Filename: xue2qwqt.xlsx
Variant: Variant 1 XTR200-FE
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XTR200_FT REV A1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB1	1		XTR200_FT	Any	Printed Circuit Board	
2	C1	1	0.1uF	GRM155R71C104KA88D	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	0402
3	C2, C8	2	1uF	8.85012E+11	Wurth Elektronik	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, 0603	0603
4	C3, C17	2	2.2uF	GRM21BR71C225KA12L	MuRata	CAP, CERM, 2.2 uF, 16 V, +/- 10%, X7R, 0805	0805
5	C4, C21	2	10uF	C3216X6S1V106K160AC	TDK	CAP, CERM, 10 uF, 35 V, +/- 10%, X6S, 1206	1206
6	C5, C20	2	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0603	0603
7	C6	1	4.7uF	GRM31CR71H475KA12L	MuRata	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, 1206	1206
8	C7	1	100nF	KGF15AR71H104KT	KYOCERA AVX	0.1 µF ±10% 50V Ceramic Capacitor X7R 0603 (1608 Metric)	0603
9	C9	1	4.7uF	GRM21BR61H475KE51L	MuRata	CAP, CERM, 4.7 uF, 50 V, +/- 10%, X5R, 0805	0805
10	C10	1	12nF	CC0402KRX7R7BB123	Yageo	0.012 µF ±10% 16V Ceramic Capacitor X7R 0402 (1005 Metric)	0402
11	C11	1	1000pF	CC0805KRX7R9BB102	Yageo America	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0805	0805
12	C12, C14	2	10nF	GRM155R71H103JA88D	Murata	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10000pF, X7R, 15%, 5%, 50V	0402
13	C13	1	0.068uF	GRM155R71C683KA88D	MuRata	CAP, CERM, 0.068 uF, 16 V, +/- 10%, X7R, 0402	0402
14	C15, C16	2	0.1uF	8.85012E+11	Wurth Elektronik	CAP, CERM, 0.1 uF, 10 V,+/- 10%, X7R, 0603	0603
15	C18, C19	2	22uF	GRM21BR61A226ME44L	MuRata	CAP, CERM, 22 uF, 10 V, +/- 20%, X5R, 0805	0805
16	D1	1	40V	SD103AW-7-F	Diodes Inc.	Diode, Schottky, 40 V, 0.35 A, SOD-123	SOD-123
17	D3	1		LTST-C190KFKT	Lite-On	Orange 605nm LED Indication - Discrete 2V 0603 (1608 Metric)	0603
18	FB1, FB2	2	600 ohm	742792041	Wurth Elektronik	Ferrite Bead, 600 ohm @ 100 MHz, 0.2 A, 0805	0805
19	H1, H2, H3, H4	4		SJ5382	3M	Bumpon, Hemisphere, 0.25 X 0.075, Clear	75x250 mil
20	J1	1		6.91412E+11	Wurth Elektronik	Terminal Block, 3 Position, 3.81mm, Tin, R/A, TH	Terminal Block, 3 Position, 3.81mm, R/A, TH
21	J2	1		61301621021	Wurth Elektronik	Header, 2.54mm, 8x2, Gold, R/A, TH	Header, 2.54mm, 8x2, R/A, TH
22	J3	1		61300211121	Wurth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
23	L1	1	22uH	SRN8040-220M	Bourns	Inductor, Drum Core, Ferrite, 22 uH, 2.2 A, 0.1 ohm, SMD	Inductor, 8x4x8mm
24	L2	1	33uH	SRN8040-330M	Bourns	Inductor, Drum Core, Ferrite, 33 uH, 1.7 A, 0.145 ohm, SMD	Inductor, 8x4x8mm
25	LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650 x 0.200 inch
26	Q1	1	40 V	MMBT3904LP	Diodes Inc.	Transistor, NPN, 40 V, 0.2 A, 3-UFDFN	3-UFDFN
27	R1	1	169k	CRCW0603169KFKEA	Vishay-Dale	RES, 169 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
28	R2	1	261k	CRCW0603261KFKEA	Vishay-Dale	RES, 261 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
29	R3	1	1.00k	ERA-2AEB102X	Panasonic	RES, 1.00 k, 0.1%, 0.063 W, 0402	0402
30	R4	1	15.0k	RC0402FR-0715KL	Yageo America	RES, 15.0 k, 1%, 0.063 W, 0402	0402
