

Bill of Materials PCB MCU NCM107 v1.1

	Creation Date: 21.12.2016					
#	Designator	Quantity	Comment	Footprint	Price \$, 1PC	Price \$, Total
1	B1	1	Buzzer HCS0903G	SMD passive BUZZER 8,5x8,5	0,3	0,300
2	BT1	1	Batttery Holder CR1220	Batttery Holder CR1220	0,1	0,100
3	C2, C3 , C26, C27, 'C12, C16, C18, C20, C21, C22, C23, C29	12	100nF 50V	0805	0,0025	0,030
4	C4	1	220uF 16V	SMD 6,3x7,7mm (or TH Capacitor)	0,1	0,100
5	C5, C9, C11, C14	4	10uF 16V	0805	0,01	0,040
6	C6	1	10uF 250V	10x10,5mm UUX2E100MNL1GS (or TH Capacitor)	0,36	0,360
7	C7, C28	2	100nF 250V	1206	0,014	0,028
8	C10	1	10nF 50V	0805	0,003	0,003
9	C13	1	1000uF 16V	10x10,5mm (or TH Capacitor)	0,2	0,200
10	C15, C17, C19	3	10uF 16V	Size-A (SMD3216)	0,03	0,090
11	C24, C25	2	22pF 50V	0805	0,003	0,006
12	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D21, D22, D23, D24, D25, D26, D27, D28, D29	20	BAV103	SOD80/MLL34	0,02	0,400
13	D12	4	ZM4764A	DO-213AB	0,1	0,400
14	D13	1	LED	LED RED 1206	0,01	0,010
15	D14	1	ES2J	DO-214AA (SMB)	0,04	0,040
16	D15, D19	2	DS_SS26	DO-214AA (SMB)	0,0128	0,026
17	D16	1	SMAJ18CA	DO-213AC (SMA)	0,1	0,100
18	D17	1	SMBJ220CA	DO-214AA (SMB)	0,1	0,100
19	D20	4	DL4148	SOD80/MLL34		0,000
20	DOWN, MODE, UP	3	Button_SW T 3	SW T 3_6mm	0,024	0,072
21	ExDOWN, ExMODE, ExUp, ExPow	4	PH2.0-2p	PH2-2p	0,05	0,200
22	ExUSB	1	PH2.0-4p	PH2-4p	0,05	0,050
23	F1	1	0 ohm	1206 (or Fuse 3A 36V)	0,01	0,010
24	J1	4	PWR_DJK 02A	KLD 0202_NOM	0,037	0,037
25	J2	4	MUSB	UX60-MB	0,037	0,037
26	L1	1	100uH 2,7A	RCR1616 16x16mm	0,22	0,220
27	L2	1	15-22uH 2A	CDRH104R 10x10mm	0,15	0,150
28	MAIN	1	PBD-38	PBD-38-3D	0,25	0,250
29	Q1	1	STD18N55M5 (or FDD18N20LZ)	DPAK	0,45	0,450
30	R1, R2, R3, R4, R5, R8, R29, R31, R33, R34, R35	11	1k	0805	0,0016	0,018
31	R6, R7, R19, R20	4	300k 0805	0805	0,0016	0,006
32	R9	1	1.5 MOhm 0805	0805	0,0016	0,002
33	R10	1	1 Ohm	1206	0,0016	0,002
34	R11	1	150k 0805	0805	0,0016	0,002
35	R12 , R14, R15 , R16, R18 , R26, R27, R30	8	10k 0805	0805	0,0016	0,013
36	R13	4	10K Opt 0805	R_0805	0,0016	0,002
37	R17	1	10k	3296W (adjust resistor)	0,1	0,100
38	R21	1	0.05 Ohm	R2512	0,1	0,100
39	R22	1	95.3k 0805	0805	0,0016	0,002
40	R23	1	18.2k 0805	0805	0,0016	0,002
41	R24, R25	2	27 Ohm 0805	0805	0,0016	0,003
42	T1, T3, T5	3	PMBTA92	SOT23-3N	0,04	0,030
43	T2, T4, T6, T7, T8	5	PMBTA42	SOT23-3N	0,04	0,050
44	TLI	1	PH2.0-3p	PH2-3p	0,05	0,050
45	U1	4	HV5812WG	SOIC-28W	1,6	1,600
46	U4	1	MAX1771CSA	SOIC-8	0,45	0,450
47	U5	1	RT8258GE (Replace see schem)	SOT23-6	0,22	0,220

