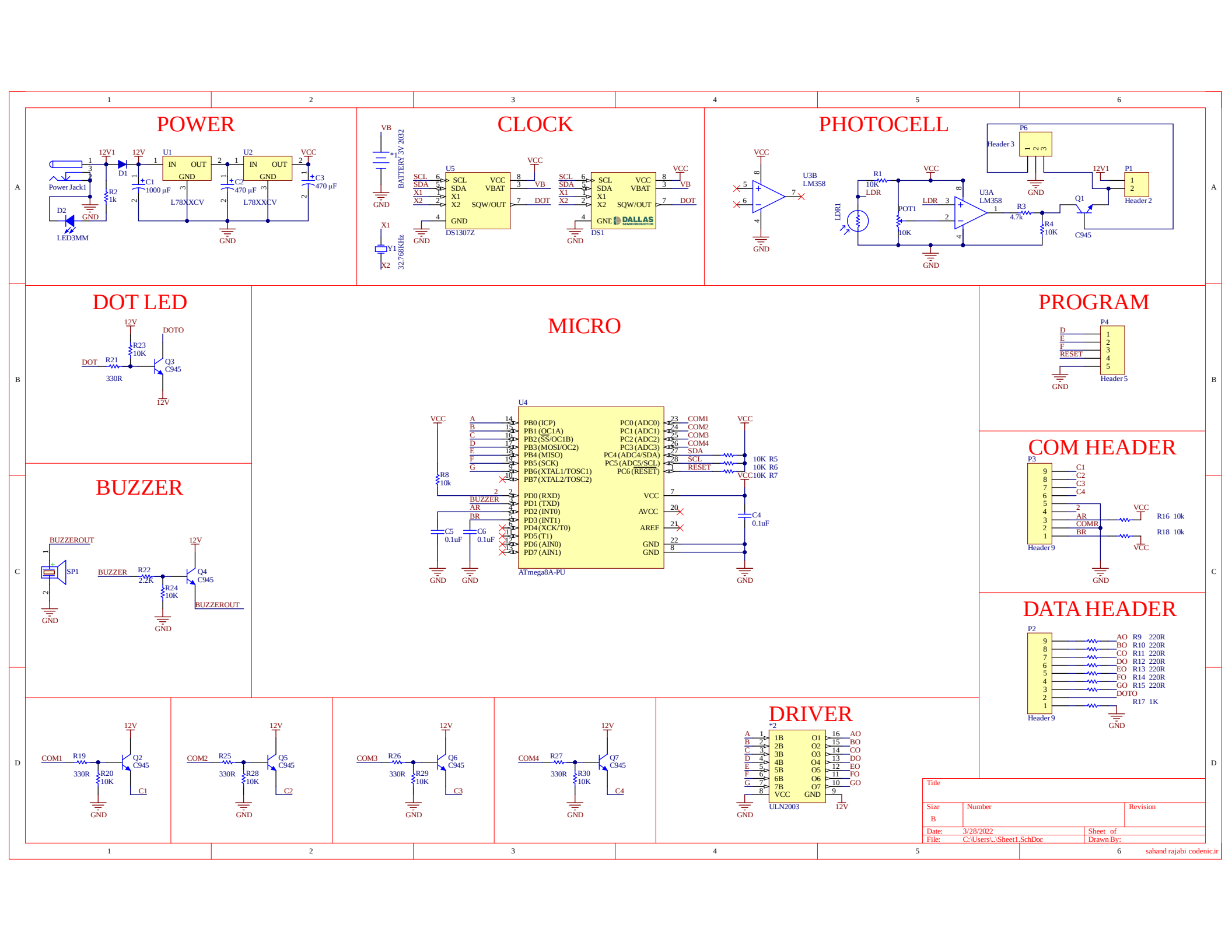
POWER
Power Jack1
LED3MM
D2
R2
1k
D1
12V1
12V
U1
IN
OUT
GND
L78XXCV
C1
1000 µF
U2
C2
470 µF
VCC
C3
470 µF
CLOCK
VB
BATTERY 3V 2032
U5
SCL
SDA
X1
X2
VCC
VBAT
SQW/OUT
DS1307Z
DOT
DS1
Y1
32.768KHz
PHOTOCELL
U3B
LM358
R1
10K
LDR
LDR1
POT1
U3A
R3
4.7k
R4
10K
Q1
C945
P6
Header 3
P1
Header 2
DOT LED
DOTO
R23
10K
R21
330R
Q3
C945
MICRO
U4
PB0 (ICP)
PB1 (OC1A)
PB2 (SS/OC1B)
PB3 (MOSI/OC2)
PB4 (MISO)
PB5 (SCK)
PB6 (XTAL1/TOSC1)
PB7 (XTAL2/TOSC2)
PD0 (RXD)
PD1 (TXD)
PD2 (INT0)
PD3 (INT1)
PD4 (XCK/T0)
PD5 (T1)
PD6 (AIN0)
PD7 (AIN1)
PC0 (ADC0)
PC1 (ADC1)
PC2 (ADC2)
PC3 (ADC3)
PC4 (ADC4/SDA)
PC5 (ADC5/SCL)
PC6 (RESET)
AVCC
AREF
ATmega8A-PU
R8
10k
BUZZER
AR
BR
C5
0.1uF
C6
0.1uF
COM1
COM2
COM3
COM4
10K R5
10K R6
10K R7
C4
0.1uF
PROGRAM
P4
Header 5
BUZZER
BUZZEROUT
SP1
R22
2.2K
R24
10K
Q4
C945
COM HEADER
P3
Header 9
R16 10k
R18 10k
DATA HEADER
P2
AO R9 220R
BO R10 220R
CO R11 220R
DO R12 220R
EO R13 220R
FO R14 220R
GO R15 220R
DOTO
R17 1K
COM1
R19
330R
R20
10K
Q2
C945
C1
COM2
R25
330R
R28
10K
Q5
C945
C2
COM3
R26
