Texas Instruments

Bill of Materials

C5545 Booster Pack **BOM Version 1.0**
Schematic Version 1.40
SPRR231 **Board Revision C**

Item Number	Qty	Part Reference	Value	Description	Mfr_name	Mfr_part_number	Distributor_name	Distributor_part_number
1	21	C1 C10 C11 C12 C13 C14 C15 C16 C23 C26 C27 C28 C29 C33 C34 C53 C54 C80 C84 C117 C158	0.01uF	CAP CERAMIC 0.01uF 16V 20% X5R 0402	AVX CORPORATION	UT02YD103MAT2E	DIGIKEY	478-6240-1-ND
2	71	C2 C3 C4 C6 C17 C18 C24 C30 C31 C36 C37 C38 C42 C43 C45 C46 C47 C48 C49 C52 C56 C59 C60 C64 C65 C67 C70 C71 C72 C73 C74 C76 C78 C83 C85 C86 C87 C89 C96 C97 C98 C99 C100 C102 C104 C106 C107 C108 C109 C112 C113 C114 C115 C116 C118 C119 C120 C121 C123 C125 C127 C129 C130 C131 C132 C133 C142 C147 C148 C149 C150	0.1uF	CAP CERAMIC 0.1uF 16V 10% X7R 0402	MURATA	GRM155R71C104KA88D	DIGIKEY	490-3261-1-ND
3	12	C5 C20 C22 C41 C51 C69 C75 C81 C88 C101 C122 C126	10uF	CAP CERAMIC 10uF 10V 20% X5R 0402	SAMSUNG ELECTRO MECHANIC	CL05A106MP5NUNC	DIGIKEY	1276-1450-1-ND
4	4	C7 C8 C156 C157	22pF	CAP CERAMIC 22pF 25V 5% NP0 0402	AVX CORPORATION	04023A220JAT2A	DIGIKEY	04023A220JAT2A-ND
5	11	C9 C25 C32 C35 C39 C44 C63 C66 C95 C141 C145	1uF	CAP CERAMIC 1uF 10V 10% X5R 0402	MURATA	GRM155R61A105KE15D	DIGIKEY	490-3890-1-ND
6	5	C57 C61 C62 C103 C105	4.7uF	CAP CERAMIC 4.7uF 10V 20% X5R 0402	TDK CORPORATION	C1005X5R1A475M050BC	DIGIKEY	445-8023-1-ND
7	1	C68	2.2uF	CAP CERAMIC 2.2uF 25V 10% X5R 0402	SAMSUNG ELECTRO MECHANIC	CL05A225KA5NUNC	DIGIKEY	1276-1460-1-ND
8	2	C79 C82	2.2uF	CAP CERAMIC 2.2uF 10V 10% X7R 0603	MURATA	GRM188R71A225KE15D	DIGIKEY	490-4520-1-ND
9	2	C93 C94	15pF	CAP CERAMIC 15pF 50V 5% C0G 0402	MURATA	GRM1555C1H150JA01D	NA	NA
10	2	C124 C128	22uF	CAP CERAMIC 22uF 16V 20% X5R 0805	TDK CORPORATION	C2012X5R1C226M125AC	DIGIKEY	445-7647-1-ND
11	2	C134 C135	1uF	CAP CERAMIC 1uF 25V 10% X7R 0805	MURATA	GCM21BR71E105KA56L	DIGIKEY	490-4785-1-ND
12	1	C136	4.7uF	CAP CERAMIC 4.7uF 16V 10% X7R 0805	MURATA	GRM21BR71C475KA73L	DIGIKEY	490-4522-1-ND
13	2	C137 C146	1.2pF	CAP CERAMIC 1.2pF 50V 0.1pF% C0G 0402	MURATA	GRM1555C1H1R2BA01D	DIGIKEY	490-6209-1-ND
14	1	C139	12pF	CAP CERAMIC 12pF 50V 5% C0G 0402	MURATA	GRM1555C1H120JA01D	DIGIKEY	490-5924-1-ND
