

OSO-BOOK-A1-05

References	Qty	Description	Manufacturer	MPN	Manufacturer	MPN	Digikey	Mouser	RS	Farnell
Unmarked; USB port, top center	1	CONN RCPT USB2.0 MICRO B SMD R/A	Amphenol ICC / FCI	10118193-0001LF			609-4616-6-ND	649101181930001LF	8632989	2751675
R1, R3, R7, R8	4	RES SMD 10K OHM 1% 1/8W 0805	Yageo	RC0805FR-0710KL			311-10.0KCRDKR-ND	603RC0805FR0710KL	6185163	2148862
R2, R11, R26	3	RES SMD 100K OHM 1% 1/8W 0805	Yageo	RC0805FR-07100KL			311-100KCRDKR-ND	603RC0805FR07100KL		2459311
R23, R24, R27	3	RES SMD 1M OHM 5% 1/8W 0805	Yageo	RC0805JR-071ML			311-1.0MARDKR-ND	603RC0805JR071ML		1799482
R4, R5, R10, R15, R16, R21, R22, R25	8	RES SMD 1K OHM 5% 1/8W 0805	Yageo	RC0805JR-071KL			311-1.0KARCT-ND	603RC0805JR071KL		9234004
R12	1	RES 0.47 OHM 1% 1/3W 0805	Susumu	RL1220S-R47-F			RL12S.47FCT-ND	754RL1220SR47F		9376542
R6, R13, R14	3	RES ARRAY 4 RES 100K OHM 1206	Panasonic	EXB-V8V104JV			Y4104CT-ND	667EXBV8V104JV		2060173
R9, R17, R18, R19, R20	5	RES SMD 100 OHM 5% 1/8W 0805	Yageo	RC0805JR-07100RL			311-100ARCT-ND	603RC0805JR07100RL		9233881
LED	1	LED RED CLEAR SMD	Lite-On	LTST-C171KRKT			160-1427-6-ND	859LTSTC171KRKT	6920941	
CHG	1	LED YELLOW CLEAR CHIP SMD	Lite-On	LTST-C171KSKT			160-1428-1-ND	859LTSTC171KSKT	6920950	
FUL	1	LED GREEN CLEAR SMD	Lite-On	LTST-C171KGKT			160-1426-6-ND	859LTSTC171KGKT	6920947	
NEOPIX	1	ADDRESS LED DISCRETE SERIAL RGB	Inolux	IN-PI42TASPRPGPB			1830-1206-1-ND	743INPI42TASPRPGPB		
C1, C2, C4, C5, C7, C11, C25, C27, C35	9	CAP CER 10UF 10V X5R 0805	Samsung	CL21A106KPFNNNE			1276-1052-6-ND			3013456
C13, C32	2	CAP CER 0.1UF 25V X7R 0805	Murata	GRM21BR71E104KA01L	Yageo	CC0805KRX7R9BB104	311-1140-6-ND	603CC805KRX7R9BB104	6698842	3019949
C24	1	CAP CER 4.7UF 25V X7R 0805	Taiyo Yuden	TMK212AB7475KG-T			587-2990-6-ND	963TMK212AB7475KGT	1034141	2779199
C3, C6, C8, C9, C10, C12, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C26, C28, C29	19	CAP CER 1UF 25V X7R 0805	Samsung	CL21B105KAFNNNE			1276-1066-1-ND		7665682	3013481
C30, C31	2	CAP CER 100UF 6.3V X5R 1210	Samsung	CL32A107MQVNNNE	Taiyo Yuden	JMK325ABJ107MM-P	1276-1092-1-ND	963JMK325ABJ107MMP	7661166	3010208
C33	1	CAP CER 10000PF 100V X7R 0805	Murata	GRM216R71H103KA01D	KEMET	C0805C103K1RACTU	399-1159-1-ND	80C0805C103K1R	2989309	1414661
C34	1	CAP CER 100PF 50V C0G/NP0 0805	Murata	GRM2165C1H101JA01D			490-1615-6-ND		7236199P	2666525
C36	1	CAP CER 1000PF 50V X7R 0805	Samsung	CL21B102KBANNNC			1276-1020-6-ND			3013466
FB1, FB2	2	FERRITE BEAD 1 KOHM 0805 1LN	TDK	MMZ2012R102AT000			445-1555-6-ND	810MMZ2012R102AT000		2372956
D1	1	DIODE SCHOTTKY 20V 1A SOD123L	ON Semiconductor	MBR120ESFT1G			MBR120ESFT1GOSDKR-ND	863MBR120ESFT1G	7925606	1431041
D2, D3, D4	3	DIODE SCHOTTKY 30V 500MA SOD123	ON Semiconductor	MBR0530T1G			MBR0530T1GOSDKR-ND	863MBR0530T1G	5453291P	2317649
D5, D6	2	DIODE ZENER 3.6V 500MW SOD123	MCC	MMSZ4685-TP			MMSZ4685-TPMSDKR-ND	833MMSZ4685TP		1924402
