

panda-2-BOM

Qty Rev 2	Qty Rev 1	Value	Device	Package	Parts	Link	Manufacture	Manufacturer Part Number
8	8	0.1uF	C-USC0402	C0402	C5, C6, C7, C8, C9, C10, C11, C12	https://www.digikey.com/en/products/detail/Kyocera	Kyocera	0402YC104KAT2A
1	1		R-US_CHIP-0402(1005-METRIC)	RES01005X40	R22	https://www.digikey.com/en/products/detail/YAGEO	YAGEO	RC0402FR-07100RL
4	3		R-US_R0402	R0402	R17, R18, R19, R34	https://www.digikey.com/en/products/detail/YAGEO	YAGEO	RC0402FR-07100RL
15	14	100nF	C-EUC0402	C0402	C2, C46, C47, C49, C51, C52, C53, C54, C55, C56, C57, C58, C59, C65, C67	https://www.digikey.com/en/products/detail/Kyocera	Kyocera	0402YC104KAT2A
1	1	100nF	C-US_CHIP-0402(1005-METRIC)	CAPC1005X60	C38	https://www.digikey.com/en/products/detail/Kyocera	Kyocera	0402YC104KAT2A
12	11	10k	R-US_CHIP-0402(1005-METRIC)	RES01005X40	R3, R4, R5, R6, R7, R8, R9, R10, R11, R20, R21, R25	https://www.digikey.com/en/products/detail/YAGEO	YAGEO	RC0402FR-0710KP
9	3	10k	R-US_R0402	R0402	R1, R2, R15, R16, R24, R27, R28, R29, R37	https://www.digikey.com/en/products/detail/YAGEO	YAGEO	RC0402FR-0710KP
1	0	1k	R-US_R0402	R0402	R38	https://www.digikey.com/en/products/detail/YAGEO	YAGEO	RC0402FR-071KP
6	5	1uF	C-EUC0402	C0402	C3, C48, C50, C61, C64, C66	https://www.digikey.com/en/products/detail/Kyocera	Kyocera	04026C105KAT2A
1	0	2.4k	R-US_R0402	R0402	R32	https://www.digikey.com/en/products/detail/YAGEO	YAGEO	RC0402FR-072K4L
3	0	200mA/40V	TRANS_PNP-PMBT3906/MMBT3906L	SOT23-3	Q9, Q10, Q11	https://www.digikey.com/en/products/detail/Nexperia_USA_Inc	Nexperia USA Inc.	PMBT3906,235
1	1		R-US_CHIP-0402(1005-METRIC)	RES01005X40	R23	https://www.digikey.com/en/products/detail/Stackpole_Electronics_Inc	Stackpole Electronics Inc	RMCF0402JT220R
2	0		R-US_R0402	R0402	R35, R36	https://www.digikey.com/en/products/detail/Stackpole_Electronics_Inc	Stackpole Electronics Inc	RMCF0402JT220R
1	0	DNP	R-US_R0402	R0402	R26	DNP		
9	8	220mA/50V/3.5Q	MOSFET-NCH-BSS138	SOT23-3	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q12	https://www.digikey.com/en/products/detail/Micro_Commercial_Co	Micro Commercial Co	BSS138-TP
2	2		R-US_R0402	R0402	R12, R13	https://www.digikey.com/en/products/detail/YAGEO	YAGEO	RC0402FR-07360RL
2	1	4.7uF	C-EUC0603	C0603	C1, C60	https://www.digikey.com/en/products/detail/Samsung_Electro-Mechanics	Samsung Electro-Mechanics	CL10A475K08NNNC
2	2	4.7uF	C-US_CHIP-0603(1608-METRIC)	CAPC1608X85	C39, C40	https://www.digikey.com/en/products/detail/Samsung_Electro-Mechanics	Samsung Electro-Mechanics	CL10A475K08NNNC
1	0	4040D	4040D	S016	IC2	https://www.digikey.com/en/products/detail/Nexperia_USA_Inc	Nexperia USA Inc.	74HC4040D,653
2	2	5.6p	C-EUC0402	C0402	C69, C70	https://www.digikey.com/en/products/detail/KYOCERA_AVX	KYOCERA AVX	04025A5R6B4T2A
