

Project: ULP_BLE_Camera.PrjPcb

Source Data From: ULP_BLE_Camera.PrjPcb
Project: ULP_BLE_Camera.PrjPcb
Variant: rechargeable

Bill of Materials



Solution Engineering Center
Piestany

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#	Designator	Comment	Description	LibRef	SourceLibraryName	Manufacturer	Manufacturer Part Number	Supplier	Supplier Part Number	Supplier 2	Supplier Part Number 2	Quantity
1.	C1, C41	2µ2	MLC capacitor 2µ2 25V X5R 10% Murata	GRM155R61E225KE11D	capacitors.SVNDblib	Murata	GRM155R61E225KE11D	Digi-Key	490-12703-1-ND	Mouser	81-GRM155R61E225KE1D	2
2.	C2, C3, C4, C5	100 nF	MLC capacitor 100nF 16V X7R 10% Würth Electronics	885012205037	capacitors.SVNDblib	Würth Elektronik	885012205037	Digi-Key	732-7532-1-ND	Mouser	710-885012205037	4
3.	C6	100 nF	MLC capacitor 0.1µF 16V X7R 10% Würth Electronics	885012206046	capacitors.SVNDblib	Würth Elektronik	885012206046	Digi-Key	732-7965-1-ND	Mouser	710-885012206046	1
4.	C8, C10, C12, C13, C14, C15, C16, C17, C20, C21, C24, C25, C29	100 nF	MLC capacitor 100nF 25V X7R 10% Murata	GRM155R71E104KE14D	capacitors.SVNDblib	Murata	GRM155R71E104KE14D	Digi-Key	490-10698-1-ND	Mouser	81-GRM155R71E104KE4D	13
5.	C11, C18, C35, C38, C47, C50, C51, C52, C53	1 µF	MLC capacitor 1µF 25V X5R 10% Murata	GRM155R61E105KE11D	capacitors.SVNDblib	Murata	GRM155R61E105KE11D	Mouser	81-GRM155R61E105KE1D	Murata	GRM155R61E105KE11D	9
6.	C19, C23, C28, C31, C34, C37	1 µF	MLC capacitor 1µF 25V X5R 10% Murata	GRM188R61E105KAADD	capacitors.SVNDblib	Murata	GRM188R61E105KAADD	Mouser	81-GRM188R61E105KAADD	Murata	GRM188R61E105KAADD	6
7.	C22	10 µF	MLC capacitor 10µF 25V X5R 10% Murata	GRM188R61E106KA73D	capacitors.SVNDblib	Murata	GRM188R61E106KA73D	Murata	GRM188R61E106KA73D			1
8.	C26, C27	10 pF	MLC capacitor 10pF 25V COG 5% Murata	GRM1555C1E100JA01D	capacitors.SVNDblib	Murata	GRM1555C1E100JA01D	Digi-Key	490-6168-1-ND	Mouser	81-GRM1555C1E100JA1D	2
9.	C30	4n7	MLCC capacitor 4.7nF 250V COG ± 5% TDK	C2012C0G2E47J125AA	capacitors.SVNDblib	TDK	C2012C0G2E47J125AA	Digi-Key	445-15289-1-ND	Mouser	810-C2012C0G2E47J2AA	1
10.	C32, C33, C39	2µ2	MLC capacitor 2µ2 25V X5R 10% Murata	GRM188R61E225KA12D	capacitors.SVNDblib	Murata	GRM188R61E225KA12D	Digi-Key	490-10731-1-ND	Mouser	81-GRM188R61E225KA2D	3
11.	C36, C40	4.7 µF	MLCC capacitor 4.7µF 50V X5R ± 10% TDK	C2012X5R1H475K125AB	capacitors.SVNDblib	TDK	C2012X5R1H475K125AB	Farnell	2346932	Mouser	810-C2012X5R1H475K	2