L1	1	FIXED IND 10UH 1.3A 170 MOHM SMD	Vishay	IFSC1515AHER100M01			541-1406-6-ND	70IFSC1515AHER100M0		2352696
Q1	1	MOSFET P-CH 20V 4A SOT-23	Diodes Inc.	DMG3415U-7			DMG3415UDICT-ND	621DMG3415U7	7514095P	1843688
Q2	1	MOSFET N-CH 100V 1.6A SOT-23-3	Infineon	IRLML0100TRPBF			IRLML0100TRPBFDKR-ND	942IRLML0100TRPBF	7259350	1783928
U1	1	AP2112-3.3	Diodes Inc.	AP2112K-3.3TRG1			AP2112K-3.3TRG1DIDKR-ND	621AP2112K3.3TRG1	8283509	3257429
U2	1	IC CONTROLLR LI-ION 4.2V SOT23-5	Microchip	MCP73831T-2ACI/OT			MCP73831T-2ACI/OTCT-ND	579MCP73831T2ACIOT	7386360	1332158
U3	1	IC MCU 32BIT 512KB FLASH 64TQFP	Microchip	ATSAMD51J19A-AUT			ATSAMD51J19A-AUTCT-ND	556ATSAMD51J19AAUT		
U4, U6	2	NOR FLASH	GigaDevice	GD25Q16CTIGR			1970-1010-1-ND	363GD25Q16CTIGR		
U5	1	IC SHIFT REGST 8BIT PI-SO 16SOIC	Nexperia	74HC165D.653			1727-2788-6-ND	77174HC165DT	1707987	1201249
U7	1	IC AMP CLASS AB MONO SOT23-8	Maxim Integrated	MAX4468EKA+T			MAX4468EKA+DKR-ND	700MAX4468EKAT		2514504
MICROSD (better one, w/ card detect: <a href="https://adafru.it/1660">https://adafru.it/1660</a> )	1	CONN MICRO SD CARD PUSH-PUSH R/A	Molex	47334-0001			WM3288DKR-ND	538473340001	7206000	2668481
J1	1	CONN JACK 4COND 3.5MM SMD R/A	CUI Devices	SJ-43514-SMT-TR			CP-43514SJDKR-ND	490SJ43514SMTTR		
DEBUG PORT	1	CONN HEADER SMD 10POS 1.27MM	CNC Tech	3220-10-0300-00			1175-1629-ND			
Unmarked; left feather header	1	CONN RCPT 24POS 0.1 GOLD SMD	Amphenol ICC / FCI	89898-312LF			609-3046-ND	64989898312LF	8599599	1622548
Unmarked; right feather header	1	CONN RCPT 32POS 0.1 GOLD SMD	Amphenol ICC / FCI	89898-316LF			609-3050-ND	64989898316LF	8599921	1622552
Unmarked; battery connector in BATTERY & CHARGING	1	CONN HEADER SMD R/A 2POS 2MM	JST	S2B-PH-SM4-TB(LF)(SN)			455-1749-1-ND		6881353	9492615
PORT_I2C	1	CONN HEADER SMD R/A 4POS 2MM	JST	S4B-PH-SM4-TB(LF)(SN)			455-1751-6-ND		6881366	9492631
PORT_A8, PORT_A9	2	CONN HEADER SMD R/A 3POS 2MM	JST	S3B-PH-SM4-TB(LF)(SN)			455-1750-6-ND		6881357	9492623
Flex connector (usually Good Display includes a better one)	1	CONN FPC TOP 24POS 0.50MM R/A	Amphenol ICC / FCI	SFV24R-4STBE1HLF			609-5202-1-ND	649SFV24R4STBE1HLF		2892429
BTN_LOCK, BTN_RESET	2	SWITCH TACTILE SPST-NO 0.05A 50V	C&K Components	KSS231GLFS			401-1098-1-ND	611KSS231GLFS	5059057	1437639
Optional: DNP_NEXT_ALT, DNP_PREV_ALT	2	SWITCH TACTILE SPST-NO 0.05A 12V	E-Switch	TL3330AF130QG			EG4388CT-ND	612TL3330AF130QG		2522276
BTN_PREV/NEXT/UP/DOWN/LEFT/RIGHT/SEL	7	SWITCH TACTILE SPST-NO 0.05A 12V	E-Switch	TL1107AF130WQ			EG2510-ND	612TL1107AF130W		2830645
SW1	1	SWITCH SLIDE SPDT 200MA 30V	TE Connectivity	1825232-1			A107673-ND	65518252321		2772069
Unmarked; mounts on front side, atop documentation	1	4.2 inch e-ink panel GDEW042T2	Good Display	GDEW042T2	Waveshare	13186	Buy the display here: <a href="https://tinyurl.com/GDEW042T2">https://tinyurl.com/GDEW042T2</a>			