

(190A23744-10) PCB-BLX2 HANDHELD

Part Type	Qty	Designators	Description	Mfr	#Mfr	Substitutions
134-23745_00	1	PCB1	Raw Board			
152A04	1	CV500	CAPACITOR,TRIM,SMD,.65-2.5pF	Murata Manufacturing Co Ltd	TZV2Z2R5A110	Approval Required
183A66	4	Q501 Q502 Q600 Q601	TRANSISTOR,HIGH FREQ,3 PIN MINI MOLD,NPN	California Eastern Labs (Renesas)	NE85619-A	Approval Required
184A72	1	D500	DIODE,CAPACITANCE,VARIABLE,SC79-2	Infineon Technologies	BB565-02VH_X	Approval Required
53A8589A	1	SHLD501	FENCE,SHIELD,TIN PLATED,0.22IN	CUSTOM - SEE SHURE DRAWING	53A8589A	NONE PERMITTED
150NE338BA	2	C523 C528	CAPACITOR,SMD 603,3.3pF,200V,.1pf	AVX	06032U3R3BAT	See AVL
150NE398BA	2	C525 C534	CAPACITOR,SMD 603,3.9pF,200V,.1pf	AVX	06032U3R9BAT	See AVL
150NE688BA	1	C522	CAPACITOR,SMD 603,6.8pF,200V,.1pf	AVX	06032U6R8BAT	See AVL
150QC331JB	1	C181	CAPACITOR,SMD 402,330pF,50V,5%	Murata Manufacturing Co Ltd	GRM155R71H331J	See AVL
162A46	5	E100 E101 E408 E500 E501	BEAD,FERRITE,SMD 603,600 OHM	Murata Manufacturing Co Ltd	BLM18AG601SN1	Approval Required
162AC56	2	L501 L503	INDUCTOR,SMD 603,100nH	Würth Elektronik	744786210A	Approval Required
162AE56	2	L600 L601	INDUCTOR,SMD 603,150nH	Würth Elektronik	744786215A	Approval Required
162AF56	1	L603	INDUCTOR,SMD 603,180nH	Würth Elektronik	744786218A	Approval Required
162L56	2	L602 L641	INDUCTOR,SMD 603,8.2nH	Würth Elektronik	744786082A	Approval Required
162M56	1	L611	INDUCTOR,SMD 603,10nH	Würth Elektronik	744786110A	Approval Required
162P56	1	L502	INDUCTOR,SMD 603,15nH	Würth Elektronik	744786115A	Approval Required
162R56	2	L605 L606	INDUCTOR,SMD 603,18nH	Würth Elektronik	744786118A	Approval Required
162S56	1	L604	INDUCTOR,SMD 603,22nH	Würth Elektronik	744786122A	Approval Required
40B8010	1	Y347	CRYSTAL,32.768KHz,10ppm	ECS Inc International	ECS-.327-12.5-8X-C	Approval Required
53A20436	2	CON400 CON401	BATTERY CONTACT,PCB	CUSTOM - SEE SHURE DRAWING	N/A	Approval Required
145FF22R1	1	R606	RESISTOR,SMD 603,22.1,1/10W,1%	NIC Components	NRC06F22R1F	See AVL
145FF49R9	3	R350 R500 R605	RESISTOR,SMD 603,49.9,1/10W,1%	NIC Components	NRC06F49R9F	See AVL
145FF2000	3	R321 R322 R323	RESISTOR,SMD 603,200,1/10W,1%	NIC Components	NRC06F2000F	See AVL
145FJ000	2	R499 R607	RESISTOR,SMD 603,000,1/10W,5%	Vishay-BCC	CRCW06030000Z	See AVL
145FJ305	1	R185	RESISTOR,SMD 603,3M,1/10W,5%	NIC Components	NRC06J305F	See AVL