12.	C42	10 nF	MLC capacitor 10nF 25V X7R 10% Murata	GRM155R71E103KA01D	capacitors.SVNDblib	Murata	GRM155R71E103KA01D	Digi-Key	490-1312-1-ND	Mouser	81-GRM36X103K25	1
13.	C43	10 µF	MLC capacitor 10µF 35V X5R 20% Murata	GRM188R61A106MA73D	capacitors.SVNDblib	Murata	GRM188R61A106MA73D	Digi-Key	490-13248-1-ND	Mouser	81-GRM188R61A106MA3D	1
14.	C44	1 µF	MLC capacitor 1µF 25V X5R 10% Murata	GRM188R61E105KA12D	capacitors.SVNDblib	Murata	GRM188R61E105KA12D	Digi-Key	490-3897-1-ND	Mouser	81-GRM188R61E105KA12	1
15.	C45, C46	22 µF	MLC capacitor 22µF 10V X5R 20% Murata	GRM188R61A226ME15D	capacitors.SVNDblib	Murata	GRM188R61A226ME15D	Digi-Key	490-10476-1-ND	Mouser	81-GRM188R61A226ME5D	2
16.	C48, C49	4µ7	MLC capacitor 4µ7 16V X5R 10% Murata	GRM188R61C475KE11D	capacitors.SVNDblib	Murata	GRM188R61C475KE11D	Digi-Key	490-10730-1-ND	Mouser	81-GRM188R61C475KE1D	2
17.	C54, C55, C56	2µ2	MLC capacitor 2µ2 16V X5R 10% Murata	GRM155R61C225KE44D	capacitors.SVNDblib	Murata	GRM155R61C225KE44D	Digi-Key	490-10455-1-ND	Mouser	81-GRM155R61C225KE4D	3
18.	C57, C58	10 µF	MLC capacitor 10µF 10V X5R 10% Murata	GRM188R61A106KAALD	capacitors.SVNDblib	Murata	GRM188R61A106KAALD	Digi-Key	490-12733-1-ND	Mouser	81-GRM188R61A106KAALD	2
19.	CABLE1	USB A Male to Micro-B Male cable length 50cm	USB A Male to Micro-B Male cable length 50cm CNC Tech	102-1092-BL-00050	specials.SVNDblib			Digi-Key	1175-1127-ND	Arrow	103-1092-BL-00050	1
20.	CON1	BM20B(0.8)-34DS-0.4V(51)	SMD 2x17 vertical receptacle pitch 0.4 mm Hirose	BM20B(0.8)-34DS-0.4V(51)	connectors.SVNDblib	Hirose	BM20B(0.8)-34DS-0.4V(51)	Digi-Key	BM20B(0.8)-34DS-0.4V(51)-ND	Mouser	798-BM20B0834DS04V51	1
21.	CON2	FTSH-105-01-F-DV-K	SMD vertical male header 2x5pins 1.27mm Samtec	FTSH-105-01-F-DV-K	connectors.SVNDblib	Samtec	FTSH-105-01-F-DV-K	Digi-Key	SAM8796-ND	Samtec	FTSH-105-01-F-DV-K	1
22.	CON3	653 004 117 322	WR-WTB 1.25 mm Male Horizontal Shrouded Header, 4 Contacts Würth Elektronik	653004117322	connectors.SVNDblib	Würth Elektronik	653004117322	Würth Elektronik	653004117322			1
23.	D1	APHD1608LZGCK	1.6x0.8x0.65mm SMD green LED Kingbright	APHD1608LZGCK	diodes.SVNDblib	Kingbright	APHD1608LZGCK	Digi-Key	754-2036-1-ND	Mouser	604-APHD1608LZGCK	1
24.	D2	1N914BWS	Switching diode 100V 300mA SOD323 ON Semiconductor	1N914BWS	diodes.SVNDblib	ON Semiconductor	1N914BWS	Digi-Key	1N914BWSCT-ND	Mouser	512-1N914BWS	1
