

# Bill of Materials

Project Number: P234  
 Project Revision: 0.5  
 Project File Name: BAS\_DevKIT\_PrlPcb  
 Assembly Variant: None  
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Part Number	GTS	Designator	Description	Manufacturer Part Number	Footprint	Layer	Quantity	
CA0001		C110, C112, C113, C114, C117, C118, C119, C120, C203, C207, C404, C405	10µF 16V 10% XSR	GRM71BR60C10MKE15L	C0805	Top	12	
CA0002		C227, C228	4.7µF 16V 10% XSR	C1608BR1C475R08AC	C0603	Bottom	2	
CA0003		C115, C116, C204, C205, C206, C208, C209, C210, C211, C212, C213, C214, C215, C216, C226, C234, C406, C407, C505	1µF 16V 10% XSR	C1608BR1C105R08AA	C0603	Top, Bottom	19	
CA0005		C122, C123, C124, C125, C126, C127	10µF 35V 10% XSR	C2012XR1V10M4725AC	C0805	Top	6	
CA0007		C503	47µF 16V 20% XSR	EMK325AB474M06MP	C1210	Top	1	
CA0008		C504, C508, C509	10µF 16V 20% XSR	GRM188R1C100M40LD	C0603	Top	3	
CA0009		C109, C111, C229, C235	2.2µF 35V 10% XSR	C1608BR1V225R08AC	C0603	Top, Bottom	4	
CA0010		C506, C507	100µF 16V 10% X7R	GMPT50RT1C100A03SD	C0402	Top	2	
CA0011		C502	100µF 16V 20% 15mΩ 4000mA	145WPC100MA	EC_B6	Top	1	
CA0012		C201, C202, C401, C402, C501	330µF 16V 20% 16mΩ 4100mA	145WPC330MA	EC_E7	Top	5	
CA0013		C217	10nF 16V 10% X7R	GR110SR7C103KE01D	C0402	Bottom	1	
CA0014		C101, C102, C103, C104	10µF 63V 10% X7R	GRM43BR1T105MA012	C1210	Top	4	
CA0015		C105, C106	10µF 25V 10% X7R	CL31A106K40V08005	C1206	Top	2	
CA0016		C225, C231	1µF 100V 15% X7R	GRM42MR12A105KA01	C1210	Bottom	2	
CA0018		C224, C226, C230, C232	1000µF 100V 15% X7R	GRM42MR12A105KA01	C1210	Bottom	4	
CA0019		C107, C108, C109, C219, C220, C221, C222, C223	100nF 50V 10% X7R	CGA2B3X7R1H104K050BB	C0402	Top	8	
CA0020		C130	1.2nF 50V 10% X7R	GMPT50RT1H122NA37D	C0402	Top	1	
CA0021		C121, C129	1nF 50V 1% CGO	GR110SR1H102AB0D	C0402	Top	2	
CO0007		C0502	HEM		1002N489100M	Top	1	
CO0012		J501, J502, J503, J504, J505, J506	Header 1x2P	GB099C090105U	1x2P, 2.54mm	Top	6	
CO0015		J101	DC Jack 30V @10A	PJ-30DBH	PJ-30DBH	Top	1	
CO0016		C0101	SDX00C-LB	PJ-082BH	45718002	SDX0005	Top	1
CO0021		CO301, CO302, CO303	USB4070-30-C	USB4070-30-C	USB4070-30-C	Top	3	
CO0025		CO501	USB-C connector	USB4500-03-1.A	USB4500-03-1.A	Top	1	
CO0027		CO503	µSD-Card holder		4.9307E-11	4.9307E-11	Top	1
CR0006		X201	25MHz 3.3V 50PPM	ASE-25.000MHz LC-1	ASE-XX	4.9307E-11	Bottom	1
DI0001		D207, D202, D503, D504, D505, D506	LED Green	KP-2012C50K	L440005	Top	6	
DI0002		D201, D202, D203, D501	USB 2 TVS Diode	TPD2E0USB30DR1R	SOT-3	Top	4	
DI0007		D204, D205, D206	USB 3 TVS Diode	PUS3BFA32	SOT-1176-1	Top	3	
DI0008		D101	Zener Diode 36V 200mW	BZT52C36S	SOD-323	Top	1	
F0004		F101	32V/10A	C1010	F1206	Top	1	
F0005		F103	65V/2A	SF-1296SA200M-2	F1206	Top	1	
F0006		F104	65V/3A	SF-1296SA300M-2	F1206	Top	1	
F0007		F105	65V/0.5A	SF-1296SA05M-2	F1206	Top	1	
IC0001		IC104	DC-DC 12Vin-3.3Vout/3A	HELIOT12303A-6	HELIOT12303A-6	Top	1	
