



Comment	Description	Designator	Footprint	LibRef	Quantity
	Ceramic Chip Capacitor -	C1, C2, C3, C4, C5, C7, C10, C11, C13,			
100nF	Standard	C15, C18	0603	C0603	11
	Ceramic Chip Capacitor -				
4u7	Standard	C6	0805	C0805	1
	Ceramic Chip Capacitor -				
1uF	Standard	C8	0603	C0603	1
	Ceramic Chip Capacitor -				
10nF	Standard	C9	0603	C0603	1
	Ceramic Chip Capacitor -				
10uF	Standard Aluminum	C12, C16, C17	0805	C0805	3
	Electrolytic				
	Capacitor, Radial Style with Long				
22uF	Leads: 47uF, 35V	C14, C19	CAPPR2-5X11	EKA00AA247F00	2
LED_RED	High Performance Chip LED, Red	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, D30, D31, D32, D33	1.6X0.8X0.8	HSMZ-C190	33
_	2 pinski terminal				
TERMINAL BLOK 2	blok Header, 10-Pin,	P1, P5	TERMINAL BLOK 2	TERMINAL BLOK 2	2
Header 10X2	Dual row	P2	HDR2X10	Header 10X2	1
ICSP	Header, 3-Pin	P3	HDR1X3	Header 3	1
Header 17	Header, 17-Pin	P4	HDR1X17	Header 17	1
	NPN General- purpose				
MMBT2222	Transistor N-channel	Q1	SOT23_N	BC817	1
	Enhancement Mode Vertical D-				
BSS123	MOSFET	Q2, Q3, Q4 R1, R2, R3, R4, R5,	SOT23_N	BSS123	3
3K3	Rectangular Thick Film Chip Resistor, 10 Ohm to 330k Ohm Range, 0.1% and 0.5% Tolerance, 0603 Size, 0.063 W Rectangular Thick	R6, R8, R9, R10, R11, R12, R13, R14, R15, R16, R18, R20, R21, R22, R23, R24, R25, R28, R30, R33, R39, R40, R41, R44, R45, R46, R47, R48	ERA-0603	ERA3Y	33
1K	Film Chip Resistor, 10 Ohm to 1M Ohm Range, 0.1% and 0.5% Tolerance, 0805 Size, 0.1 W	R7	ERA-0603	ERA6Y	1
10К	Rectangular Thick Film Chip Resistor, 10 Ohm to 1M Ohm Range, 0.1% and 0.5% Tolerance, 0805 Size, 0.1 W	R17, R19, R26, R27, R35, R36, R42, R43	ERA-0603	ERA6Y	8
TOIC	Rectangular Thick Film Chip Resistor, 10 Ohm to 1M Ohm Range, 0.1% and 0.5%		ENA-0003	ENAUT	
NF	Tolerance, 0805 Size, 0.1 W	R29, R31, R32, R34, R37, R38	ERA-0603	ERA6Y	6
	8-Bit Shift Register with 3-State				
SN74HC595D	Output Registers	U1, U3, U5, U6	D016_N	SN74HC595D	4
MAX485	Differential Bus Transceiver	U2	D008_L	SN75176BD	1
STM32F030F4P6	ARM Cortex-M0 32- bit MCU, 16 KB Flash, 4 KB Internal RAM, 15 I/Os, 20-pin TSSOP, -40 to 85 degC, Tube Positive Voltage	U4	STM-TSSOP20_N	STM32F030F4P6	1
	Positive Voltage Regulator, 5V, 3-				
L78M05CDT-TR	Pin DPAK, Tape and Reel	U7	TO-252_N	L78M05CDT-TR	1
REG1117-3.3	800mA and 1A Low	l	ZZ311	REG1117-3.3	1
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