15	2	C143 C144	0.47uF	CAP CERAMIC 0.47uF 16V 20% X5R 0402	TDK CORPORATION	C1005X5R1C474M050BC	DIGIKEY	445-4977-1-ND
16	1	C151	3.3uF	CAP CERAMIC 3.3uF 6.3V 20% X5R 0402	TDK CORPORATION	C1005X5R0J335M050BC	DIGIKEY	445-7394-1-ND
17	1	D1	1SS416	DIODE SCHOTTKY 30V 100mA 1-1L1A	TOSHIBA	1SS416,L3M	MOUSER	757-1SS416
18	3	D2 D3 D4	RB578VAM100TR	DIODE SCHOTTKY 100V 70mA TUMD2M	ROHM SEMICONDUCTOR	RB578VAM100TR	DIGIKEY	RB578VAM100TRCT-ND
19	3	D6 D9 D10	TPD1E10B06DPY	DIODE 1CH ESD PROTECTION SMD(0402)	TEXAS INSTRUMENTS	TPD1E10B06DPYR	DIGIKEY	296-30406-1-ND
20	2	D7 D8	TPD2EUSB30DRTR	DIODE 2-CHANNEL ESD PROTECTION DIODES SOT-3	TEXAS INSTRUMENTS	TPD2EUSB30DRTR	DIGIKEY	296-25509-1-ND
21	6	FB1 FB3 FB5 FB6 FB7 FB8	120E	IND BEAD CHIP 120E 1.2A 0402	TDK CORPORATION	MPZ1005S121CT000	DIGIKEY	445-2981-1-ND
22	1	FB4	220E	IND BEAD CHIP 200E 20% 0603	TDK CORPORATION	MPZ1608S221A00	DIGIKEY	445-1565-1-ND
23	6	FL1 FL2 FL3 FL4 FL5 FL6	600E	PASSIVE FILTER EMI 600E 0603	MURATA	BLM18AG601SN1D	DIGIKEY	490-1014-1-ND
24	1	FL7	1.5KE	FERRITE BEAD 1.5KE 500MA 0603	MURATA	BLM18HE152SN1D	DIGIKEY	490-5216-1-ND
25	2	FL9 FL10	220E	FERRITE CHIP 220E 0.3A 0402	MURATA	BLM15GG221SN1D	DIGIKEY	490-5197-1-ND
26	2	J1 J9	CON_MUSB-B_5_F	CON MICRO USB-B TYPE 5POS FEMALE RT SMD	FCI	10118194-0001LF	DIGIKEY	609-4618-1-ND
27	1	J2	HDR_2X1	CON HDR 2X1 2.54MM PITCH ST TH	TE CONNECTIVITY AMP CONN	5-146278-2	DIGIKEY	A121476-ND
28	1	J3	CON_SDCARD_8_DM3AT-SF-PEJM5	CON SD CARD PUSH-PUSH 8POS SMD	HIROSE ELECTRIC EUROPE	DM3AT-SF-PEJM5	DIGIKEY	HR1964CT-ND
29	2	J5 J6	CON_AUDIOJACK4_SJ-43514	CON AUDIO JACK 4POS FEMALE RT TH	CUI INC	SJ-43514	DIGIKEY	CP-43514-ND
30	2	J7 J8	RECP_2X10	CON RECP 2X10 2.54MM PITCH ST TH	SAMTEC	SSQ-110-23-L-D	NA	NA
31	1	J11	CON_FLEX_1X14_10051922	CON FPC 1X14 0.50MM PITCH RT SMD	FCI	10051922-1410ELF	DIGIKEY	609-1237-1-ND
32	1	J12	HDR_2X5	CON HDR 2X5 1.27MM PITCH ST SMD	FCI	20021121-00010C4LF	DIGIKEY	609-3695-1-ND
33	2	JP2 JP3	HDR_2X2	CON HDR 2X2 2.54MM PITCH ST TH	TE CONNECTIVITY AMP CONN	5-146258-2	DIGIKEY	A122863-ND
34	5	LD1 LD2 LD3 LD4 LD5	SML-P11MTT86	DIODE LED GREEN 0402	ROHM	SML-P11MTT86	DIGIKEY	511-1652-1-ND
35	2	L1 L2	2.2uH	IND 2.2uH 20% 1.3A SMD	TDK CORPORATION	VLS252012T-2R2M1R3	NA	NA
36	1	L3	15nH	IND 15nH 5% 0402	MURATA	LQG15HS15NJ02D	DIGIKEY	490-2625-1-ND