330R
R29
10K
Q6
C945
C3
COM4
R27
330R
R30
10K
Q7
C945
C4
DRIVER
*2
ULN2003
Title
Size
B
Number
Revision
Date:
3/28/2022
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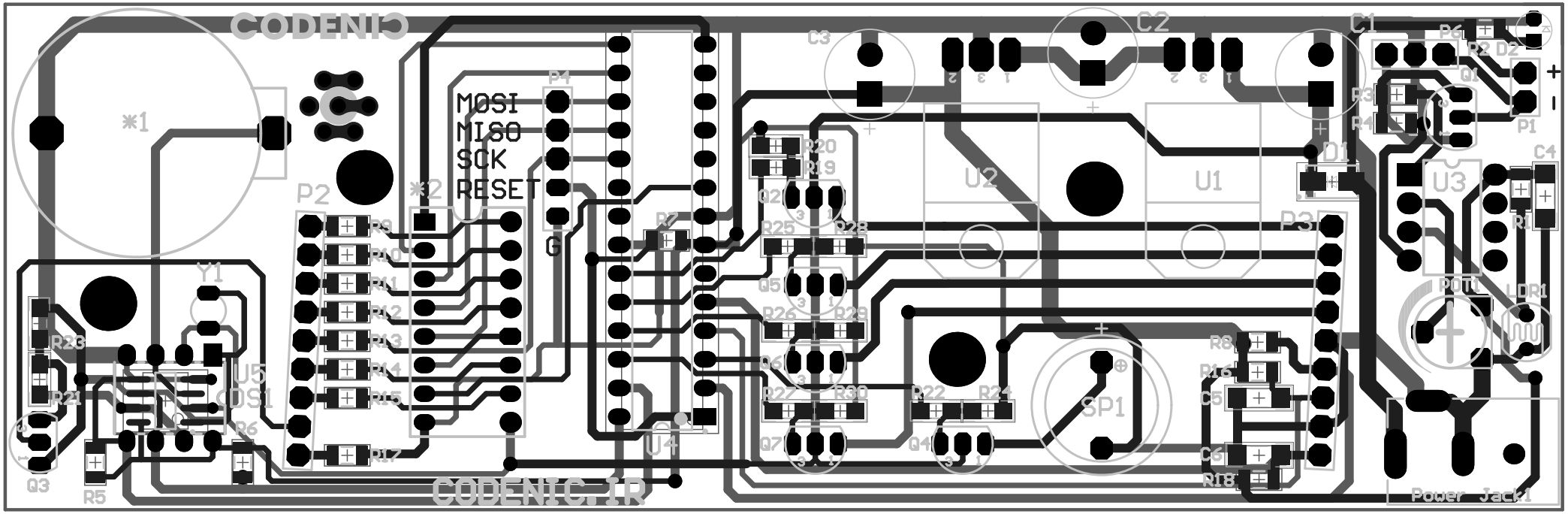
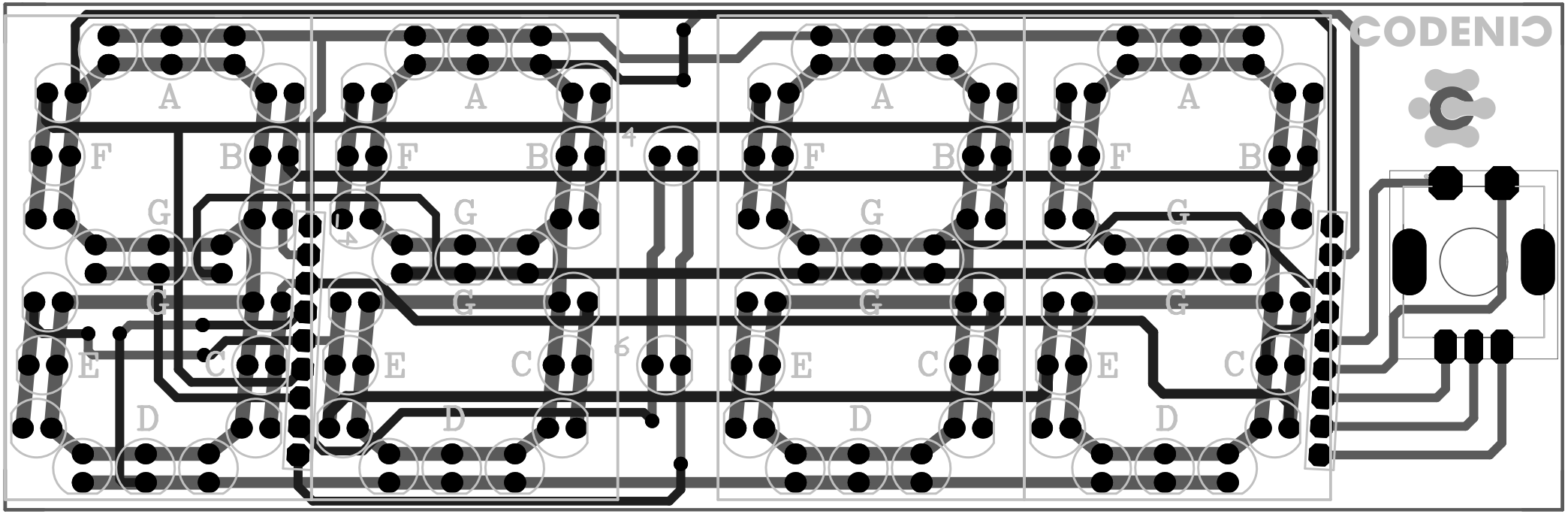

CODENIC
MOSI
MISO
SCK
RESET
CODENIC.IR
Power Jack1


CODENIC
A
F
B
G
E
C
D

Comment	Description	Designator	Footprint	LibRef	Quantity
BATTERY 3V 2032		*1	batt	BATTERY 3V 2032	1
ULN2003		*2	ULN2003	ULN2003	1
1000 µF	WCAP-PTHT Aluminum Polymer Capacitors , 1000 µF; + / - 20%; 6,3 V , 8 x 11,5	C1	WCAP-PTHT 8x11.5x3.5x0.6	WCAP-PTHT 8x11.5x3.5x0.6 870135174006	1
470 µF	WCAP-PTHT Aluminum Polymer Capacitors , 470 µF; + / - 20%; 6,3 V , 8 x 8	C2, C3	WCAP-PTHT 8x8x3.5x0.6	WCAP-PTHT 8x8x3.5x0.6 870135174002	2
0.1uF	CAP 1206	C4, C5, C6	CAPC4817X12N	CAP SMD 1206	3
1n4007	Standard Rectifiers	D1	DIOM4629X24N	1n4007 SMD M7	1
LED3MM	Light Emitting Diode	D2	LED3mm_GRN	LED 3MM	1
DS1307	DS1307	DS1	DIP_8	DS1307.	1
PhotoCell	Photo Cell- Variable Resistor With Light	LDR1	PhotoCell	LDR	1
Header 2	Header, 2-Pin	P1	HDR1X2	Header 2	1