31	R5	1	22.1k	CRCW040222K1FKED	Vishay-Dale	RES, 22.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
32	R6	1	4.87k	RC0603FR-074K87L	Yageo	RES, 4.87 k, 1%, 0.1 W, 0603	0603
33	R7	1	90.9k	RC0603FR-0790K9L	Yageo	RES, 90.9 k, 1%, 0.1 W, 0603	0603
34	R8	1	6.49k	RT0603BRD076K49L	Yageo America	RES, 6.49 k, 0.1%, 0.1 W, 0603	0603
35	R9	1	3.40k	RT0603BRD073K4L	Yageo America	RES, 3.40 k, 0.1%, 0.1 W, 0603	0603
36	R10	1	6.19k	RC0603FR-076K19L	Yageo	RES, 6.19 k, 1%, 0.1 W, 0603	0603
37	R11	1	8.87k	RT0603DRE078K87L	Yageo America	RES, 8.87 k, 0.5%, 0.1 W, 0603	0603
38	R12	1	2.49k	RT0603DRE072K49L	Yageo America	RES, 2.49 k, 0.5%, 0.1 W, 0603	0603
39	R13, R18, R20, R21, R22, R24, R29, R30, R37	9	0	WSL060300000ZEA9	Vishay	0 Ohms Jumper Chip Resistor 0603 (1608 Metric) Metal Element	0603
40	R14, R17	2	100k	RG1608P-104-B-T5	Susumu Co Ltd	RES, 100 k, 0.1%, 0.1 W, 0603	0603
41	R15	1	3.74k	RT0603DRE073K74L	Yageo America	RES, 3.74 k, 0.5%, 0.1 W, 0603	0603
42	R16	1	1.37k	RT0603BRD071K37L	Yageo America	RES, 1.37 k, 0.1%, 0.1 W, 0603	0603
43	R19	1	1.00k	RT0603DRE071KL	Yageo America	RES, 1.00 k, 0.5%, 0.1 W, 0603	0603
44	R23	1	11.8k	RT0603BRD0711K8L	Yageo America	RES, 11.8 k, 0.1%, 0.1 W, 0603	0603
45	TP1, TP2, TP3, TP4, TP5, TP6	6		5002	Keystone Electronics	Test Point, Miniature, White, TH	White Miniature Testpoint
46	U1	1		TPS7A0333DBVR	Texas Instruments	Nanopower-IQ 200nA 200mA low-dropout (LDO) voltage regulator with fast transient response	SOT-23-5
47	U2, U5	2		LMR54406DBVR	Texas Instruments	Buck Converter, Adjustable, 4V-36V Input, 1-28V 1A Output, SOT23-6	SOT23-6
48	U3	1		TLV9302IDDFR	Texas Instruments	Dual, 40-V, 1-MHz, low-power operational amplifier 8-SOT-23-THIN -40 to 125	SOT-23
49	U4	1		TPS26611DDFR	Texas Instruments	50-V, universal 4-20-mA, ±20-mA current loop protector 8-SOT-23-THIN -40 to 125	TSOT23-8
50	U6	1		TLV9301IDCKR	Texas Instruments	40-V, 1-MHz, RRO Operational Amplifiers for Cost-Sensitive Systems	SC70-5
51	U7	1		OPA2991IDGKR	Texas Instruments	40-V, dual-channel, 4.5-MHz, rail-to-rail input/output, low-offset-voltage, low-noise op amp 8-VSSOP -40 to 125	VSSOP8
52	U8	1		XTR200IDQCR	Texas Instruments	XTR200IDQCR	WSON10
53	U9, U14	2		TVS3301DRBR	Texas Instruments	33 V Bidirectional Flat-Clamp Surge Protection Device, DRB0008A (VSON-8)	DRB0008A
54	U10	1		SN74LV8T165BQBR	Texas Instruments	1.65-V to 5.5-V 8-bit parallel-load shift register with voltage translation	WQFN16
55	U11	1		SN74LVC1G04DRLR	Texas Instruments	Single Inverter, DRL0005A, LARGE T&R	DRL0005A
56	U12	1		TPS70950DBVR	Texas Instruments	150-mA, 30-V, Ultra-Low IQ, Wide Input Low-Dropout Regulator with Reverse Current Protection, DBV0005A (SOT-23-5)	DBV0005A
57	Q3, Q4	0		NTR4003NT3G	On Semiconductor	N-Channel 30V 500mA (Ta) 690mW (Ta) Surface Mount SOT-23-3 (TO-236)	SOT23-3
58	R26	0	0	WSL060300000ZEA9	Vishay	0 Ohms Jumper Chip Resistor 0603 (1608 Metric) Metal Element	0603

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