IC0009		IC502	Buffer IC	SN74VCT10010BVT	SOT-23.5	Top	1	
IC0011		IC501	RT9142SN5GV	RT9142SN5GV	SOT-23	Top	1	
IC0014		IC201	USB Interface, USB Hub Controller, USB 3.0	TPS3843B-10002V	TP3844	Top	1	
IC0023		IC102	DC-DC 12Vin-5Vin/0.2A	HELIOT12303A-6	HELIOT12303A-6	Top	1	
IC0023		IC105	DC-DC 4.8Vin-1.2Aout/0.1A	TPS62975PT	TPS6297x	Top	1	
IC0024		IC101	DC-DC 36Vin-12Vout/3A	RPMB12-3-0	RPMB13	Top	1	
IC0028		IC202, IC204	USB Type-C Power Delivery Controller	BD94392W1R-42	SCP-16	Bottom	2	
IC0029		IC503	RT9142 High-side power switch	RT9142SG	SOT-23.5	Top	1	
IC0031		IC102	3.8V TO 40V INPUT, 5A LOW-IO SYNCHRONOUS BUCK WITH	AP44501P-13	SO-8 EP	Top	1	
IN0004		L101	NR54018T262MDCG	NR54018T262MDCG	NR54018	Top	1	
IN0005		L102	3.3µH 5A 30% 21mΩ	SRN645TA-36V1	SRN645TA	Top	1	
ME0002		HT, H2, H3, H4	Mounting Hole M4		HOLE_M4	Top	4	
ME0004		Logo-GTS	Logo-GTS-1		Logo-GTS-1	Top	1	
ME0006		Logo-Fuland	Logo-Fuland-2		Logo-Fuland-2	Top	1	
ME0011		Fid1, Fid3, Fid6, Fid8	Fiducial Round 1mm		FidR_1.0mm	Top, Bottom	4	
ME0012		Fid2, Fid4, Fid5, Fid7	Fiducial Square 1mm		FidS_1.0mm	Top, Bottom	4	
MO0011		MO507	Outline of CMM	RPI-CMM	RPI-CMM_Layout	Top	1	
MO0012		MO508	RPI-CMM Pin 1-100	DF40K123-10-10000-0-4V	CMM-101-100	Top	1	
MO0013		MO502	RPI-CMM Pin 101-200	DF40K123-10-10000-0-4V	CMM-101-200	Top	1	
MO0014		MO503, MO504, MO505, MO506	RPI-CMM Mounting Studs	RT7403011R	CMM-M	Top	4	
MO0015		MO406	Outline of ZeroW	RPI-Zero-W	RPI-ZeroW_Layout	Top	1	
MO0016		MO402, MO403, MO404, MO405	RPI-ZeroW Mounting Studs	RT7403011R	CMM-M	Top	4	
MO0017		MO401	RPI-ZeroW Header 1-40		RPI-ZeroW_Pins	Top	1	
RS0001		R211, R501, R505, R506, R507, R509	150Ω 1% 100mW	MCMWR04A1500FTL	R0603	Top	6	
RS0002		R201, R204, R207, R208	4.7KΩ 1% 100mW	WR06047070FTL	R0603	Bottom	4	
RS0003		R101, R103, R202, R203, R214, R216, R217, R218, R219, R504	10KΩ 5% 100mW	WR060K103-JTL	R0603	Top, Bottom	10	
RS0007		R102, R104	100K 1% 100mW	WR060K100FTL	R0603	Top	2	
RS0011		R512	10KΩ 1% 62.5mW	WR060K100FTL	R0402	Top	1	
RS0014		R212, R213	100KΩ 1% 100mW	RC0603R01-07F000L	R0603	Top	2	
RS0015		R105, R215, R508	12KΩ 1% 62.5mW	RC0603R01-13J00L	R0402	Top	3	
RS0020		R502, R503	2.2KΩ 5% 62.5mW	MCMWR04K222-JTL	R0402	Top	2	
RS0032		R205, R206	10mΩ 5% 100mW 100PPM	RC0603R01-10100R	R0402	Bottom	2	
RS0033		R510	22KΩ 1% 62.5mW 100PPM	MCMWR04K222FTL	R0402	Top	1	
RS0034		R106	20KΩ 1% 100mW 100PPM	RLU-S02F200K2	R0402	Top	1	
RS0035		R107	2.2KΩ 1% 62.5mW 100PPM	CR05C040222FK2	R0402	Top	1	
RS0037		R511	1KΩ 5% 62.5mW 100PPM	RC0603R01-10100R	R0402	Top	1	
RS0038		R209, R210	5.1KΩ 1% 62.5mW 100PPM	RC0604025K10100R	R0402	Top	2	
SW0001		SW501, SW502	Miniature Slide Switch	DS102011M2C00N1	DS10-Series	Top	2	
TR0002		TR202, TR203	40V/11mΩ-Mosfet N-10A	R03C10000018A	40M4T-8	Bottom	2	
TR0007		TR101	30V JFET N-1	ZVP1206TA	SOT-223	Top	1	
TR0008		TR501	30V, N-channel Trench MOSFET	PAV2300NE	SOT-23	Top	1	

Approved	Notes