37	1	L4	2nH	IND 2nH 300mA 0.3nH% 0402	MURATA	LQG15HS2N0S02D	DIGIKEY	490-6569-1-ND
38	1	MK1	CMC-2242PBL-A	MICROPHONE CONDENSER ELECTRET OMNI TH	CUI INC	CMC-2242PBL-A	DIGIKEY	102-1727-ND
39	3	Q1 Q2 Q3	BSS138	IC MOSFET N-CHANNEL 50V 200mA SOT23-3	DIODES INC	BSS138-7-F	DIGIKEY	BSS138CT-ND
40	14	R1 R2 R4 R5 R30 R31 R36 R38 R59 R110 R112 R121 R125 R140	100K	RES 100K 1/16W 5% 0402	PANASONIC-ECG	ERJ-2GEJ104X	DIGIKEY	P100KJCT-ND
41	8	R7 R8 R20 R21 R26 R27 R143 R148	4.7K	RES 4.7K 1/16W 5% 0402	PANASONIC-ECG	ERJ-2GEJ472X	DIGIKEY	P4.7KJCT-ND
42	1	R9	8.06K_1%	RES 8.06K 1/16W 1% 0402	PANASONIC-ECG	ERJ-2RKF8061X	DIGIKEY	P8.06KLCT-ND
43	17	R10 R11 R12 R13 R14 R15 R16 R40 R41 R42 R43 R46 R48 R62 R63 R82 R118	0E_1%	RES 0E 1/16W 1% 0402	YAGEO AMERICA	RC0402FR-070RL	NA	NA
44	44	R18 R23 R28 R47 R52 R53 R54 R56 R57 R58 R60 R61 R64 R65 R66 R67 R77 R78 R79 R80 R83 R87 R88 R92 R94 R95 R97 R99 R101 R104 R105 R107 R108 R109 R111 R113 R117 R119 R127 R134 R135 R136 R141 R144	10K_1%	RES 10K 1/16W 1% 0402	YAGEO AMERICA	RC0402FR-0710KL	DIGIKEY	311-10.0KLRTR-ND
45	1	R19	6.8K_1%	RES 6.8K 1/16W 1% 0402	PANASONIC-ECG	ERJ-2RKF6801X	DIGIKEY	P6.80KLCT-ND
46	1	R22	20K_1%	RES 20K 1/16W 1% 0402	YAGEO AMERICA	RC0402FR-0720KL	DIGIKEY	311-20.0KLRCT-ND
47	4	R24 R25 R137 R139	1E_1%	RES 1E 1/10W 1% 0603	YAGEO AMERICA	RC0603FR-071RL	DIGIKEY	311-1.00HRCT-ND
48	6	R29 R91 R124 R129 R131 R133	0E	RES 0E 1/10W 5% 0402	PANASONIC-ECG	ERJ-2GE0R00X	DIGIKEY	P0.0JCT-ND
49	8	R32 R37 R45 R49 R50 R51 R68 R145	1K	RES 1K 1/16W 5% 0402	PANASONIC-ECG	ERJ-2GEJ102X	DIGIKEY	P1.0KJCT-ND
50	3	R39 R44 R138	2.7K	RES 2.7K 1/16W 5% 0402	PANASONIC-ECG	ERJ-2GEJ272X	DIGIKEY	P2.7KJCT-ND
51	7	R69 R70 R71 R72 R73 R89 R98	47E_1%	RES 47E 1/10W 1% 0402	PANASONIC	ERJ-2RKF47R0X	DIGIKEY	P47.0LCT-ND
52	1	R76	12K_1%	RES 12K 1/16W 1% 0402	PANASONIC-ECG	ERJ-2RKF1202X	DIGIKEY	P12.0KLCT-ND
53	1	R81	2.2K_1%	RES 2.2K 1/16W 1% 0402	YAGEO AMERICA	RC0402FR-072K2L	DIGIKEY	311-2.20KLRCT-ND
54	1	R85	100E	RES 100E 1/16W 5% 0402	PANASONIC-ECG	ERJ-2GEJ101X	DIGIKEY	P100JCT-ND
55	1	R116	820K_1%	RES 820K 1/16W 1% 0402	PANASONIC-ECG	ERJ-2RKF8203X	DIGIKEY	P820KLCT-ND
56	1	R120	169K_1%	RES 169K 1/16W 1% 0402	PANASONIC-ECG	ERJ-2RKF1693X	DIGIKEY	P169KLCT-ND

