

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	1	ZM4764A	DO-213AB	0,1	0,100
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	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_SWT 3	SWT 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	220uH 1,7A	SMD 12x8mm	0,22	0,220
27	L2	1	15-22uH 2A	CDRH104R 10x10mm	0,15	0,150
28	MAIN	1	PBD-38	PBD-38 (KLS1-208-2-38-S)	0,25	0,250
29	Q1	1	STD18N55M5 (or IRFR320TRPBF, AOD458)	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	0.1 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	0,01	0,030
43	T2, T4, T6, T7, T8	5	PMBTA42	SOT23-3N	0,01	0,050
44	TLI	1	PH2.0-3p	PH2-3p	0,05	0,050
45	U1	1	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 NCT414 v1.0

#	Designator	Quantity	Comment	Footprint	Price \$, 1PC	Price \$, Total
1	Hex pillar M3x5mm IN-OUT	4			0,038	0,152
2	Hex pillar M3x18mm IN-IN	4			0,086	0,344
3	Hex pillar M3x25mm IN-IN	2			0,22	0,440
4	Screw M3x6mm L=6mm	6			0,096	0,576
5	MAIN1	1	PLD-38	PLD-38	0,4	0,400
8	D1, D2, D3, D4, D5, D6, D7, D8	8	LED RGB 3528	LED RGB 3528	0,01	0,080
10	R5, R6, R7, R8, R9, R10, R11, R12, R21, R22, R23, R24, R25, R26, R27, R28	16	100 Ohm	0805	0,0016	0,026
11	R13, R14, R15, R16, R17, R18, R19, R20	8	150 Ohm	0805	0,0016	0,013
	COMA1, COMA2, COMA3, COMA4		0 ohm	0805	0,0016	
11	R29, R30, R31, R32, R33, R34	6	1k	0805	0,0016	0,010
13	PCB TUBES NCT414 Manufacture	1			1,8	1,800

1	NX0, NX1, NX2, NX3, NX4, NX5	6	IN-14	NIXIE Tubes	2	12,000
2.1	DS2, DS3	2	IN-3	Variant 1 -Without Column	0,3	0,600
2.2	DS1, DS2, DS3, DS4	4	GT-NE6S1325T (or NE-2H/C2A)	Variant 2 - With Column	0,3	1,200
		2	Column 10x65mm	- DS2, DS4 solder pins at full length	1	2,000
		2	Column Holder	DS1, DS3 solder below DS2, DS4	0,6	1,200
		8	Screw M2.5x12mm		0,01	0,080
		8	Nut M2.5		0,01	0,080
3	Wooden Case (Victor)	1			15	15,000
4	Assembled NIXIE Clock (Ivan)	1			18	18,000
5	PG2.1	1		Power connector 5.5x2.1mm	0,5	0,500
6	MTS-123	2		Button (ON)-OFF-(ON)	1	2,000
7	USB-B	1	USB-B Vertical	KIT for USB-B	0,3	0,300
		2	Hex pillar 12mm		0,07	
		1	PCB NCU-701		0,25	
		2	Screw M3x6mm			
		2	Screw M3x6mm			
		1	PH2.0-4 plug with wire			
8	Top cover	1			4	4,000
9	Back Panel	1			2,6	2,600
10	Logo (Divergence Meter)	1			2,2	2,200
11	Screw countersunk head M3x6mm	6				0,000
12	screw-nail countersunk head d2,5x8mm	4				0,000
13	screw-nail d2,5x8mm	4				0,000
15	PN2.0-2 plug with wire	4			0,01	0,040
16	Пайка MCU	1			2,6	2,600
17	Пайка Tube	1			1	1,000