

Bill of Materials

Project:	FE310 Badge
Revision:	1.1
Variant:	Production



Creation Date: 10/30/2017
Print Date: 2017/11/22

Value	Footprint	Designator	Description	Manufacturer	Part Symbol	Quantity
812-22-002-30-003101	811-22-002-30-001101	A1	2 position spring piston connector	Mill-Max	811-22-002-30-001101	1
BC-2003	BC-2003	BAT1, BAT2	SMT holder for CR2032 battery	Keystone	BC-2003	2
CR2032		BATTERY1, BATTERY2	CR2032 battery	Panasonic - BSG	CR2032	2
2u	0402	C1	MLCC SMT Capacitor 2u2F 0402	TDK	C1005X5R1A225K050BC	1
2u	0603	C2, C3, C4, C5, C6, C7, C8, C9, C10, C12, C13, C14, C15	MLCC SMT Capacitor 2u2F 0603	TDK	C1608X5R1V225K080AC	13
1u	0402	C11	MLCC SMT Capacitor 1uF 0402	MURATA	GRM155R61C105KA12D	1
10u	0805	C16	MLCC SMT Capacitor 10uF 0805	WALSIN	0805F106Z100CT	1
3n3	0603	C17	MLCC SMT Capacitor 3n3F 0603	WALSIN	0603B33ZJ500CT	1
22u	0805	C18	MLCC SMT Capacitor 22uF 0805	MULTICOMP	MC0805X226M6R3CT	2
100n	0402	C21, C25, C26, C27, C28, C29, C30, C31, C32, C34, C38, C40, C43	MLCC SMT Capacitor 100nF 0402	MULTICOMP	MC0402X104M100CT	13
4u7	0402	C33, C37	MLCC SMT Capacitor 4u7F 0402	MURATA	GRM155R60G475ME	2
100n	0603	C35	MLCC SMT Capacitor 100nF 0603	WALSIN	0603B104K500CT	1
10n	0603	C36	MLCC SMT Capacitor 10nF 0603	AVX	06031C103JA72A	1
10u	0402	C39, C44	MLCC SMT Capacitor 10uF 0402	TDK	C1005X5R0J106M050BC	2
18p	0402	D1, C42	MLCC SMT Capacitor 18pF 0402	KEMET	C0402C180J5GCAUTO	2
1N4148WS	SMB	D1, D2	DIODE, SCHOTTKY, 1A, 40V, DO-214AA	ON SEMICONDUCTOR	MBRS140T3G	2
EG020BS011	SOD-323	D3	Diode small signal	MULTICOMP	1N4148WS	1
74HC1632GW		D3	E-Paper display module	Pervasive Displays	EG020BS011	1
FT4232HQ	SOT23-5	IC1	2 input OR gate	TEXAS INSTRUMENTS	SN74LVC1G32DBVR	1
FT2232HQ	FT2232HQ	IC2	FTDI FT4232HQ-R Interface Bridges, USB to UART, MPSSPE, 1.62 V, 1.98 V, QFN, 64 Pins, -40 °C	FTDI	FT4232HQ-R	1
SN74LVC1G14DBVR	SOT23-5	IC3	Inverter with Schmitt trigger.	TEXAS INSTRUMENTS	SN74LVC1G14DBVR	1
M24LR64E-RMC6T/2	UFDFPN-8	IC4	RFID Transponder IC 13.56MHz ISO 14443, NFC PC 2.7 V ~ 5.5 V 8-UFDFN Exposed Pad	ST MICROELECTRONICS	M24LR64E-RMC6T/2	1
TPS82130	MicroSIP	IC5	Voltage Regulators - Switching Regulators 3-A 17V Step-down Converter Module with Integrated Inductor 8-uSIP -40 to 125	TEXAS INSTRUMENTS	TPS82130SILR	1
XF2M-4015-1A	XF2M-4015-1A	J1	RECEPTACLE, FPC, ZIF, SMT, 0.5MM, 40WAY	OMRON ELECTRONIC COMPONENTS	XF2M40151A	1
Molex 47346-0001	CON-Molex-047346-0001	J2	USB - micro B Receptacle Connector 5 Position Surface Mount, Right Angle, Horizontal	MOLEX	473460001	1
AXK5F60347YG	AXK5F60347YG	J3	CONN SCKT BRD/BRD .5MM 60POS SMD	PANASONIC	AXK5F60347YG	1
BLM18AG601SN1D	0603	L1, L3	Ferrite Bead, 600 ohm, 0603 [1608 Metric], BLM18A Series, 500 mA, 0.38 ohm, ± 25%	MURATA	BLM18AG601SN1D	2
742792022	0805	L2	WURTH ELEKTRONIK - 742792022 - FERRITE BEAD, 0.050Hm, 2A, 0805	WURTH ELEKTRONIK	742792022	1
FXR.07.A		M2	NFC antenna	Taoglas Limited	FXR.07.A	1
434333045822	434333045822	ON, RST, WAKE	3.5x4.7 mm SMD side push, boss design WS-TASU	WURTH ELEKTRONIK	434333045822	3
PMV32UP	SOT-23	Q1, Q2, Q3	P CH, 20V, 4A	NXP	PMV32UP_215	3
2k2	0402	R1, R13	RES, 2k2, 0402, 5%	MULTICOMP	MCWR04X2201FTL	2
22R	0402	R2, R3, R4, R5, R6, R7, R10, R14, R15	SMT Resistor 22R 0402	VISHAY	CRCW040222R0FKED	3
255k	0402	R11	SMT Resistor 255k 0402	PANASONIC ELECTRONIC COMPONENTS	ERJ-2RKF255X3	1
80k6	0402	R12	SMT Resistor 80k6 0402	PANASONIC ELECTRONIC COMPONENTS	ERJ2RKF8062X	1
1k	0402	R16, R17, R25, R26	SMT Resistor 0402	MULTICOMP	MCMR04X1001FTL	4
10k	0402	R18, R34, R35, R37	SMT Resistor 0402	MULTICOMP	MCMR04X1002FTL	4
12k	0402	R19	SMT Resistor 12k 0402	VISHAY	CRCW040212K0FKEDHP	1
470R	0603	R20, R39	SMT Resistor 470R 0603	BOURNS	CR0603-JW-471 GLF	2
0R	0603	R22, R24	SMT Resistor 0R 0603	BOURNS	CR0603-JI-000ELF	2
100k	0402	R27, R30, R36, R40	SMT Resistor 100k 0402	VISHAY	CRCW0402100KFEDHP	4
0R	0402	R29	SMT Resistor 0402	MULTICOMP	MCMR04X000 PTL	1
4k7	0402	R31, R32, R33	SMT Resistor 4k7 0402	PANASONIC ELECTRONIC COMPONENTS	ERJ2GEJ472X	3
9774010243	M2-1.5mm	SP1	M2x1.5	WURTH ELEKTRONIK	9774015243R	1
9774040243	M2-4mm	SP2, SP3, SP4, SP5	M2x4	WURTH ELEKTRONIK	9774040243R	4
KPT-1608SGC	LED0603	SYS, USB	LED Green 0603 case	KINGBRIGHT	KPT-1608SGC	2
BSS138AKA	SOT-23	T1, T2, T3, T4, T5, T6	MOSFET, N CH, 60V, 0.2A	NXP	BSS138AKAR	6
	ABM7	Y1	CRYSTAL, 12MHZ, 18PF, SMD	ABRACON	ABM7-12 000MHZ-D2Y-T	1
			Machine screw metric thread M2, 5mm below head	B&F Fastener Supply	MPMS 002 0005 PH	5
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Approved	Notes