25.	D3	APTD1608LSECK/J3-PF	1.6x0.8x0.95mm SMD red LED Kingbright	APTD1608LSECK/J3-PF	diodes.SVNDblib	Kingbright	APTD1608LSECK/J3-PF	Digi-Key	754-1945-1-ND	Mouser	604-APTD1608LSECKJ3F	1
26.	D4	BAT54XV2	Schottky diode 30 V 200 mA SOD523 ON Semiconductor	BAT54XV2T1G	diodes.SVNDblib	ON Semiconductor	BAT54XV2T1G	Digi-Key	BAT54XV2T1GOSCT-ND	Mouser	863-BAT54XV2T1G	1
27.	FB1	30 Ohm @ 100 MHz	EMI Suppression ferrite bead SMD 300ohm 3A Würth Elektronik	742792609	inductors.SVNDblib	Würth Elektronik	742792609	Digi-Key	732-1591-1-ND	Mouser	710-742792609	1
28.	FB2, FB3	30 Ohm @ 100 MHz	EMI Suppression ferrite bead SMD 0402 300ohm TDK	MPZ1005S300CT000	inductors.SVNDblib	TDK	MPZ1005S300CT000	Digi-Key	445-2979-1-ND	Mouser	810-MPZ1005S300CT000	2
29.	FB4, FB5, FB6, FB7	120 Ohm @ 100 MHz	EMI suppression ferrite bead SMD 0603 120Ohm Murata	BLM18R121SN1D	inductors.SVNDblib	Murata	BLM18R121SN1D	Digi-Key	490-5226-1-ND	Mouser	81-BLM18R121SN1D	4
30.	L1	470 nH	Thin film metal SMD inductor 470nH 5A TDK	TFM201610ALM-R47MTAA	inductors.SVNDblib	TDK	TFM201610ALM-R47MTAA	Digi-Key	445-174184-1-ND	Mouser	810-TFM201610ALM-R47MTAA	1
31.	L2, L3	1 µH	WE-MAPI SMT Power Inductor 1µH 4A 26 mOhm Würth Elektronik	7443836010	inductors.SVNDblib	Würth Elektronik	7443836010	Digi-Key	732-5693-1-ND	Mouser	710-7443836010	2
32.	MODULE1	ARX3A0 IAS image sensor module	ARX3A0 IAS Module ON Semiconductor	IAS1MOD-ARX3A0CSSM050110-GEVB	specials.SVNDblib			Mouser	863-ARX3A0CSSM05011B	Arrow	IAS1MOD-ARX3A0CSSM050110-GEVB	1
33.	NTC1	10k	SMD NTC Thermistor, 10kohm, NCP15 series, 0402, 100 mW Murata	NCP15XH103F03RC	resistors.SVNDblib	Murata	NCP15XH103F03RC	Digi-Key	490-4801-1-ND	Mouser	81-NCP15XH103F03RC	1
34.	PB1, PB RST1	434 153 017 835	SMD pushbutton top actuated 3.5x2.9x1.7mm Würth Elektronik	434153017835	switches.SVNDblib	Würth Elektronik	434153017835	Digi-Key	732-10143-1-ND	Mouser	710-434153017835	2
35.	R1, R2, R15, R16	4k7	SMD thick film resistor 4k7 0402 1% 100 mW Panasonic	ERJ2RKF4701X	resistors.SVNDblib	Panasonic	ERJ2RKF4701X	Farnell	2302707	Mouser	667-ERJ-2RKF4701X	4
36.	R3, R4, R5	68	SMD thick film resistor 68R 0402 1% 100 mW Panasonic	ERJ2RKF68R0X	resistors.SVNDblib	Panasonic	ERJ2RKF68R0X	Farnell	2302508	Mouser	667-ERJ-2RKF68R0X	3