48	U6	1	DS3231S	SOIC-16W	0,25	0,250
49	U7	1	FT230XS	SSOP-16	1,7	1,700
50	U8	1	ATmega328P-PU	DIP-28	1,26	1,260
51	U9	1	ULN2003D	SOIC-16	0,04	0,040
52	Z1	1	16Mhz	Quartz SMD 6x3,5mm	0,22	0,220
53	not market on PCB	1	SIP DIP-28	Install to U8	0,3	0,300
54	not market on PCB	1	Battery Li-ion CR1220	Install to BT1	0,08	0,080
55	PCB MCU NCM107 v1.1 (Manufacture)	1			1	1,000

Bill of Materials PCB Tubes Board NCT318 v1.0

#	Designator	Quantity	Comment	Footprint	Price \$, 1PC	Price \$, Total
1	Hex pillar M3x6mm IN-OUT	4			0,038	0,152
2	Hex pillar M3x20mm IN-IN	4			0,086	0,344
3	Hex pillar M3x28mm IN-IN	4			0,22	0,880
4	Screw M3x6mm L=6mm	8			0,096	0,768
5	MAIN1	1	PLD-18	PLD-18	0,4	0,400
6	EDIT1	4	PBD-12R	PBD-12R	0,4	0,400
7	not market on PCB	84	Collet	Socket for IN-18 Install to NX1-NX6	0,05	4,200
8	not market on PCB	2	PLCC-44	Socket for HV5122JP Install to U2, U3	0,3	0,600
8	D1, D2, D3, D4, D5, D6, D7, D8	8	LED RGB 3528	LED RGB 3528	0,01	0,080
9	U2, U3	2	HV5122JP	PLCC-44	4,2	8,400
9	U1	1	CD4504BM	SOIC-16	0,1	0,100
10	C1, C2, C3, C4	4	100nF 50V	0805	0,0025	0,010
10	R11-R18, R27-34	16	100 Ohm	0805	0,0016	0,026
11	R19-R26	8	150 Ohm	0805	0,0016	0,013
11	R5-R10	12	22k	0805 Warning Solder Parralel 2pcs resistors	0,0016	0,019
13	PCB TUBES Manufacture	1			1,8	1,800

1	NX1, NX2, NX3, NX4, NX5, NX6	6	IN-18	NIXIE Tubes	30	180,000
2.1	DS2, DS3	2	NE-2H/C2A	Variant 1 -Without Column	0,3	0,600
2.2	DS1, DS2, DS3, DS4	4	NE-2H/C2A	Variant 2 - With Column	0,3	1,200
		2	Column 10x65mm	- DS2, DS4 solder legs at full length	1	2,000
		2	Column Holder	DS1, DS3 solder below DS2, DS4	0,6	1,200
		8	Screw		0,01	0,080
		8	Nut M2,5		0,01	0,080
3	Wooden Case	1			15	15,000
4	Assebled NIXIE Clock (Ivan)	1			18	18,000
5	PG2.1	1			0,5	0,500
6	PS24B2	3		Buuton SPST-NO; 6A/250BAC	2	6,000
7	USB + PCB + Hex pillar 12mm - 2pcs	1			1	1,000
8	Top cover	1			7	7,000
9	Back Panel	1			2,6	2,600
10	Logo	1			2,2	2,200
11	Screw countersunk head M3x6mm	8				0,000
12	screw-nail	4				0,000
13	screw-nail	4				0,000
14	PH2.0-4 plug with wire	1				0,000
15	PN2.0-2 plug with wire	4				0,000
16	Пайка MCU	1			2,6	2,600
17	Пайка Tube	1			1	1,000