





Bill of Materials

USB Mifare Card Reader Writer

Source Data From: DE-300617.PrjPcb
 Project: DE-300617.PrjPcb
 Variant: None

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Footprint	Comment	LibRef	Designator	Description	Quantity
F	22uF	194D226X00152	C1, C2, C3	Midget Conformal Coated Solid Tantalum Chip Capacitor: 22uF, 20% Tolerance, 15 WVDC @ +85°C, Surge= 20V	3
0603	100nF	C0603	C4, C5, C7, C9, C12, C13, C14, C21, C22, C29, C30, C31, C32, C35	Ceramic Chip Capacitor - Standard	14
0603	10nF	C0603	C6	Ceramic Chip Capacitor - Standard	1
0805	10nF	C0805	C8, C10, C11, C17, C19, C22, C23, C24, C25	Ceramic Chip Capacitor - Standard	9
0603	22pF	C0603	C15, C16, C27, C28	Ceramic Chip Capacitor - Standard	4
0603	6p8	C0603	C18, C20	Ceramic Chip Capacitor - Standard	2
0805	4u7	C0805	C33	Ceramic Chip Capacitor - Standard	1
0603	1uF	C0603	C34	Ceramic Chip Capacitor - Standard	1
0805	C0805	C0805	C36	Ceramic Chip Capacitor - Standard	1
SMA	1N4001	10MQ060N	D1	Schottky Rectifier	1
SOD323	NF	BAS321	D2	General-purpose Diode	1
LED 3mm	LED_GREEN	LED 3mm	D3		1
SOT23_N	BZX84-3V6	BZX84-A4V7	D4, D6	Voltage Regulator Diode	2
LED 3mm	LED_RED	LED 3mm	D5		1
0402-A	BLM15AG121	Chip inductor	L1	SMD chip inductor	1
BUZZER	Buzzer 5Vdc	BUZZER	LS1	5Vdc PCB buzzer	1
HDR1X2	DC_PWR	Header 2	P1	Header, 2-Pin	1
HDR2X5	EXTEND	Header 5X2	P2	Header, 5-Pin, Dual row	1
HDR2X5	ENC28J60	Header 5X2	P3	Header, 5-Pin, Dual row	1
HDR1X5	HC12_RADIO	Header 5	P4	Header, 5-Pin	1
HDR1X8	RC522	Header 8	P5	Header, 8-Pin	1
HDR1X2	3V_BATT	Header 2	P6	Header, 2-Pin	1
USB mini B	USB	USB mini B	P7	USB connector B mini	1
HDR2X4	NRF24L01	Header 4X2	P8	Header, 4-Pin, Dual row	1
SOT23_N	MMBT2222	BC817	Q1, Q2, Q3	NPN General-purpose Transistor	3
ERA-0603	0R	ERAV	R1, R23, R27	Metal Film Thermosensitive Chip Resistor, 0.56 Ohm to 10k Ohm Range, 5% Tolerance, 0603 Size, 0.063 W	3
ERA-0603	220R	ERAV	R2, R4	Metal Film Thermosensitive Chip Resistor, 0.56 Ohm to 10k Ohm Range, 5% Tolerance, 0603 Size, 0.063 W	2
ERA-0603	1K	ERAV	R3, R19	Metal Film Thermosensitive Chip Resistor, 0.56 Ohm to 10k Ohm Range, 5% Tolerance, 0603 Size, 0.063 W	2
ERA-0603	10K	ERAV	R5, R8, R9, R10, R11, R12, R13, R14, R15, R17, R20, R22	Metal Film Thermosensitive Chip Resistor, 0.56 Ohm to 10k Ohm Range, 5% Tolerance, 0603 Size, 0.063 W	12
ERA-0603	4K7	ERAV	R6, R7	Metal Film Thermosensitive Chip Resistor, 0.56 Ohm to 10k Ohm Range, 5% Tolerance, 0603 Size, 0.063 W	2
ERA-0603	47K	ERAV	R16	Metal Film Thermosensitive Chip Resistor, 0.56 Ohm to 10k Ohm Range, 5% Tolerance, 0603 Size, 0.063 W	1
ERA-0603	33K	ERAV	R18	Metal Film Thermosensitive Chip Resistor, 0.56 Ohm to 10k Ohm Range, 5% Tolerance, 0603 Size, 0.063 W	1
ERA-0603	1K5	ERAV	R21	Metal Film Thermosensitive Chip Resistor, 0.56 Ohm to 10k Ohm Range, 5% Tolerance, 0603 Size, 0.063 W	1
ERA-0603	22R	ERA3Y	R24, R25	Rectangular Thick Film Chip Resistor, 10 Ohm to 330k Ohm Range, 0.1% and 0.5% Tolerance, 0603 Size, 0.063 W	2
ERA-0603	100K	ERA3Y	R26	Rectangular Thick Film Chip Resistor, 10 Ohm to 330k Ohm Range, 0.1% and 0.5% Tolerance, 0603 Size, 0.063 W	1
SOT-89_N	L78L05ACUTR	L78L05ACUTR	U1	Positive Voltage Regulator, 5V, 4-Pin SOT-89, Tape and Reel	1
ZZ311	REG1117-3.3	REG1117-3.3	U2	800mA and 1A Low Dropout Positive Regulator 2.85V, 3.3V, 5V, and Adjustable	1
STM-LQFP48_N	STM32F103C86	STM32F103C86	U3	ARM Cortex-M3 32-bit MCU, 64 KB Flash, 20 KB Internal RAM, 37 I/Os, 48-pin LQFP, 40 to 85 degC, Tray	1
SOIC-SN8_N	FT24C128A	24AA64/SN	U4	64Kbit, 400kHz, 1.7V, I2C Serial EEPROM, 8-Pin SOIC 150mil, Commercial Temperature	1
HC49/4H_SMX	4MHz	HC49/4H_SMX	Y1	Surface Mount Quartz Crystal	1
R26	32.768MHz	R26-32.768	Y2	Tuning Fork Crystal Unit	1
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Approved	Notes