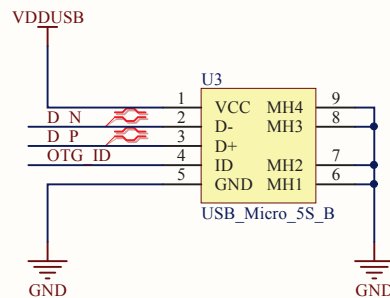
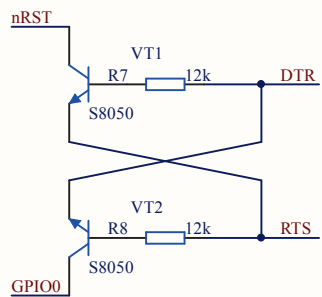
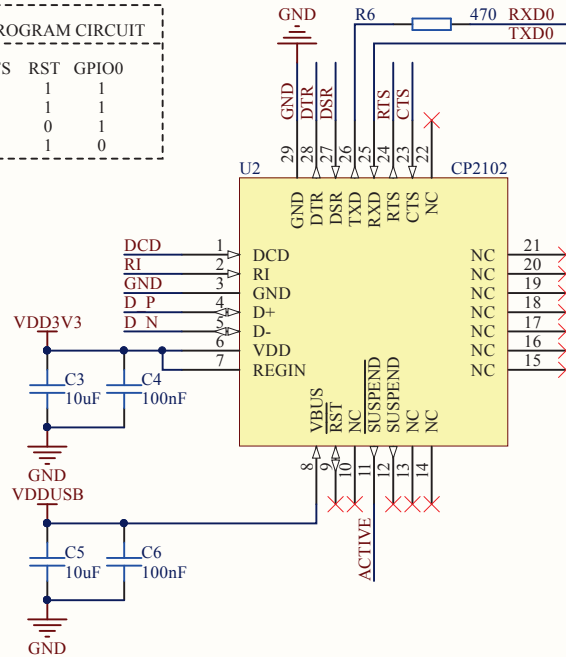
On every boot/reset/wakeup,
GPIO15 MUST keep LOW, GPIO2 MUST keep HIGH.
GPIO0 HIGH -> RUN MODE, LOW -> FLASH MODE.
When you need to use the sleep mode, GPIO16 and RST should be connected,
and GPIO16 will output LOW to reset the system at the time of wakeup.




	VER	DATE
	1.0	20/11/2014
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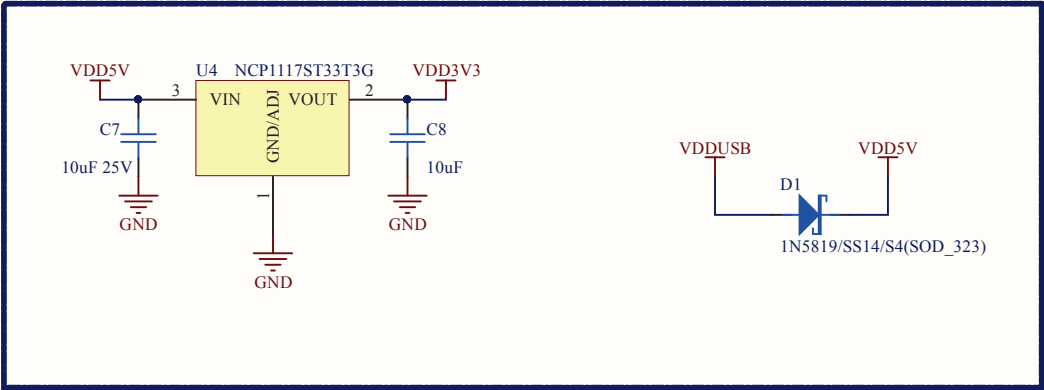
USB TO UART

AUTO PROGRAM CIRCUIT			
DTR	RTS	RST	GPIO0
1	1	1	1
0	0	1	1
1	0	0	1
0	1	1	0




	VER	DATE
	0.9	20/11/2014
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POWER



Working Output: 3.3V 800mA
Working Current Limit: 1000mA
Max Current: 1000mA
Max Supply Voltage: 20V
Voltage Dropout: 1.2V@800mA




VER	DATE
1.0	28/01/2015
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IO CONN