4	1		R-US_R0402	R0402	R14, R30, R31, R33	https://www.digikey.com/en/products/detail/YAGEO	YAGEO	RC0402FR-07560RL
1	1	5V for 3v3 Reg	JUMPER-SMT_2_NC_PASTE_SILK	SMT-JUMPER_2_NC_PASTE_SILK	JP1	Solder	Solder	Solder
1	0	5VOUT_S	TESTPOINT_TPS-SMD-10SN	TESTPOINT_SMD-10SN	TP4	DNP		
1	0	74HC00_SOIC	74HC00_SOIC	SOIC127P600X175-14N	IC4	https://www.digikey.com/en/products/detail/onsemi	onsemi	MC74HC00ADR2G
1	1	ACC	CONN_025MM	SCREWTERMINAL-5MM-2	J12	https://www.digikey.com/en/products/detail/CUI_Devices	CUI Devices	TB002-500-02BE
1	1	ACC_EN	LED-RED0603	LED-0603	D3	https://www.digikey.com/en/products/detail/Lite-On_Inc	Lite-On Inc.	LTST-C191KRKT
4	4	ACT1210D	ACT1210D	ACT1210-101-2P-TL	U8, U9, U10, U11	https://www.digikey.com/en/products/detail/TKD_Corporation	TKD Corporation	ACT1210D-510-2P-TL00
1	1	AGND	JUMPER-SMT_2_NC_PASTE_SILK	SMT-JUMPER_2_NC_PASTE_SILK	JP5	Solder	Solder	Solder
1	0	BOOT	LED-RED0603	LED-0603	D5	https://www.digikey.com/en/products/detail/Visual_Communications_Company_-_VCO	Visual Communications Company - VCO	VAOL-S6SB4
1	1	Boot	CONN_02	1X02	J8	https://www.digikey.com/en/products/detail/Wurth_Elektronik	Wurth Elektronik	61300211121
1	0	Boot	MOMENTARY-SWITCH-SPST-PTH-6.0MM	TACTILE_SWITCH_PTH_6.0MM	SW2	https://www.digikey.com/en/products/detail/TE_Connectivity_ALCOSWITCH_Switches	TE Connectivity ALCOSWITCH Switches	1825910-3
1	1	CLV1A-FKB-CK1VW1DE1BB7C3C3	CLV1A-FKB-CK1VW1DE1BB7C3C3	LED_CLV1A-FKB-CK1VW1DE1BB7C3C3	D1	https://www.digikey.com/en/products/detail/CreeLED_Inc	CreeLED, Inc.	CLV1A-FKB-CK1VW1DE1BB7C3C3
1	1	G6K-2P-Y	G6K-2P-Y	G6K-2P-Y	K1	https://www.digikey.com/en/products/detail/Omron_Electronics_Inc-EMC_Div	Omron Electronics Inc-EMC Div	G6K-2P-Y DC3
1	0	LMC555_SOIC	LMC555_SOIC	SOIC127P599X175-8N	IC3	https://www.digikey.com/en/products/detail/Texas_Instruments	Texas Instruments	LMC555CM
1	1	MCP4261-103E/ML	MCP4261-103E/ML	QFN65P400X400X100-17N	U17	https://www.digikey.com/en/products/detail/Microchip_Technology	Microchip Technology	MCP4261-103E/ML
1	1	MCP4261-103E/SL	MCP4261-103E/SLSOIC-14	SOIC127P600X175-14N	IC1	DNP		
1	1	MRA4003T3G	DIODE_MRA4003T3G_SMA	DIOM5226X290N	D2	https://www.mouse.com/ProductDetail/onsi	onsemi	MRA4003T3G
1	1	NX2016SA-32MHZ-EX500A-CS06654	NX2016SA-32MHZ-EX500A-CS06654	NX2016SA_NDK	X1	https://www.digikey.com/en/products/detail/NDK_America_Inc	NDK America, Inc.	NX2016SA-25.000M-STD-C2S-1
1	0	PDR_ON	TESTPOINT_TPS-SMD-10SN	TESTPOINT_SMD-10SN	TP2	DNP		
4	4	PESD2CANFD27V-T	PESD2CANFD27V-T	DBZ_R-PDSO-G3	U12, U13, U14, U15	https://www.digikey.com/en/products/detail/Nexperia_USA_Inc	Nexperia USA Inc.	PESD2CANFD27V-TR
1	1	Power Select	CONN_03X2FEMALE	2X3	J14	https://www.digikey.com/en/products/detail/METZ_CONNECT_USA_Inc	METZ CONNECT USA Inc.	PR20203VBDN
1	1	RASPBERRYPI4_4GB	RASPBERRYPI4_4GB	MODULE_RASPBERRYPI4_4GB	U1	https://www.digikey.com/en/products/detail/Samtec_Inc	Samtec Inc.	SSQ-120-03-T-D