37.	R6, R7, R8, R11, R12, R14, R25, R26, R39, R40, R42, R44	0R	SMD thick film resistor 0R 0402 1A Panasonic	ERJ2GER00X	resistors.SVNDblib	Panasonic	ERJ2GER00X	Farnell	2059190	Mouser	667-ERJ-2GER00X	12
38.	R9, R10, R17, R18, R19, R32, R33	100k	SMD thick film resistor 100k 0402 1% 100 mW Panasonic	ERJ2RKF1003X	resistors.SVNDblib	Panasonic	ERJ2RKF1003X	Farnell	2302839	Mouser	667-ERJ-2RKF1003X	7
39.	R13	1M	SMD thick film resistor 1M 0402 1% 100 mW Panasonic	ERJ2RKF1004X	resistors.SVNDblib	Panasonic	ERJ2RKF1004X	Farnell	2302957	Mouser	667-ERJ-2RKF1004X	1
40.	R20, R31, R37, R38	10k	SMD thick film resistor 10k 0402 1% 100 mW Panasonic	ERJ2RKF1002X	resistors.SVNDblib	Panasonic	ERJ2RKF1002X	Farnell	2302739	Mouser	667-ERJ-2RKF1002X	4
41.	R24	1M	SMD thick film resistor 1M 0603 5% 100 mW ROHM Semiconductor	KTR03EZP1J05	resistors.SVNDblib	ROHM Semiconductor	KTR03EZP1J05	Digi-Key	RHM1.0MAZCT-ND	Mouser	755-KTR03EZP1J05	1
42.	R27	560	SMD thick film resistor 560R 0402 1% 100 mW Panasonic	ERJ2RKF5600X	resistors.SVNDblib	Panasonic	ERJ2RKF5600X	Farnell	2302608	Mouser	667-ERJ-2RKF5600X	1
43.	R28	82k	SMD thick film resistor 82k 0402 1% 100 mW Panasonic	ERJ2RKF8202X	resistors.SVNDblib	Panasonic	ERJ2RKF8202X	Digi-Key	P82.0KLCCT-ND	Mouser	667-ERJ-2RKF8202X	1
44.	R29	3k	SMD thick film resistor 3k 0402 1% 100 mW Panasonic	ERJ2RKF3001X	resistors.SVNDblib	Panasonic	ERJ2RKF3001X	Farnell	2302686	Mouser	667-ERJ-2RKF3001X	1
45.	R30	1k27	SMD Chip Resistor, 1.27 kohm, ERJ2R Series, 50 V, Thick Film, 0402, 100 mW Panasonic	ERJ-2RKF1271X	resistors.SVNDblib	Panasonic	ERJ-2RKF1271X	Digi-Key	P1.27KLCCT-ND	Mouser	667-ERJ-2RKF1271X	1
46.	R34	6k2	SMD thick film resistor 6k2 0402 1% 100 mW Panasonic	ERJ2RKF6201X	resistors.SVNDblib	Panasonic	ERJ2RKF6201X	Farnell	2302719	Mouser	667-ERJ-2RKF6201X	1
47.	R35, R36	20k	SMD thick film resistor 20k 0402 1% 100 mW Panasonic	ERJ2RKF2002X	resistors.SVNDblib	Panasonic	ERJ2RKF2002X	Farnell	2059160	Mouser	667-ERJ-2RKF2002X	2
48.	R41	47k	SMD thick film resistor 47k 0402 1% 100 mW Panasonic	ERJ2RKF4702X	resistors.SVNDblib	Panasonic	ERJ2RKF4702X	Farnell	2302806	Mouser	667-ERJ-2RKF4702X	1
49.	U1	RSL10 SiP	RSL10: Radio SoC, Bluetooth® 5 Certified IC System in Package (SiP) ON Semiconductor	NCH-RSL10-101551	ics.SVNDblib	ON Semiconductor	NCH-RSL10-101551	Digi-Key	NCH-RSL10-101551-ACGOSCT-ND	Mouser	863-NCHRSL1010551ACG	1
50.	U2	BME280	Combined humidity and pressure sensor I2C/SPI interface Bosch Sensortec	BME280	ics.SVNDblib	Bosch Sensortec	BME280	Digi-Key	828-1063-1-ND	Mouser	262-BME280	1
