

Bill of Materials

Bill of Materials for Project [RPI-GS-CAM-SER_V1-0.PrjPcb] (No PCB Document Selected)

Source Data From:

Project:

Variant:

RPI-GS-CAM-SER_V1-0.PrjPcb

RPI-GS-CAM-SER_V1-0.PrjPcb

None

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1 Documents / PCB Data										
#	Document / Data	Details	Value							
1	Schematics	RPI-GS-CAM-SER_SCH_V1-0.PDF	PCB							
2	Assembly Drawing	RPI-GS-CAM-SER_ASS_V1-0.PDF	PCB							
3	Layer Drawings	RPI-GS-CAM-SER_PCB_V1-0.PDF	PCB							
4	PCB Dimensions	RPI-GS-CAM-SER_DIM_V1-0.PDF	PCB							
5	PCB Specification	RPI-GS-CAM-SER_PCBSpec_V1-0.PDF	PCB							
6	PCB Layer Specification	RPI-GS-CAM-SER_PCBLayerSpec_V1-0.PDF	PCB							
7	Gerber Data, NC Drill, Pick & Place	- Gerber - NC Drill - ODB++ - Pick & Place	PCB							
8	Test Specification	n / a	PCBA							
2 Programming Files										
#	Name	Filename	Version							
1	n/a									
3 Printed Circuit Board (PCB)										
#	Name	Details								Quantity
1	RPI-GS-CAM-SER_V1-0	see PCB Specification and PCB Layer Specification								1
4 SMT / THT Components										
#	Comment	Description	Designator	Footprint	Library Name	Manufacturer 1	Manufacturer 1 Prt. Nr.	Manufacturer 2	Manufacturer 2 Prt. Nr.	Quantity
1	1µF 16V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0402 16VDC	C101, C104, C108, C409	CAP_0402_L	Cap.SchLib	Taiyo Yuden	EMK105BJ105MVHF	Murata Electronics	GRM155R61E105KA12D	4
2	1µF 16V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0603 16VDC 1uF 10% X7R 0.8mm	C304, C306, C419, C421	CAP_0603_L	Cap.SchLib	TDK	C1608X7R1C105K080AC	KEMET	C0603C105K4RACTU	4
3	4.7µF 10V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 4.7 uF 10 VDC 10% 0603 X7R	C410, C414	CAP_0603_L	Cap.SchLib	Murata Electronics	GRM188Z71A475KE15D	FH (Guangdong Fenghua Advanced Tech)	0603B475K100NT	2
4	4.7µF 50V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 4.7 uF 50 VDC 10% 1206 X7R	C300	CAP_1206	Cap.SchLib	Murata Electronics	GRM31CR71H475KA12L	Kemet	C1206X475K5RACAUTO	1
5	4.7nF 50V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 50V 0.022uF X7R 0402 10%	C405, C412	CAP_0402_L	Cap.SchLib	Murata Electronics	GCM155R71H472KA37J	KEMET	C0402C472K5RAC7411	2
6	10µF 6.3V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 10 uF 6.3 VDC 10% 0805 X7R	C111, C114, C120, C124	CAP_0805	Cap.SchLib	Murata Electronics	GRM21BR70J106KA73L	TDK	CGA4J1X7R0J106K125AC	4
7	10µF 6.3V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0603 6.3VDC	C205, C416, C417	CAP_0603_L	Cap.SchLib	Murata Electronics	GRM188R60J106ME84J	Taiyo Yuden	JMK107ABJ106MA-T	3
8	10µF 16V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 16V 10uF X7R 0805 10%	C422	CAP_0805	Cap.SchLib	KYOCERA AVX	0805YC106KAT2A	Samsung Electro-Mechanics	CL21B106K0QNNNG	1
9	10µF 50V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 10 uF 50 VDC 10% 1210 X7R	C401, C402	CAP_1210	Cap.SchLib	Murata Electronics	GRJ32ER71H106KE11L	KEMET	C1210C106K5RACTU	2
10	10nF 50V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0402 50VDC	C102, C105, C109, C113, C116, C122, C204	CAP_0402_L	Cap.SchLib	Würth Elektronik	885012205067	Yageo	AC0402KXPX7R9BB103	7
11	15nF 50V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0402 50VDC	C110	CAP_0402_L	Cap.SchLib	Murata	GRM155R71H153KA12J	Yageo	CC0402KRX7R9BB153	1
12	22nF 50V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0402 50VDC	C119, C404	CAP_0402_L	Cap.SchLib	Murata	GRT155R71H223KE01D	Walsin	0402B223K500CT	2
13	33nF 50V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0402 50VDC	C106, C411	CAP_0402_L	Cap.SchLib	Murata	GRT155R71H333KE01D	Yageo	CC0402KRX7R9BB333	2
14	47µF 10V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 47 uF 10 VDC 10% 1210 X7R	C406, C407	CAP_1210	Cap.SchLib	Murata Electronics	GRM32ER71A476KE15L	KEMET	C1210C106K8RACTU	2
15	100nF 50V	Multilayer Ceramic Capacitors MLCC - SMD/SMT 0402 50VDC	C100, C103, C107, C112, C115, C117, C118, C121, C123, C126, C200, C201, C202, C203, C206, C301, C302, C303, C305, C307, C308, C400, C403, C408, C413, C415, C418, C420, C423	CAP_0402_L	Cap.SchLib	Murata Electronics	GCM155L8EH104KE07D	TDK	UMK105B7104KV-FR	29
16	10-Pin SMT Pin Socket 2 Row	Headers & Wire Housings WR-PHD 1.27mm SMT St SMT 10P 2Row H=2.2mm	J302	6,2331E+11	Conn.SchLib	Würth Elektronik	623310235321			1
17	FA1-NZSP-PCB-2	FAKRA GEN 1 PCB Through Hole Straight Plug 50 Ohm Z Key Code	J300	FA1-NZSP-PCB-2	Conn.SchLib	Amphenol RF	FA1-NZSP-PCB-2			1
18	XF3M(1)-1515-1B	1.00mm Pitch RotaryBackLock FFC/FPC Connector, Surface Mount, Right-Angle, Dual-Sided Contact Style, 15 Circuits	J301	XF3M(1)-1515-1B	Conn.SchLib	Omron	XF3M(1)-1515-1B			1