145HF18R2	1	R503	RESISTOR,SMD 402,18.2,1/16W,1%	NIC Components	NRC04F18R2F	See AVL
145HF22R1	1	R520	RESISTOR,SMD 402,22.1,1/16W,1%	NIC Components	NRC04F22R1F	See AVL
145HF33R2	2	R602 R651	RESISTOR,SMD 402,33.2,1/16W,1%	NIC Components	NRC04F33R2F	See AVL
145HF49R9	10	R302 R303 R304 R305 R306 R307 R308 R374 R375 R613	RESISTOR,SMD 402,49.9,1/16W,1%	NIC Components	NRC04F49R9F	See AVL
145HF1000	7	R180 R300 R309 R310 R312 R325 R343	RESISTOR,SMD 402,100,1/16W,1%	Vishay-BCC	CRCW0402100RF	See AVL
145HF1001	6	R513 R539 R540 R541 R603 R604	RESISTOR,SMD 402,1K,1/16W,1%	Vishay-BCC	CRCW04021K00F	See AVL
145HF1002	14	R100 R101 R102 R103 R105 R147 R164 R166 R186 R508 R517 R630 R631 R632	RESISTOR,SMD 402,10K,1/16W,1%	Vishay-BCC	CRCW040210K0F	See AVL
145HF1003	10	R124 R181 R182 R183 R184 R190 R206 R480 R481 R511	RESISTOR,SMD 402,100K,1/16W,1%	Vishay-BCC	CRCW0402100KF	See AVL
145HF1004	9	R104 R188 R198 R400 R404 R407 R475 R476 R479	RESISTOR,SMD 402,1M,1/16W,1%	Vishay-BCC	CRCW04021M00F	See AVL
145HF1211	1	R121	RESISTOR,SMD 402,1.21K,1/16W,1%	Vishay-BCC	CRCW04021K21F	See AVL
145HF1502	1	R187	RESISTOR,SMD 402,15K,1/16W,1%	NIC Components	NRC04F1502F	See AVL
145HF1503	3	R171 R174 R203	RESISTOR,SMD 402,150K,1/16W,1%	Vishay-BCC	CRCW0402150KF	See AVL
145HF2000	1	R505	RESISTOR,SMD 402,200,1/16W,1%	NIC Components	NRC04F2000F	See AVL
145HF2001	3	R168 R175 R191	RESISTOR,SMD 402,2K,1/16W,1%	Vishay-BCC	CRCW04022K00F	See AVL
145HF2002	1	R189	RESISTOR,SMD 402,20K,1/16W,1%	Vishay-BCC	CRCW040220K0F	See AVL

(190A23744-10) PCB-BLX2 HANDHELD

Part Type	Qty	Designators	Description	Mfr	#Mfr	Substitutions
145HF2003	2	R170 R173	RESISTOR,SMD 402,200K,1/16W,1%	Vishay-BCC	CRCW0402200KF	See AVL
145HF2210	6	R516 R519 R612 R614 R650 R652	RESISTOR,SMD 402,221,1/16W,1%	NIC Components	NRC04F2210F	See AVL
145HF2212	1	R405	RESISTOR,SMD 402,22.1K,1/16W,1%	Vishay-BCC	CRCW040222K1F	See AVL
145HF2492	1	R162	RESISTOR,SMD 402,24.9K,1/16W,1%	Vishay-BCC	CRCW040224K9F	See AVL
145HF2942	1	R193	RESISTOR,SMD 402,29.4K,1/16W,1%	NIC Components	NRC04F2942F	See AVL
145HF3010	2	R504 R514	RESISTOR,SMD 402,301,1/16W,1%	NIC Components	NRC04F3010F	See AVL
145HF3011	2	R531 R600	RESISTOR,SMD 402,3.01K,1/16W,1%	Vishay-BCC	CRCW04023K01F	See AVL
145HF3012	2	R327 R510	RESISTOR,SMD 402,30.1K,1/16W,1%	Vishay-BCC	CRCW040230K1F	See AVL
145HF3013	1	R406	RESISTOR,SMD 402,301K,1/16W,1%	Vishay-BCC	CRCW0402301KF	See AVL