57	1	R122	10.7K_1%	RES 10.7K 1/16W 1% 0402	YAGEO AMERICA	RC0402FR-0710K7L	DIGIKEY	311-10.7KLRCT-ND
58	1	RA9	0E	RES ARRAY 0E 31mW 0402	PANASONIC-ECG	EXB-N8VR000X	DIGIKEY	Y10000CT-ND
59	4	SW1 SW2 SW3 SW4	PTS820 J20M SMTR LFS	SWITCH TACT SPST SMD	C&K COMPONENTS	PTS820 J20M SMTR LFS	DIGIKEY	CKN10505CT-ND
60	1	SW6	EG-1218	SWITCH SLIDE SPST 30V TH	E-SWITCH	EG1218	MOUSER	612-EG1218
61	1	U1	TMS320C5545AZQW 10	IC FIXED POINT DSP BGA118	TEXAS INSTRUMENTS	TMS320C5545AZQW10	NA	NA
62	4	U4 U5 U23 U30	INA219AIDCNR	IC CURRENT/POWER MONITOR WITH 12C INTERFACE SOT23-8	TEXAS INSTRUMENTS	INA219AIDCNR	DIGIKEY	296-23770-1-ND
63	1	U6	TCA9517DGKR	IC 2-CHANNEL I2C BUS REPEATER VSSOP8	TEXAS INSTRUMENTS	TCA9517DGKR	DIGIKEY	296-35972-1-ND
64	1	U8	MX25R1635FM1IL0	IC MEMORY FLASH 16M BIT SOP8	MACRONIX	MX25R1635FM1IL0	NA	NA
65	1	U9	TLV320AIC3206IRSBT	IC LOW-POWER STEREO-AUDIO CODEC WQFN40	TEXAS INSTRUMENTS	TLV320AIC3206IRSBT	DIGIKEY	296-28199-1-ND
66	2	U10 U17	12.00MHz	OSC 12.000MHZ SMD	ABRACON	ASDMB-12.000MHZ-LC-T	DIGIKEY	535-11724-1-ND
67	1	U11	CC2650F128RHBT	IC MULTISTANDARD WIRELESS MCU FLASH 128Kb VQFN32	TEXAS INSTRUMENTS	CC2650F128RHBT	DIGIKEY	296-41955-1-ND
68	3	U12 U13 U19	SN74AVC4T245RSVR	IC BUS TRANSCEIVER 4-BIT DUAL SUPPLY UQFN16	TEXAS INSTRUMENTS	SN74AVC4T245RSVR	DIGIKEY	296-24366-1-ND
69	1	U15	FT2232HL	IC DUAL HIGH SPEED USB TO MULTIPURPOSE FIFO LQFP64	FTDI	FT2232HL-REEL	DIGIKEY	768-1024-1-ND
70	1	U16	AT93C46DY6-YH-T	IC 1K THREE WIRE SERIAL EEPROM 1.8V MLP8	ATMEL	AT93C46DY6-YH-T	DIGIKEY	AT93C46DY6-YH-TCT-ND
71	1	U18	SN74AVC8T245RHL	IC BUS TRANSCEIVER 8-BIT DUAL-SUPPLY QFN24	TEXAS INSTRUMENTS	SN74AVC8T245RHLR	DIGIKEY	296-17859-1-ND
72	1	U20	TPS62162DSGT	IC REGULATOR BUCK STEP-DOWN DC-DC CONVERTERS WSON8	TEXAS INSTRUMENTS	TPS62162DSGT	DIGIKEY	296-29897-1-ND
73	1	U21	TPS62161DSGT	IC CONVERTER STEP-DOWN DC-DC 1A WSON8	TEXAS INSTRUMENTS	TPS62161DSGT	DIGIKEY	
74	1	U22	TPS76601D	IC LDO VOLTAGE REGULATOR 5V 250mA SOIC8	TEXAS INSTRUMENTS	TPS76601D	DIGIKEY	296-2722-5-ND
75	2	U24 U25	TPS22913BYZVT	IC LOW ON RESISTANCE LOAD SWITCH WITH CONTROLLED TURN-	TEXAS INSTRUMENTS	TPS22913BYZVT	DIGIKEY	296-29760-1-ND
76	2	U26 U31	SN74LVC1G11DCKR	IC SINGLE 3-INPUT POSITIVE-AND GATE SC70-6	TEXAS INSTRUMENTS	SN74LVC1G11DCKR	DIGIKEY	296-18066-1-ND
77	1	U27	SN74AUP1G74RSER	IC SINGLE D-TYPE FLIP FLOP WITH CLEAR PRESET UQFN8	TEXAS INSTRUMENTS	SN74AUP1G74RSER	DIGIKEY	296-27280-1-ND
78	1	U29	TPS3125J18DBVT	IC ULTRALOW VOLTAGE SUPERVISORE CIRCUITS SOT23-5	TEXAS INSTRUMENTS	TPS3125J18DBVT	DIGIKEY	296-2615-1-ND
79	1	U142	TXS0108EPWR	IC TRANSLATOR BIDIRECTIONAL VOLTAGE-LEVEL 8BIT TSSOP20	TEXAS INSTRUMENTS	TXS0108EPWR	DIGIKEY	296-23011-1-ND
80	1	U143	SN74LVC1G08	IC SINGLE 2-INPUT POSITIVE-AND GATE SC70-5	TEXAS INSTRUMENTS	SN74LVC1G08DCKT		
81	1	Y1	32.768 Khz	CRYSTAL 32.768 Khz 12.5PF SMD	QUARTZ CRYSTAL	NX3215SA-32.768K-STD-MUS-2	DIGIKEY	644-1159-1-ND
82	1	Y2	24.0000MHz	CRY 24MHz SMD	NDK	NX3225SA-24.000MHZ-STD-CSR-1	DIGIKEY	644-1052-1-ND
83	1	Y3	32.768KHz	CRY 32.768KHz 9pF SMD	ABRACON	ABS06-32.768KHZ-9-1-T	DIGIKEY	535-10247-1-ND
84	1	Y6	12.000MHz	CRY 12MHz 12PF 4P SMD	TXC CORPORATION	7M-12.000MAHE-T	DIGIKEY	887-1775-2-ND
85	1			PCB				