19	BMI088	IMUs - High Performance Inertial Measurement Unit (IMU) for Drones and Robotics LGA16 4,5 mm x 3,0 mm	U201	LGA50P450X300X100-16N	Digital.SchLib	Bosch Sensortec	BMI088		1
20	DS90UB953TRHB-Q1	Serialisierer & Deserialisierer - Serdes 2 MP MIPI CSI-2 FPD-Link III serializer for 2MP/60fps cameras & radar 32-VQFN - 40 to 105	U100	VQFN50P500X500X100-33N	Digital.SchLib	Texas Instruments	DS90UB953TRHBQ1		1
21	PCA9685BS	LED-Anzeigetreiber 16-CH 12-BIT PWM FM+ I2C-BUS LED CTRL HVQFN28 6 mm x 6 mm	U203	QFN65P600X600X100_H S-29N	Digital.SchLib	NXP	PCA9685BS, 118		1
22	SN74AUP1T97DCKR	Translation - Single-Supply Voltage-level Translator With Nine Configurable Gate Logic Functions	U300, U301	SOT65P210X100-6N	Digital.SchLib	Texas Instruments	SN74AUP1T97DCKR		2
23	TMP1075NDRLR	Board Mount I2C Temperature Sensors with performance upgrades to industry standard LM75 / TMP75 SOT563 1,6 mm x 1,6 mm	U202	SOT50P160X60-6N_SOT563	Digital.SchLib	Texas Instruments	TMP1075NDRLR		1
24	9774100151R	Würth Standoff M2.5 h:10mm 9774050151R	H400, H401, H402, H403	9774100151R	Electro_Mech.SchLib	Würth Elektronik	9774100151R		4
25	742792031	Ferrite Beads WE-CBF 0805 200MHz 300Ohm 3000mA AEC Q200	L304, L402	L_0805	Indc.SchLib	Würth Elektronik	742792031		2
26	742792641	Ferrite Beads WE-CBF 0603 100MHz 300Ohm 2000mA AEC Q200	L404	L_0603	Indc.SchLib	Würth Elektronik	742792641		1
27	742863147	Ferrite Beads WE-CBF HF 0603 SMD 100MHz 4700Ohm 500mA	L300, L301	L_0603	Indc.SchLib	Würth Elektronik	742863147		2
28	74479299210	Fixed Power Inductor - SMD WE-PMCI 1210 1.0uH 3A 38mOhms 30%Tol	L403	WE-PMCI_1210	Indc.SchLib	Würth Elektronik	74479299210		1
29	BLM18AG102SN1D	Ferrite Beads BLM18 1000Ohms 450mA 0.5Ohm	L100, L101, L102, L303	L_0603	Indc.SchLib	Murata Electronics	BLM18AG102SN1D		4
30	IHLP4040DZER150M11	15uH ±20% 6A 45mΩ SMD,10.16x10.16x4mm Power Inductor	L401	IHLP-4040DZ-11	Indc.SchLib	Visay Dale	IHLP4040DZER150M11		1
31	LQH3NPN100MJRL	10uH ±20% 0.8A 240mΩ SMD,3.0x3.0x1.1mm Chip Inductor	L302	LQH3NPN100MJRL	Indc.SchLib	Murata Electronics	LQH3NPN100MJRL		1
32	LP5907MFX-1.8NOPB	LDO Spannungs-Regulator 250mA Ultra-Lo Noise LDO Reg SOT23-5	U402	SOT95P285X140-5N	Power.SchLib	Texas Instruments	LP5907MFX-1.8NOPB		1
33	SIC463ED-T1-GE3	Switching Voltage Regulators 4A, 4.5-60V buck reg 100kHz to 2MHz; 5 mm x 5 mm MLP55-27L package	U400	VISHAY_MLP55-27L	Power.SchLib	Vishay Siliconix	SIC463ED-T1-GE3		1
34	TLV62568ADR	Step Down Converter with Forced PWM in SOT563 Package	U401	SON50P150X80-6N	Power.SchLib	Texas Instruments	TLV62568ADR		1
35	82400274	ESD Suppressors / TVS Diodes WE-TVS High Speed 5uA 5VDC 4+1	D303	SOT65P210X100-6N	Protec.SchLib	Würth Elektronik	82400274		1
36	824014883	ESD Suppressors / TVS Diodes WE-TVS Diode Array 3.3V 0.5pF 8Channel	D300, D301	WE-TVS-DFN3810-9L	Protec.SchLib	Würth Elektronik	824014883		2
37	CESDP0402UC5VB	Low Capacitance ESD Protection Diode 0402	D302	TVS_0402	Protec.SchLib	CREATEK	CESDP0402UC5VB	BORN	1
38	0R Jumper	Thick Film Resistors - SMD 0Ohm	R101, R200, R201, R210	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW04020000Z0EDC	Yageo	4
