

Bill of Materials PCB MCU NCM107 v1.1

	Creation Date: 21.12.2016				
#	Designator	Quantity	Comment	Footprint	
1	B1	1	Buzzer HCS0903G	SMD passive BUZZER 8,5x8,5	
2	BT1	1	Batttery Holder CR1220	Batttery Holder CR1220	
3	C2, C3 , C26, C27, 'C12, C16, C18, C20, C21, C22, C23, C29	12	100nF 50V	0805	
4	C4	1	220uF 16V	SMD 6,3x7,7mm (or TH Capacitor)	
5	C5, C9, C11, C14	4	10uF 16V	0805	
6	C6	1	10uF 250V	10x10,5mm UUX2E100MNL1GS (or TH Capacitor)	
7	C7, C28	2	100nF 250V	1206	
8	C10	1	10nF 50V	0805	
9	C13	1	1000uF 16V	10x10,5mm (or TH Capacitor)	
10	C15, C17, C19	3	10uF 16V	Size-A (SMD3216)	
11	C24, C25	2	22pF 50V	0805	
14	D13	1	LED	LED RED 1206	
15	D14	1	ES2J	DO-214AA (SMB)	
16	D15, D19	2	DS_SS26	DO-214AA (SMB)	
18	D17	1	SMBJ220CA	DO-214AA (SMB)	
20	DOWN, MODE, UP	3	Button_SWT-3	SWT-3_6mm	
21	ExDOWN, ExMODE, ExUp, ExPow	4	PH2.0-2p	PH2-2p	
22	ExUSB	1	PH2.0-4p	PH2-4p	
23	F1	1	0 ohm	1206 (or Fuse 3A 36V)	
24	J1	1	PWR_DJK-02A	KLD-0202_NOM	
25	J2	1	MUSB	UX60-MB	
26	L1	1	100uH 2,7A	RCR1616 16x16mm	
27	L2	1	15-22uH 2A	CDRH104R 10x10mm	
28	MAIN	1	PBD-38	PBD-38-3D	
29	Q1	1	STD18N55M5 (or FDD18N20LZ)	DPAK	
30	R8, R29, R31, R33, R34, R35	6	1k	0805	
31	R20	1	300k 0805	0805	
32	R9	1	1.5 MOhm 0805	0805	
33	R10	1	1 Ohm	1206	
34	R11	1	150k 0805	0805	
35	R14, R16, R26, R27, R30	5	10k 0805	0805	
37	R17	1	10k	3296W (adjust resistor)	
38	R21	1	0.05 Ohm	R2512	
39	R22	1	95.3k 0805	0805	
40	R23	1	18.2k 0805	0805	
44	TLI	1	PH2.0-3p	PH2-3p	
46	U4	1	MAX1771CSA	SOIC-8	
47	U5	1	RT8258GE (Replace see schem)	SOT23-6	
48	U6	1	DS3231S	SOIC-16W	
49	U7	1	FT230XS	SSOP-16	
50	U8	1	ATmega328P-PU	DIP-28	
51	U9	1	ULN2003D	SOIC-16	
52	Z1	1	16Mhz	Quartz SMD 6x3,5mm	
53	not market on PCB	1	SIP DIP-28	Install to U8	

54	not market on PCB	1	Battery Li-ion CR1220	Install to BT1	
55	PCB MCU NCM107 v1.1	1			

Bill of Materials PCB Tubes Board NCT318 v1.1

#	Designator	Quantity	Comment	Footprint	
1	NX1, NX2, NX3, NX4, NX5, NX6	6	IN-18	NIXIE Tubes	NOT Include
2.1	DS2, DS3	2	IN-3	Variant 1 -Without Column	Default
2.2	DS1, DS2, DS3, DS4	4	NE-2H/C2A	Variant 2 - With Column	Options
		2	Column 10x65mm	- DS2, DS4 solder legs at full length	Options
		2	Column Holder	DS1, DS3 solder below DS2, DS4	Options
		8	Screw		Options
		8	Nut M2,5		Options
2	Hex pillar M3x8mm IN-OUT	4			
3	Hex pillar M3x20mm IN-IN	4			
4	Hex pillar M3x30mm IN-IN	4			
5	Screw M3x6mm L=6mm	8			
6	MAIN1	1	PLD-18	PLD-18	
8	not marked on PCB	84	Socket pins	Socket for IN-18 Install to NX1-NX6	
9	not marked on PCB	2	PLCC-44	Socket for HV5122JP Install to U2, U3	
10	D1, D2, D3, D4, D5, D6, D7, D8	8	LED RGB 3528	LED RGB 3528	
11	U2, U3	2	HV5122JP	PLCC-44	
12	U1	1	CD4504BM	SOIC-16	
13	C1, C2, C3, C4	4	100nF 50V	0805	
14	R11-R18, R27-34	16	100 Ohm	0805	
15	R19-R26	8	150 Ohm	0805	
16	R5-R10	6	10k	1210	
17	R1-R4	4	150k	0805	
18	PCB TUBES NCT318	1			