Item Number	Quantity	Part Reference	Value	Description	Mfr_name	Mfr_part_number	Distributor_name	Distributor_part_number
999	1	C140	DNI - 0.1uF	DO NOT INSTALL - CAP CERAMIC 0.1uF 16V 10% X7R 0402	MURATA	GRM155R71C104KA88D	DIGIKEY	490-3261-1-ND
999	2	R17 R126	DNI - 10K_1%	DO NOT INSTALL - RES 10K 1/16W 1% 0402	YAGEO AMERICA	RC0402FR-0710KL	DIGIKEY	311-10.0KLRTR-ND
999	1	R34	DNI - 100K	DO NOT INSTALL - RES 100K 1/16W 5% 0402	PANASONIC-ECG	ERJ-2GEJ104X	DIGIKEY	P100KJCT-ND
999	5	R35 R123 R128 R130 R132	DNI - 0E	DO NOT INSTALL - RES 0E 1/10W 5% 0402	PANASONIC-ECG	ERJ-2GE0R00X	DIGIKEY	P0.0JCT-ND
999	2	R74 R75	DNI - 47E_1%	DO NOT INSTALL - RES 47E 1/10W 1% 0402	PANASONIC	ERJ-2RKF47R0X	DIGIKEY	P47.0LCT-ND
999	2	R90 R147	DNI - 0E_1%	DO NOT INSTALL - RES 0E 1/16W 1% 0402	YAGEO AMERICA	RC0402FR-070RL	NA	NA
999	1	R142	DNI - 6.2K_1%	DO NOT INSTALL - RES 6.2K 1/16W 1% 0402	YAGEO AMERICA	RC0402FR-076K2L	DIGIKEY	311-6.20KLRCT-ND