Header 9	Header, 9-Pin	P2, P3	HDR1X9	Header 9	2
Header 5	Header, 5-Pin	P4	HDR1X5	Header 5	1
Header 3	Header, 3-Pin	P6	HDR1X3	Header 3	1
10K	Variable Resistor	POT1	POT 4	POT	1
Power Jack.	Power Jack.	Power Jack1	Power Jack.	Power Jack.	1
C945	NPN Silicon Epitaxial Planar Transistor, NPN Transistor	Q1, Q2, Q3, Q4, Q5, Q6, Q7	c945	C945	7
Resistor 0.25w	Resistor 0.25w	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18	Resistor_SMD_1206	Resistor	18
330R	RES 0805	R19, R21, R25, R26, R27	RESC3413X04N	RES 0805 0.125W	5
10K	RES 0805	R20, R23, R24, R28, R29, R30	RESC3413X04N	RES 0805 0.125W	6
2.2K	RES 0805	R22	RESC3413X04N	RES 0805 0.125W	1
	PIEZO BUZZER ACTIVE	SP1	BUZZER 7.62mm DC	PIEZO BUZZER	1
L78XXCV	Fixed Voltage Regulator	U1, U2	78XXCV - Right	L78XXCV	2
LM358		U3	DIP8E	1458	1
ATmega8A-PU	8-bit AVR Microcontroller, 8KB Flash, 512 Bytes EEPROM, 1KB SRAM, 28-pin PDIP, Industrial Grade (-40°C to 85°C)	U4	28P3	ATmega8A-PU	1
DS1307Z	64 X 8 Serial Real-Time Clock	U5	SOIC8N_N	DS1307Z	1
32.768KHz	XTAL Crystal	Y1	XTAL RTC	XTAL	1