51.	U3	BMA400	3-axes ultra-low power accelerometer Bosch Sensortec	BMA400	ics.SVNDblib	Bosch Sensortec	BMA400	Digi-Key	828-1081-1-ND	Mouser	262-BMA400	1
52.	U4	EKMB1307111K	Board Mount Motion & Position Sensors PIR 6µA Panasonic	EKMB1307111K	specials.SVNDblib			Digi-Key	255-6554-ND	Mouser	769-EKMB1307111K	1
53.	U5	SPCV1100A-HV35X	Low Power IoT Camera Controller SunplusIT	SPCV1100A-HV35X	ics.SVNDblib	SunplusIT	SPCV1100A-HV35X	SunplusIT	SPCV1100A-HV35X			1
54.	U6	LE25U20AQGTGX	Serial Flash Memory 2Mib (256Kx8) ON Semiconductor	LE25U20AQGTGX	ics.SVNDblib	ON Semiconductor	LE25U20AQGTGX	Digi-Key	LE25U20AQGTGXOSCT-ND	Mouser	863-LE25U20AQGTGX	1
55.	U7	EMI2121MTTAG	EMI Common Mode Filter with ESD Protection for High Speed Serial Digital Interfaces ON Semiconductor	EMI2121MTTAG	ics.SVNDblib	ON Semiconductor	EMI2121MTTAG	Digi-Key	EMI2121MTTAGOSCT-ND	Mouser	863-EMI2121MTTAG	1
56.	U8	LC709204FXE-01TBG	Battery Fuel Gauge for 1-Cell Lithium-Ion/Polymer ON Semiconductor	LC709204FXE-01TBG	ics.SVNDblib	ON Semiconductor	LC709204FXE-01TBG	Digi-Key	488-LC709204FXE-01TBGCT-ND	Mouser	863-LC709204FXE01TBG	1
57.	U9	FAN54120MP420X	Single-Cell Linear Battery Charger 500mA ON Semiconductor	FAN54120MP420X	ics.SVNDblib	ON Semiconductor	FAN54120MP420X	ON Semiconductor	FAN54120MP420X			1
58.	U10	MMBT2222AM3T5G	General purpose NPN transistor 40V 600mA ON Semiconductor	MMBT2222AM3T5G	transistors.SVNDblib	ON Semiconductor	MMBT2222AM3T5G	Digi-Key	MMBT2222AM3T5GOSCT-ND	Mouser	863-MMBT2222AM3T5G	1
59.	U11	FAN49100AUC330X	Buck Boost regulator 2.5 A 1.8 MHz Fairchild	FAN49100AUC330X	ics.SVNDblib	Fairchild	FAN49100AUC330X	Digi-Key	FAN49100AUC330XCT-ND	Mouser	512-FAN49100AUC330X	1
60.	U12	NCP6925BFCT2G	7-Channel PMIC with 2 DC-DC Converters, 5 LDOs and a Triple Input 10 Bits ADC ON Semiconductor	NCP6925BFCT2G	ics.SVNDblib	ON Semiconductor	NCP6925BFCT2G	Digi-Key	NCP6925BFCT2G-ND	ON Semiconductor	NCP6925BFCT2G	1
61.	USB	629 105 136 821	Micro USB B SMD connector WR-COM series Würth Elektronik	629105136821	connectors.SVNDblib	Würth Elektronik	629105136821	Digi-Key	732-3155-1-ND	Mouser	710-629105136821	1
62.	X1	12 MHz 10 ppm	XTAL 12MHz 10ppm 6pF Abracon	ABM8W-12.0000MHZ-6-81U-T3	oscillators.SVNDblib	Abracon	ABM8W-12.0000MHZ-6-81U-T3	Digi-Key	535-14002-1-ND	Mouser	815-8W12-6B1UT	1