STANDARD TERMS AND CONDITIONS FOR EVALUATION MODULES

1. *Delivery:* TI delivers TI evaluation boards, kits, or modules, including demonstration software, components, and/or documentation which may be provided together or separately (collectively, an “EVM” or “EVMs”) to the User (“User”) in accordance with the terms and conditions set forth herein. Acceptance of the EVM is expressly subject to the following terms and conditions.

   1.1 EVMs are intended solely for product or software developers for use in a research and development setting to facilitate feasibility evaluation, experimentation, or scientific analysis of TI semiconductors products. EVMs have no direct function and are not finished products. EVMs shall not be directly or indirectly assembled as a part or subassembly in any finished product. For clarification, any software or software tools provided with the EVM (“Software”) shall not be subject to the terms and conditions set forth herein but rather shall be subject to the applicable terms and conditions that accompany such Software

   1.2 EVMs are not intended for consumer or household use. EVMs may not be sold, sublicensed, leased, rented, loaned, assigned, or otherwise distributed for commercial purposes by Users, in whole or in part, or used in any finished product or production system.

2 *Limited Warranty and Related Remedies/Disclaimers*:

   2.1 These terms and conditions do not apply to Software. The warranty, if any, for Software is covered in the applicable Software License Agreement.

   2.2 TI warrants that the TI EVM will conform to TI's published specifications for ninety (90) days after the date TI delivers such EVM to User. Notwithstanding the foregoing, TI shall not be liable for any defects that are caused by neglect, misuse or mistreatment by an entity other than TI, including improper installation or testing, or for any EVMs that have been altered or modified in any way by an entity other than TI. Moreover, TI shall not be liable for any defects that result from User's design, specifications or instructions for such EVMs. Testing and other quality control techniques are used to the extent TI deems necessary or as mandated by government requirements. TI does not test all parameters of each EVM.

   2.3 If any EVM fails to conform to the warranty set forth above, TI's sole liability shall be at its option to repair or replace such EVM, or credit User's account for such EVM. TI's liability under this warranty shall be limited to EVMs that are returned during the warranty period to the address designated by TI and that are determined by TI not to conform to such warranty. If TI elects to repair or replace such EVM, TI shall have a reasonable time to repair such EVM or provide replacements. Repaired EVMs shall be warranted for the remainder of the original warranty period. Replaced EVMs shall be warranted for a new full ninety (90) day warranty period.

3 *Regulatory Notices:*

   3.1 *United States*

      3.1.1 *Notice applicable to EVMs not FCC-Approved:*

      This kit is designed to allow product developers to evaluate electronic components, circuitry, or software associated with the kit to determine whether to incorporate such items in a finished product and software developers to write software applications for use with the end product. This kit is not a finished product and when assembled may not be resold or otherwise marketed unless all required FCC equipment authorizations are first obtained. Operation is subject to the condition that this product not cause harmful interference to licensed radio stations and that this product accept harmful interference. Unless the assembled kit is designed to operate under part 15, part 18 or part 95 of this chapter, the operator of the kit must operate under the authority of an FCC license holder or must secure an experimental authorization under part 5 of this chapter.

      3.1.2 *For EVMs annotated as FCC – FEDERAL COMMUNICATIONS COMMISSION Part 15 Compliant:*

      CAUTION

      This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

      Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

      FCC Interference Statement for Class A EVM devices

      NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Interference Statement for Class B EVM devices

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- *Reorient or relocate the receiving antenna.*
- *Increase the separation between the equipment and receiver.*
- *Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.*
- *Consult the dealer or an experienced radio/TV technician for help.*

3.2 *Canada*

3.2.1 *For EVMs issued with an Industry Canada Certificate of Conformance to RSS-210*

Concerning EVMs Including Radio Transmitters:

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Concernant les EVMs avec appareils radio:

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Concerning EVMs Including Detachable Antennas:

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication. This radio transmitter has been approved by Industry Canada to operate with the antenna types listed in the user guide with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Concernant les EVMs avec antennes détachables

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante. Le présent émetteur radio a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés dans le manuel d'usage et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur

3.3 *Japan*

3.3.1 *Notice for EVMs delivered in Japan:* Please see http://www.tij.co.jp/lsds/ti_ja/general/eStore/notice_01.page 日本国内に輸入される評価用キット、ボードについては、次のところをご覧ください。
http://www.tij.co.jp/lsds/ti_ja/general/eStore/notice_01.page

3.3.2 *Notice for Users of EVMs Considered "Radio Frequency Products" in Japan:* EVMs entering Japan may not be certified by TI as conforming to Technical Regulations of Radio Law of Japan.