39	1.2k 1%	Thick Film Resistors - SMD 1/16watt 1.2Kohms 1%	R105	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW04021K20FKEDC	Yageo	1
40	2k 1%	Thick Film Resistors - SMD 2 kOhms 62.5mW 0402 1%	R407	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW04022K00FKEDC	Yageo	1
41	2.2R 1%	Thick Film Resistors - SMD 2.2Ohm 1%	R400	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW04022R20JNED	Yageo	1
42	4.02k 1%	Thick Film Resistors - SMD 4.02kOhm 1%	R300, R403	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW04024K02FKEDC	Yageo	2
43	4.7k 1%	Thick Film Resistors - SMD 4.7kOhm 1%	R204, R205	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW04024K70FKEDC	Yageo	2
44	10k 1%	Thick Film Resistors - SMD 10kOhm 1%	R106, R108, R206, R213, R214, R215, R216, R217, R218, R219, R410, R413	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW040210K0FKEDC	Yageo	12
45	24k 1%	Thick Film Resistors - SMD 24kOhm 1%	R408	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW040224K0FKEDC	Yageo	1
46	27k 1%	Thick Film Resistors - SMD 27kOhm 1%	R103	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW040227K0FKEDC	Yageo	1
47	49.9k 1%	Thick Film Resistors - SMD 49.9kOhm 1%	R404	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW040249K9FKEDC	Yageo	1
48	49.9R 1%	Thick Film Resistors - SMD 49.9kOhm 1%	R100	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW040249R9FKEDC	Yageo	1
49	52.3k 1%	Thick Film Resistors - SMD 52.3kOhm 1%	R405	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW040252K3FKEDC	Yageo	1
50	75k 1%	Thick Film Resistors - SMD 75kOhm 1%	R406	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW040275K0FKEDC	Yageo	1
51	82.5k 1%	Thick Film Resistors - SMD 1/16W 82.5Kohms 1%	R107	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW040282K5FKEDC	Bourns	1
52	100k 1%	Thick Film Resistors - SMD 100kOhm 1%	R402, R412	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW0402100KFKEDC	Yageo	2
53	102k 1%	Thick Film Resistors - SMD 102KOHM 1/16WATT 1%	R109	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW0402102KFKEDC	Bourns	1
54	105k 1%	Thick Film Resistors - SMD 105kOhm 1%	R409	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW0402105KFKEDC	Yageo	1
55	402R 1%	Thick Film Resistors - SMD 402Ohms 1/16W 0402 1%	R110	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW0402402RKFEDC	Yageo	1
56	453k 1%	Thick Film Resistors - SMD 1/16watt 453Kohms 1%	R411	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW0402453KFKED	Bourns	1
57	562k 1%	Thick Film Resistors - SMD 562kOhms 62.5mW 0402 1%	R401	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW0402562KFKEDC	Yageo	1
58	620R 1%	Thick Film Resistors - SMD 1/16watt 620ohms 1%	R102	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW0402620RKFED	Yageo	1
59	820R 1%	Thick Film Resistors - SMD 1/16watt 820ohms 1%	R104	RES_0402_L	Res.SchLib	Vishay / Dale	RCRW0402820RKFED	Yageo	1
Approved			Notes						137

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PCB Arts GmbH
<https://pcb-arts.com/>
 Sitz: Fürth, Bayern
 Registergericht: Amtsgericht Fürth, HRB 16070
 Geschäftsführer: Saber Kaygusuz

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