

## SHIELD NCS314 V3.4 B1

	#	Designator	Qty	Value	PackageReference	Comment
1 - Resistors	1	R61	1	0.1 Ohm	2512	Resistor
	2	R11, R65	2	51 Ohm	0805	Resistor
	3	R20, R37, R38, R48, R23, R54	6	1k	0805	Resistor
	4	R35, R41, R42, R67	4	10k	0805	Resistor
	5	R56	1	10.5k	0806	Resistor
	6	R1, R2, R3, R4, R5, R6	6	27k	0805	Resistor
	7	R36	1	150k	0805	Resistor
	8	R7, R8, R9, R10	4	220k	0805	Resistor
	9	R12, R13, R14, R15, R57	5	300k	0805	Resistor
	10	R50	1	1.5 MOhm	0805	Resistor
2 - Capacitors	11	C1, C3, C4, C5, C8, C9, C10, C13, C14, C16, C17, C19, C21, C22, C23	15	100nF 50V	0805	Ceramic capacitor
	12	C2, C18	2	100nF 250V	1206	Ceramic capacitor
	13	C6, C12	2	10uF 16V	0805	Ceramic capacitor
	14	C7	1	10uF 10V/ or 10uF 16V	Size-A (SMD3216) Size-B (SMD3528)	Tantal capacitor
	15	C15	1	10uF 250V	TH & SMD 10x10mm	Aluminum capacitor NACV100M250V10X10.8TR13F
	16	C11, C20	2	220uF 16V	TH & 'SMD 6.3x7.7mm	Aluminum capacitor NACE221M16V6.3X8TR13F
3 - Diodes	17	D3, D4	2	SS26	SMA/ SMB	Schottky diode
	18	D24	1	ES2J/ or ES2F	SMA/ SMB	Fast diode
	19	POW	1	LED RED	1206	Power indicator
	20	D2	1	ZM4764A	DO-213AB	Zener Diode 100V
4 - IC's & Transistors	21	U1	1	HV57708PG	PQFP-80	HV Driver
	22	U5	1	DS3231SN/ or DS3231MZ	SOIC-16W/ SOIC-8	RTC
	23	U6	1	LM3478MM/ or LM3488MM/ or LM3478MAX	VSSOP-8/ VSSOP-8/ SOIC-8	DC-DC HV. Already soldered on PCB.
	24	<i>for connect TEM1 via Wire PH2.0-3p</i>	1	DS18B20	TO-92	Temperature sensor
	25	IR1	1	TSOP4836	DIP-3	IR Receiver
	26	T2	1	PMBTA42/BC817	SOT-23	NPN Transistor
	27	T1	1	FQD10N20L/ FQD12N20L	DKPAK	Transistor MOSFET N-Chanal
5 - Coils	28	L1	1	220uH 1.5A	CDRH127 SMD 12x12x7mm	Shielded inductance
6 - Misc	29	GPS1-1, TEM-2	2	Jack 3.5mm	ST-11M-030-00-0	For external GPS and DS18B20
	30	DOWN, MODE, UP	3	SWT-3/13 Button	h=13, L=9	Control buttons
	31	BT1	1	Battery Holder CR1220	SMD CR1220	Backup for RTC
	32	<i>insert into the battery holder BT1</i>	1	Battery CR1220		Battery 3V Lithium
	33	B1	1	HCS0903G/ or STD0833C	SMD 8.5x8.5mm	Buzzer HCS0903G Replace STD0833C
	34	SPI1	1	PLD-4	Pich 2.54mm	Connect to Arduino
	35	DG3	1	PLS-4	Pich 2.54mm	Connect to Arduino
	36	AN1, PWR1	2	PLS-6	Pich 2.54mm	Connect to Arduino
	37	DG2	1	PLS-8	Pich 2.54mm	Connect to Arduino
	38	DG1	1	PLS-10	Pich 2.54mm	Connect to Arduino
	39	ExDOWN, ExMODE, ExUP, LS1	4	PH2.0-2p	Pich 2.0mm	For external buttons
	40	GPS1	1	PH2.0-4p	Pich 2.0mm	For external GPS
	41	TEM-1	1	PH2.0-3p Right / or PH2.0-3p	Pich 2.0mm	For external TEMP DS18B20
42	<i>for connect DS18B20 to TEM1</i>	1	Wire PH2.0-3p	L = 10-30cm	Wire for DS18B20	
43	<i>sockets for NX1, NX2, NX3, NX4, NX5, NX6</i>	84	Socket pin		Options: Sockets for IN14	
7- RGB LED	44	D1, D26, D27, D28, D29, D30, D31, D32	8	SK6812-Mini	3535	Addressabled RGB LED
8 - Nixie Tubes	45	NX1, NX2, NX3, NX4, NX5, NX6	6	IN-14	Option	Nixie Tube
9 - Neon lamps	46	DS1, DS2, DS3, DS4	2	NE-2H		Neon Lamp Replace NE11S5
10 - Mechanical	47	Hex Spacer M3 5mm	4		IN-OUT	
	48	Hex Spacer M3 12mm	4		IN-IN	
	49	Hex Spacer M3 18mm	2		IN-IN	
	50	Screw M3 L=6 mm	6			
	51	<i>for DS18B20 and Neon Lamp</i>	1	Heat Shrink 1/0.5mm	7cm	For insulation DS18B20 and Neon Lamp
	52	PCB NCS314-6 v3.4	1			Size 53.26x200mm