J1			J2					
ADC EX	A0	1	PIN1	1	D0	GPIO16		
ADC		2	PIN2	2	D1	GPIO5		
RESV		3	PIN3	3	D2	GPIO4		
SD D3	GPIO10	D12	PIN4	4	D3	GPIO0		
SD D2	GPIO9	D11	PIN5	5	D4	GPIO2	TXD1	
SD D1	SPI INT	6	PIN6	6		VDD3V3		
SD CMD	SPI MOSI	7	PIN7	7		GND		
SD D0	SPI MISO	8	PIN8	8	D5	GPIO14	HSPICLK	
SD CLK	SPI CLK	9	PIN9	9	D6	GPIO12	HSPIQ	
GND		10	PIN10	10	D7	GPIO13	RXD2	HSPID
VDD3V3		11	PIN11	11	D8	GPIO15	TXD2	HSPICS
EN		12	PIN12	12	D9	RXD0	GPIO3	
nRST		13	PIN13	13	D10	TXD0	GPIO1	
GND		14	PIN14	14		GND		
VDD5V		15	PIN15	15		VDD3V3		

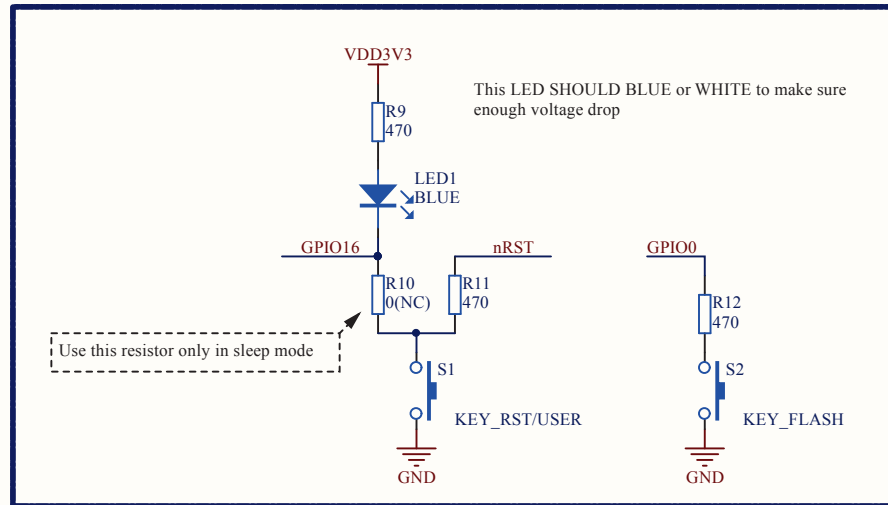
THT_Male_P_1x15


THT_Male_P_1x15



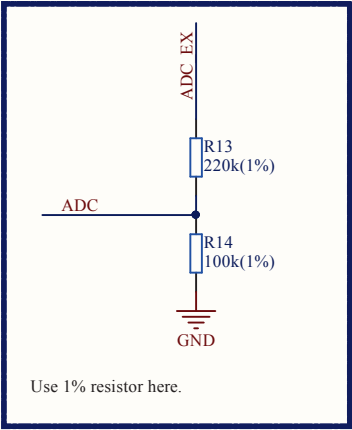
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KEY