If User uses EVMs in Japan, not certified to Technical Regulations of Radio Law of Japan, User is required by Radio Law of Japan to follow the instructions below with respect to EVMs:

1. Use EVMs in a shielded room or any other test facility as defined in the notification #173 issued by Ministry of Internal Affairs and Communications on March 28, 2006, based on Sub-section 1.1 of Article 6 of the Ministry's Rule for Enforcement of Radio Law of Japan,
2. Use EVMs only after User obtains the license of Test Radio Station as provided in Radio Law of Japan with respect to EVMs, or
3. Use of EVMs only after User obtains the Technical Regulations Conformity Certification as provided in Radio Law of Japan with respect to EVMs. Also, do not transfer EVMs, unless User gives the same notice above to the transferee. Please note that if User does not follow the instructions above, User will be subject to penalties of Radio Law of Japan.

【無線電波を送信する製品の開発キットをお使いになる際の注意事項】 開発キットの中には技術基準適合証明を受けていないものがあります。 技術適合証明を受けていないもののご使用に際しては、電波法遵守のため、以下のいずれかの措置を取っていただく必要がありますのでご注意ください。

1. 電波法施行規則第6条第1項第1号に基づく平成18年3月28日総務省告示第173号で定められた電波暗室等の試験設備でご使用いただく。
2. 実験局の免許を取得後ご使用いただく。
3. 技術基準適合証明を取得後ご使用いただく。

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3.3.3 *Notice for EVMs for Power Line Communication:* Please see http://www.tij.co.jp/lsds/ti_ja/general/eStore/notice_02.page
電力線搬送波通信についての開発キットをお使いになる際の注意事項については、次のところをご覧ください。http://www.tij.co.jp/lsds/ti_ja/general/eStore/notice_02.page

4 *EVM Use Restrictions and Warnings:*

4.1 EVMS ARE NOT FOR USE IN FUNCTIONAL SAFETY AND/OR SAFETY CRITICAL EVALUATIONS, INCLUDING BUT NOT LIMITED TO EVALUATIONS OF LIFE SUPPORT APPLICATIONS.

4.2 User must read and apply the user guide and other available documentation provided by TI regarding the EVM prior to handling or using the EVM, including without limitation any warning or restriction notices. The notices contain important safety information related to, for example, temperatures and voltages.

4.3 *Safety-Related Warnings and Restrictions:*

4.3.1 User shall operate the EVM within TI's recommended specifications and environmental considerations stated in the user guide, other available documentation provided by TI, and any other applicable requirements and employ reasonable and customary safeguards. Exceeding the specified performance ratings and specifications (including but not limited to input and output voltage, current, power, and environmental ranges) for the EVM may cause personal injury or death, or property damage. If there are questions concerning performance ratings and specifications, User should contact a TI field representative prior to connecting interface electronics including input power and intended loads. Any loads applied outside of the specified output range may also result in unintended and/or inaccurate operation and/or possible permanent damage to the EVM and/or interface electronics. Please consult the EVM user guide prior to connecting any load to the EVM output. If there is uncertainty as to the load specification, please contact a TI field representative. During normal operation, even with the inputs and outputs kept within the specified allowable ranges, some circuit components may have elevated case temperatures. These components include but are not limited to linear regulators, switching transistors, pass transistors, current sense resistors, and heat sinks, which can be identified using the information in the associated documentation. When working with the EVM, please be aware that the EVM may become very warm.

4.3.2 EVMs are intended solely for use by technically qualified, professional electronics experts who are familiar with the dangers and application risks associated with handling electrical mechanical components, systems, and subsystems. User assumes all responsibility and liability for proper and safe handling and use of the EVM by User or its employees, affiliates, contractors or designees. User assumes all responsibility and liability to ensure that any interfaces (electronic and/or mechanical) between the EVM and any human body are designed with suitable isolation and means to safely limit accessible leakage currents to minimize the risk of electrical shock hazard. User assumes all responsibility and liability for any improper or unsafe handling or use of the EVM by User or its employees, affiliates, contractors or designees.