145HF3651	1	R601	RESISTOR,SMD 402,3.65K,1/16W,1%	NIC Components	NRC04F3651F	See AVL
145HF3652	1	R161	RESISTOR,SMD 402,36.5K,1/16W,1%	NIC Components	NRC04F3652F	See AVL
145HF4021	3	R125 R141 R172	RESISTOR,SMD 402,4.02K,1/16W,1%	NIC Components	NRC04F4021F	See AVL
145HF4022	5	R123 R140 R163 R201 R202	RESISTOR,SMD 402,40.2K,1/16W,1%	NIC Components	NRC04F4022F	See AVL
145HF4121	1	R120	RESISTOR,SMD 402,4.12K,1/16W,1%	NIC Components	NRC04F4121F	See AVL
145HF4321	1	R515	RESISTOR,SMD 402,4.32K,1/16W,1%	NIC Components	NRC04F4321F	See AVL
145HF4872	1	R167	RESISTOR,SMD 402,48.7K,1/16W,1%	NIC Components	NRC04F4872F	See AVL
145HF4990	1	R99	RESISTOR,SMD 402,499,1/16W,1%	Vishay-BCC	CRCW0402499RF	See AVL
145HF4991	1	R301	RESISTOR,SMD 402,4.99K,1/16W,1%	Vishay-BCC	CRCW04024K99F	See AVL
145HF5232	1	R192	RESISTOR,SMD 402,52.3K,1/16W,1%	NIC Components	NRC04F5232F	See AVL
145HF6042	3	R145 R204 R328	RESISTOR,SMD 402,60.4K,1/16W,1%	NIC Components	NRC04F6042F	See AVL
145HF7151	1	R122	RESISTOR,SMD 402,7.15K,1/16W,1%	NIC Components	NRC04F7151F	See AVL
145HF7502	3	R146 R148 R200	RESISTOR,SMD 402,75K,1/16W,1%	Vishay-BCC	CRCW040275K0F	See AVL
145HF8251	2	R502 R506	RESISTOR,SMD 402,8.25K,1/16W,1%	NIC Components	NRC04F8251F	See AVL
145HF9092	1	R159	RESISTOR,SMD 402,90.9K,1/16W,1%	NIC Components	NRC04F9092F	See AVL
145HJ000	5	R160 R314 R316 R326 R653	RESISTOR,SMD 402,000,1/16W,5%	Vishay-BCC	CRCW04020000Z	See AVL
146A15985	1	TR201	POTENTIOMETER,TRIMMER,METAL-GLAZE THIN,LINEAR,220K	Noble USA	TMC2K2J-0B220K	Approval Required
146C15985	1	TR200	POTENTIOMETER,TRIMMER,METAL-GLAZE THIN,LINEAR,100K	Noble USA	TMC2K2J-0B100K	Approval Required
146D15985	1	TR160	POTENTIOMETER,TRIMMER,METAL-GLAZE THIN,LINEAR,47K	Noble USA	TMC2K2J-0B47K	Approval Required
150DF224KB	2	C514 C532	CAPACITOR,SMD 805,.22uF,16V,10%	AVX	0805YC224KAT	See AVL
150DG475ZF	11	C140 C161 C163 C318 C321 C350 C402 C404 C432 C509 C550	CAPACITOR,SMD 805,4.7uF,10V,+80-20%	AVX	0805ZG475ZAT	See AVL
150GB100JA	1	C520	CAPACITOR,SMD 603,10pF,100V,5%	AVX	06031A100JAT	See AVL
150GC104KB	7	C503 C519 C521 C544 C545 C546 C552	CAPACITOR,SMD 603,.1uF,16V,10%	AVX	0603YC104KAT	See AVL
150QA103KB	15	C141 C191 C302 C303 C304 C305 C306 C307 C308 C309 C310 C312 C374 C375 C440	CAPACITOR,SMD 402,.01uF,16V,10%	AVX	0402YC103KAT	See AVL
150QA473KB	1	C186	CAPACITOR,SMD 402,.047uF,16V,10%	AVX	0402YC473KAT	See AVL
150QC100JA	1	C405	CAPACITOR,SMD 402,10pF,50V,5%	AVX	04025A100JAT	See AVL