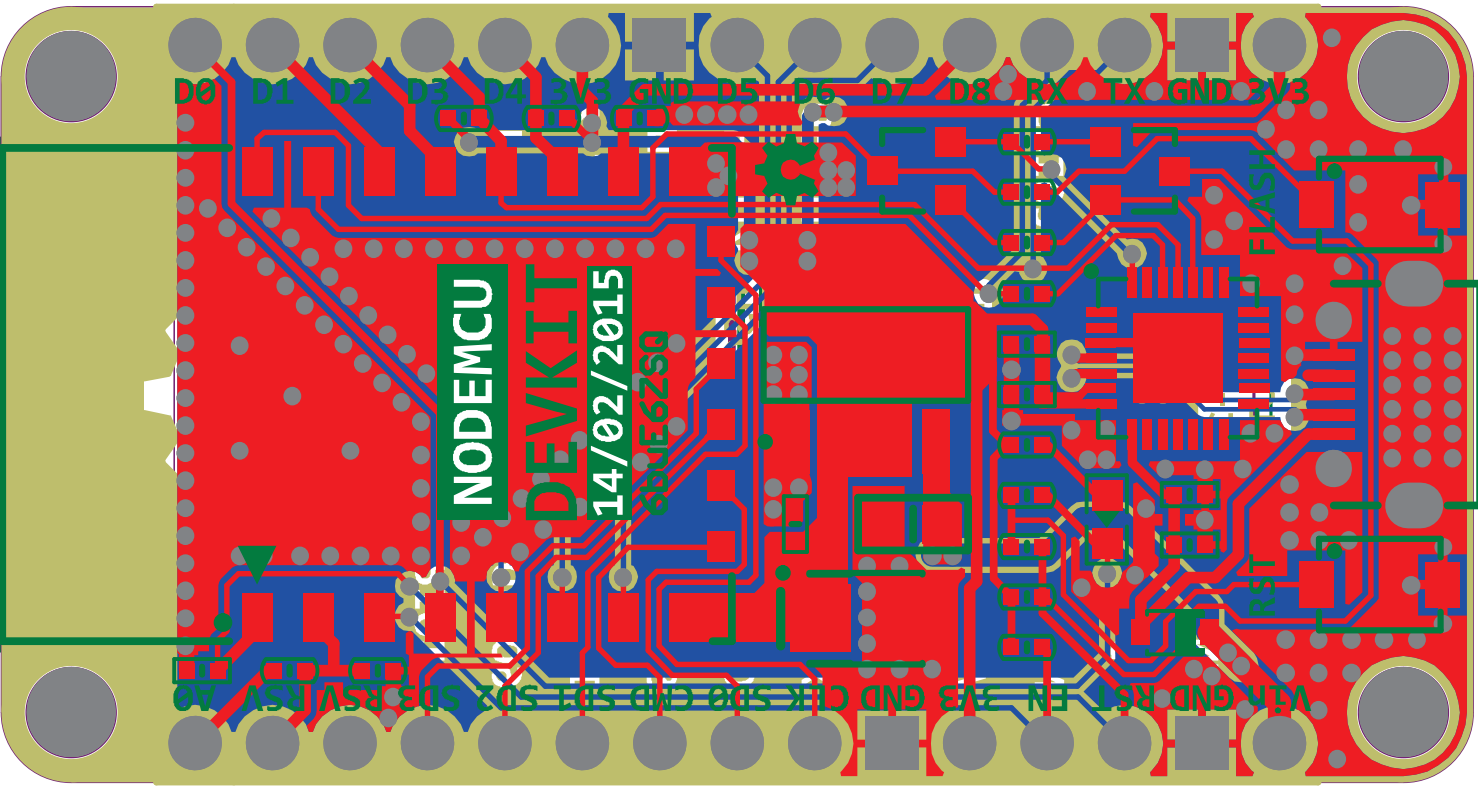


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ADC



	VER	DATE
	0.9	20/11/2014
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2.5400x4.8260cm

Bill of Materials

NODE MCU DEVKIT V1.0

Source Data From: NODEMCU_DEVKIT_V1.0.PrjPCB
Project: NODEMCU_DEVKIT_V1.0.PrjPCB
Variant: None

Creation Date: 2015/5/14 12:28:09
Print Date: 14-May-15 12:28:30 PM

Footprint	Comment	LibRef	Designator	Description	Quantity
SMT_C_0402	100nF	SMT_C_0402	C1, C4, C6	Surface mount capacitor 0402	3
SMT_C_Tantalum_B	100uF TAJB107M006R NJ	SMT_C_Tantalum_B	C2	Capacitor, SM Tantalum; Body 3.5 x 2.8 mm (LxW typ)	1
SMT_C_0402	10uF	SMT_C_0402	C3, C5, C8	Surface mount capacitor 0402	3
SMT_C_0805	10uF 25V	SMT_C_0805	C7	Surface mount capacitor 0805	1
SMT_DIODE_SOD_323	1N5819/SS14/S 4(SOD_323)	SMT_DIODE_SCHOTTKY_SOD_323	D1	Surface mount schottky diode SOD-323(0805) 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	12k	SMT_R_0402	R1, R2, R3, R4, R5, R7, R8	Surface mount resistor 0402	7
SMT_R_0402	470	SMT_R_0402	R6, R9, R11, R12	Surface mount resistor 0402	4
SMT_R_0402	0(NC)	SMT_R_0402	R10	Surface mount resistor 0402	1
SMT_R_0402	220k(1%)	SMT_R_0402	R13	Surface mount resistor 0402	1
SMT_R_0402	100k(1%)	SMT_R_0402	R14	Surface mount resistor 0402	1
SMT_SW_PTS_820	KEY_RST/USER	SMT_SW_PTS_820	S1	SMT Tactile ?Switch PTS 820 Series	1
SMT_SW_PTS_820	KEY_FLASH	SMT_SW_PTS_820	S2	SMT Tactile ?Switch PTS 820 Series	1
ESP_12_E_LCP2102	ESP_12_E CP2102	ESP_12_E CP2102	U1	ESP-12 Wi-Fi Module by AI-Thinker	1
USB_MICRO_5S_B	USB_Micro_5S_B	USB_Micro_5S_B	U2	CP2102	1
SOT-223	USB_Micro_5S_B	USB_Micro_5S_B	U3	USB micro female SMT with 4 fixed foot	1
	NCP1117ST33T3G	NCP1117	U4	USB micro female SMT with 4 fixed foot	1
SMT_TRIODE_NPN	S8050	SMT_TRIODE_NPN	VT1, VT2	NCP1117, NCV1117. 1.0 A Low-Dropout Positive Fixed and Adjustable Voltage Regulators	1
				Surface mount NPN transistor, package SOT-23	2
					34

Approved	Notes