4.4 User assumes all responsibility and liability to determine whether the EVM is subject to any applicable international, federal, state, or local laws and regulations related to User's handling and use of the EVM and, if applicable, User assumes all responsibility and liability for compliance in all respects with such laws and regulations. User assumes all responsibility and liability for proper disposal and recycling of the EVM consistent with all applicable international, federal, state, and local requirements.

5. *Accuracy of Information:* To the extent TI provides information on the availability and function of EVMs, TI attempts to be as accurate as possible. However, TI does not warrant the accuracy of EVM descriptions, EVM availability or other information on its websites as accurate, complete, reliable, current, or error-free.

6. *Disclaimers:*

   6.1 EXCEPT AS SET FORTH ABOVE, EVMS AND ANY WRITTEN DESIGN MATERIALS PROVIDED WITH THE EVM (AND THE DESIGN OF THE EVM ITSELF) ARE PROVIDED "AS IS" AND "WITH ALL FAULTS." TI DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, REGARDING SUCH ITEMS, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADE SECRETS OR OTHER INTELLECTUAL PROPERTY RIGHTS.

   6.2 EXCEPT FOR THE LIMITED RIGHT TO USE THE EVM SET FORTH HEREIN, NOTHING IN THESE TERMS AND CONDITIONS SHALL BE CONSTRUED AS GRANTING OR CONFERRING ANY RIGHTS BY LICENSE, PATENT, OR ANY OTHER INDUSTRIAL OR INTELLECTUAL PROPERTY RIGHT OF TI, ITS SUPPLIERS/LICENSORS OR ANY OTHER THIRD PARTY, TO USE THE EVM IN ANY FINISHED END-USER OR READY-TO-USE FINAL PRODUCT, OR FOR ANY INVENTION, DISCOVERY OR IMPROVEMENT MADE, CONCEIVED OR ACQUIRED PRIOR TO OR AFTER DELIVERY OF THE EVM.

7. *USER'S INDEMNITY OBLIGATIONS AND REPRESENTATIONS.* USER WILL DEFEND, INDEMNIFY AND HOLD TI, ITS LICENSORS AND THEIR REPRESENTATIVES HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS, DAMAGES, LOSSES, EXPENSES, COSTS AND LIABILITIES (COLLECTIVELY, "CLAIMS") ARISING OUT OF OR IN CONNECTION WITH ANY HANDLING OR USE OF THE EVM THAT IS NOT IN ACCORDANCE WITH THESE TERMS AND CONDITIONS. THIS OBLIGATION SHALL APPLY WHETHER CLAIMS ARISE UNDER STATUTE, REGULATION, OR THE LAW OF TORT, CONTRACT OR ANY OTHER LEGAL THEORY, AND EVEN IF THE EVM FAILS TO PERFORM AS DESCRIBED OR EXPECTED.

8. *Limitations on Damages and Liability:*

   8.1 *General Limitations*. IN NO EVENT SHALL TI BE LIABLE FOR ANY SPECIAL, COLLATERAL, INDIRECT, PUNITIVE, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES IN CONNECTION WITH OR ARISING OUT OF THESE TERMS ANDCONDITIONS OR THE USE OF THE EVMS PROVIDED HEREUNDER, REGARDLESS OF WHETHER TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. EXCLUDED DAMAGES INCLUDE, BUT ARE NOT LIMITED TO, COST OF REMOVAL OR REINSTALLATION, ANCILLARY COSTS TO THE PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES, RETESTING, OUTSIDE COMPUTER TIME, LABOR COSTS, LOSS OF GOODWILL, LOSS OF PROFITS, LOSS OF SAVINGS, LOSS OF USE, LOSS OF DATA, OR BUSINESS INTERRUPTION. NO CLAIM, SUIT OR ACTION SHALL BE BROUGHT AGAINST TI MORE THAN ONE YEAR AFTER THE RELATED CAUSE OF ACTION HAS OCCURRED.

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9. *Return Policy.* Except as otherwise provided, TI does not offer any refunds, returns, or exchanges. Furthermore, no return of EVM(s) will be accepted if the package has been opened and no return of the EVM(s) will be accepted if they are damaged or otherwise not in a resalable condition. If User feels it has been incorrectly charged for the EVM(s) it ordered or that delivery violates the applicable order, User should contact TI. All refunds will be made in full within thirty (30) working days from the return of the components(s), excluding any postage or packaging costs.

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