1	0	RST	LED-RED0603	LED-0603	D4	https://www.digikey.com/en/products/detail/OSRAM_Opto_(ams_OSRAM)	OSRAM Opto (ams OSRAM)	LT O39G-Q100-25-1
1	1	Reset	MOMENTARY-SWITCH-SPST-PTH-6.0MM	TACTILE_SWITCH_PTH_6.0MM	SW1	https://www.digikey.com/en/products/detail/TE_Connectivity_ALCOSWITCH_Switches	TE Connectivity ALCOSWITCH Switches	1825910-3
1	1	SS-52400-003	SS-52400-003	BELFUSE_SS-52400-003	J13	https://www.digikey.com/en/products/detail/Stewart_Connector	Stewart Connector	SS-52400-003
1	1	ST-Link	CONN_05X2SHD-NS	2X5-SHROUDED-NS	J1	DNP		
1	1	ST1L05CPU33R	ST1L05CPU33R	SON95P300X300X100-7N	U3	https://www.mouse.com/ProductDetail/STM	STMicroelectronics	ST1L05CPU33R
1	1	STM32H723ZGT	STM32H723ZGT	LQFP-144	U16	From Customer	STMicroelectronics	STM32H723ZGT6
1	1	ST_3.3V	CONN_02	1X02	J3	DNP		
1	1	ST_5V	CONN_02	1X02	J4	DNP		
1	1	SWIM	CONN_02	1X02	J2	DNP		
1	0	Startup Hacks	CONN_03X2FEMALE	2X3	J7	https://www.digikey.com/en/products/detail/METZ_CONNECT_USA_Inc	METZ CONNECT USA Inc.	PR20203VBDN
4	4	TLE9251VSJXUMA1	TLE9251VSJXUMA1	SOIC8	U4, U5, U6, U7	https://www.digikey.com/en/products/detail/Infineon_Technologies	Infineon Technologies	TLE9251VSJXUMA1
1	0	USART2	CONN_02	1X02	J5	DNP		
1	1	USBLC6-4SC6Y	USBLC6-4SC6Y	SOT95P280X145-6N	U2	https://www.digikey.com/en/products/detail/STMicroelectronics	STMicroelectronics	USBLC6-4SC6Y
1	1	USB_A_SMT_FEMALE	USB_A_SMT_FEMALE	USB-A-S-SILK-FEMALE	J6	https://www.digikey.com/en/products/detail/Amphenol_ICC_(FCI)	Amphenol ICC (FCI)	87583-0010BHLF
1	0	USB_ID	TESTPOINT_TPS-SMD-10SN	TESTPOINT_SMD-10SN	TP3	DNP		
1	0	USB_LOAD_SWITCH	TESTPOINT_TPS-SMD-10SN	TESTPOINT_SMD-10SN	TP1	DNP		
1	1	VBAT	JUMPER-SMT_2_NC_PASTE_SILK	SMT-JUMPER_2_NC_PASTE_SILK	JP4	Solder	Solder	Solder
1	1	VDDA	JUMPER-SMT_2_NC_PASTE_SILK	SMT-JUMPER_2_NC_PASTE_SILK	JP3	Solder	Solder	Solder
1	0	VHAX	JUMPER-SMT_2_NC_PASTE_SILK	SMT-JUMPER_2_NC_PASTE_SILK	JP6	Solder	Solder	Solder
1	1	VIN	CONN_02	1X02	J11	DNP		
1	0	VOLT_S	TESTPOINT_TPS-SMD-10SN	TESTPOINT_SMD-10SN	TP5	DNP		
1	1	VREF+	JUMPER-SMT_2_NC_PASTE_SILK	SMT-JUMPER_2_NC_PASTE_SILK	JP2	Solder	Solder	Solder
0	1	SBU1	CONN_02	1X02	J9	https://www.digikey.com/en/products/detail/Wurth_Elektronik	Wurth Elektronik	61300211121
0	1	SBU2	CONN_02	1X02	J10	https://www.digikey.com/en/products/detail/Wurth_Elektronik	Wurth Elektronik	61300211121
Color Legend:								
Blue:	An increase in Qty between revisions							
Orange:	Part value changed and Qty may have increased. Full quantity for Rev 2 must be ordered							
Yellow:	New Line item but nothing is populated (test points etc.)							
Green:	These are solder jumpers that need to be soldered, hopefully possible automatically with definitions in the solderpaste Gerber							
Red:	Parts that no longer need to be populated or have been removed from the design							