150QC101JA	12	C103 C111 C123 C146 C300 C483 C524 C538 C539 C540 C541 C620	CAPACITOR,SMD 402,100pF,50V,5%	Murata Manufacturing Co Ltd	GRM1555C1H101J_	See AVL
150QC102JB	7	C182 C187 C501 C505 C516 C518 C630	CAPACITOR,SMD 402,.001uF,50V,5%	AVX	04025C102JAT	See AVL
150QC108CA	1	C615	CAPACITOR,SMD 402,1pF,50V,.25pf	AVX	04025A1R0CAT	See AVL
150QC120JA	4	C543 C611 C617 C618	CAPACITOR,SMD 402,12pF,50V,5%	Murata Manufacturing Co Ltd	GRM1555C1H120J_	See AVL
150QC121JA	2	C184 C619	CAPACITOR,SMD 402,120pF,50V,5%	Murata Manufacturing Co Ltd	GRM1555C1H121J_	See AVL

(190A23744-10) PCB-BLX2 HANDHELD

Part Type	Qty	Designators	Description	Mfr	#Mfr	Substitutions
150QC151JA	1	C506	CAPACITOR,SMD 402,150pF,50V,5%	AVX	04025A151JAT	See AVL
150QC158CA	1	C530	CAPACITOR,SMD 402,1.5pF,50V,.25pf	AVX	04025A1R5CAT	See AVL
150QC200JA	1	C612	CAPACITOR,SMD 402,20pF,50V,5%	AVX	04025A200JAT	See AVL
150QC222JB	1	C515	CAPACITOR,SMD 402,.0022uF,50V,5%	AVX	04025C222JAT	See AVL
150QC270JA	4	C1 C125 C144 C203	CAPACITOR,SMD 402,27pF,50V,5%	Murata Manufacturing Co Ltd	GRM1555C1H270J_	See AVL
150QC332JB	1	C547	CAPACITOR,SMD 402,.0033uF,50V,5%	AVX	04025C332JAT	See AVL
150QC471JB	5	C185 C504 C600 C607 C621	CAPACITOR,SMD 402,470pF,50V,5%	Murata Manufacturing Co Ltd	GRM155R71H471J_	See AVL
150QC478CA	1	C183	CAPACITOR,SMD 402,4.7pF,50V,.25pf	AVX	04025A4R7CAT	See AVL
150QC680JA	12	C511 C513 C526 C527 C535 C601 C603 C606 C608 C614 C622 C650	CAPACITOR,SMD 402,68pF,50V,5%	Murata Manufacturing Co Ltd	GRM1555C1H680J_	See AVL
150QC681JB	1	C145	CAPACITOR,SMD 402,680pF,50V,5%	Murata Manufacturing Co Ltd	GRM155R71H681J_	See AVL
150QC828CA	3	C551 C616 C651	CAPACITOR,SMD 402,8.2pF,50V,.25pf	AVX	04025A8R2CAT	See AVL
150QD104KC	21	C110 C120 C121 C124 C160 C164 C180 C188 C200 C201 C299 C301 C319 C325 C327 C333 C344 C433 C475 C481 C482	CAPACITOR,SMD 402,.1uF,10V,10%	Murata Manufacturing Co Ltd	GRM155R61A104K_	See AVL
150QE474KC	1	C198	CAPACITOR,SMD 402,.47uF,6.3V,10%	Murata Manufacturing Co Ltd	GRM155R60J474K_	See AVL
150XA106MA	1	C122	CAPACITOR,X5R,SMD 805,10uF,6.3V,20%	Taiyo Yuden Co Ltd	JMK212BJ106MG	See AVL
151AB107KB	2	C548 C549	CAPACITOR,TANTALUM,SMD1411,100uF,6.3V,10%	AVX	TAJB107K006NJ	See AVL
151AD106KB	1	C162	CAPACITOR,TANTALUM,SMD1411,10uF,16V,10%	NIC Components	NTC-T106K16BF	See AVL
151AD226KC	1	C533	CAPACITOR,TANTALUM,SMD2412,22uF,16V,10%	NIC Components	NTC-T226K16CF	See AVL
151AD475KB	1	C403	CAPACITOR,TANTALUM,SMD1411,4.7uF,16V,10%	NIC Components	NTC-T475K16BF	See AVL
151AG104KA	1	C531	CAPACITOR,TANTALUM,SMD1206,.1uF,35V,10%	NIC Components	NTC-T104K35AF	See AVL
155A03	1	SW313	SWITCH,KEY,MOMENTARY	ITT Industries/Cannon	KSC221G LFS	Approval Required
155B11552	2	SW310 SW311	SWITCH,TACTILE,SPST,MICROMINIATURE,3N	C&K (ITT Industries/Cannon)	KMR231G-LFS	Approval Required
162A64	1	L404	INDUCTOR,SMD2518,4.7uH	Taiyo Yuden Co Ltd	LBC2518_4R7M	Approval Required
162B76	2	L400 L401	INDUCTOR,SMD0805,LOW Rdc,470nH,20%	Taiyo Yuden Co Ltd	CK2125_R47M	Approval Required
162D61	1	L505	INDUCTOR,SPRING,MICRO,AIR CORE,5.4nH	Coilcraft	0906-5GLC	Approval Required
183A27	1	Q630	TRANSISTOR,PNP,SOT-23,MMBT2907AL	On Semiconductor	MMBT2907ALG	See AVL
183A30	2	Q160 Q161	TRANSISTOR,PMOS,SOT-23,FET,2N7002	On Semiconductor	2N7002LG	See AVL
183A38	3	Q162 Q480 Q631	TRANSISTOR,LOW NOISE,SOT-23,NPN,5089	On Semiconductor	MMBT5089LG	See AVL
183A56	2	Q185 Q186	TRANSISTOR,NPN,DUAL,SC70-6	On Semiconductor	MBT3904DW1T1G	See AVL
183A74	2	Q410 Q475	TRANSISTOR,MOSFET,POWER,N-CHAN,SuperSOT-3	Fairchild Semiconductor Corp	NDS355AN	Approval Required
184A07	2	D162 D190	DIODE,DUAL,SWITCHING,SOT-23,75VDC	On Semiconductor	MMBD2836LG	See AVL
184A40	1	D601	DIODE,ATTENUATOR,PIN,COMMON ANODE,SOT23	Skyworks Solutions Inc	SMP1302-003LF	Approval Required
184A25971	1	DS322	LED,BICOLOR,RED/GREEN,3.0x2.5mm	Kingbright	KPB-3025ESGC-SZ	Approval Required
184B69	3	D311 D400 D480	DIODE,SCHOTTKY,COMMON ANODE,SOT-23	Fairchild Semiconductor Corp	BAT54A (OBSOLETE)	See AVL
184C90	1	DS300	LED,DISPLAY,SB GREEN,7 SEG,0.2" DIGIT HEIGHT	Kingbright	ACSA02-41SGWA-F01	Approval Required
187A12610	1	U500	TCXO,30.400MHz,3.2X2.5MM	KDS (Daishinku Corp)	1XTW30400AAA	Approval Required
188A49	2	IC120 IC150	AMPLIFIER,OPERATIONAL,QUAD,SO-14,MC33179	On Semiconductor	MC33179DR2G	Approval Required
188A479	1	IC400	IC,CONVERTER,SYNC BOOST	Linear Technology Corp	LTC3400BES6#PBF	Approval Required
188A590	1	IC401	IC,REGULATOR,CMOS LDO,3.3V,SC-70-5	Sipex Corporation (Exar Corp)	SP6213EC5-L-3.3	Approval Required
188A671	1	IC100	COMPANDER,16 PIN QSOP	THAT Corporation	4315Q16-U	Approval Required
188B13925	1	IC501	SYNTHESIZER,FRQ,PLL,1.2GHz,TSSOP-16	Analog Devices Inc	ADF4111BRUZ	Approval Required
188C10019	1	IC300	MICROCONTROLLER,16K FLASH,2K RAM,48 QFN	Freescale Semiconductor	MC9S08GT16ACFDE	Approval Required