

## **Bill of Materials**

Item Number	Quantity	Value	Description	Part Number	Part Reference	MPN	NOTE Status	Manufacturer	PCB Package
2	0	DNM	CAPACITOR, CERAMIC, N/A VALUE, -55DEGC/+125DEGC, 0402, SMD	02-04164	ANT1 C12 C41 C177 C302	CAPACITOR_0402_DNM_N/A_M	PREFERRED	Manufacturer selection	0402
3	1	0.9pF	CAPACITOR, CERAMIC COG/NP0, 0.9pF, 50V, -0.1pF/+0.1pF, - 55DEGC/+125DEGC, 0402, SMD	02-04604	ANT2	GRM1555C1HR90BA01D	PREFERRED	MURATA	0402
4	3	56nH	INDUCTOR, CHIP, 56nH, -5%/+5%, 0.2A, -55DEGC/+125DEGC, 0402, SMD	03-06596	ANT3 L171 L191	LQW15AN56NJ00D	PREFERRED	MURATA	0402
5	11	47nF	CAPACITOR, CERAMIC, X7R, 47nF, 25V, -10%/+10%, -55DEGC/+125DEGC, 0402, SMD	02-04324	C11 C51 C121 C131 C151 C221 C251 C261 C271 C281 C291	GRM155R71E473KA88D	PREFERRED	MURATA	0402
6	1	2.2uF	CAPACITOR, CERAMIC X5R, 2.2uF, 10V, -10%/+10%, -55DEGC/+85DEGC, 0603, SMD	02-02405	C52	GRM188R61A225KE34D	PREFERRED	MURATA	0603
7	1	220nF	CAPACITOR, CERAMIC X5R, 220nF, 10V, -15%/+15%, -55DEGC/+85DEGC, 0402, SMD	02-04353	C61	GRM155R61A224KE19D	PREFERRED	MURATA	0402
8	2	10nF	CAPACITOR, CERAMIC X7R, 10nF, 25V, -10%/+10%, -55DEGC/+125DEGC, 0402, SMD	02-02314	C171 C211	GRM155R71E103KA01D	PREFERRED	MURATA	0402
9	1	100pF	CAPACITOR, CERAMIC COG/NPO, 100pF, 50V, -5%/+5%, - 55DEGC/+125DEGC, 0402, SMD	02-04365	C172	GRM1555C1H101JA01D	PREFERRED	MURATA	0402
10	1	56pF	CAPACITOR, CERAMIC COG/NP0, 56pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	02-04612	C173	GRM1555C1H560JA01D	PREFERRED	MURATA	0402
11	1	39pF	CAPACITOR, CERAMIC COG/NPO, 39pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	02-04611	C174	GRM1555C1H390JA01D	PREFERRED	MURATA	0402
12	1	6.2pF	CAPACITOR, CERAMIC COG/NP0, 6.2pF, 50V, -0.25pF/+0.25pF, - 55DEGC/+125DEGC, 0402, SMD	02-04608	C175	GRM1555C1H6R2CA01D	PREFERRED	MURATA	0402
13	1	2.2pF	CAPACITOR, CERAMIC COG/NPO, 2.2pF, 50V, -0.25pF/+0.25pF, - 55DEGC/+125DEGC, 0402, SMD	02-04605	C176	GRM1555C1H2R2CA01D	PREFERRED	MURATA	0402
14	3	5.1pF	CAPACITOR, CERAMIC COG/NPO, 5.1pF, 50V, -0.25pF/+0.25pF, - 55DEGC/+125DEGC, 0402, SMD	02-04607	C181 C191 C201	GRM1555C1H5R1CA01D	PREFERRED	MURATA	0402
15	1	1.5nF	CAPACITOR, CERAMIC U2J, 1.5nF, 10V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	02-04545	C231	GRM1557U1A152JA01D	PREFERRED	MURATA	0402
16	2	15pF	CAPACITOR, CERAMIC COG/NP0, 15pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	02-04372	C301 C311	GRM1555C1H150JA01D	PREFERRED	MURATA	0402
17	0	DNM	CAPACITOR, CERAMIC X7R, 100nF, 10V, -10%/+10%, -55DEGC/+125DEGC, 0402, SMD	02-00760	C321	GRM155R71A104KA01D	PREFERRED	MURATA	0402
18	0	DNM	CAPACITOR, CERAMIC COG/NP0, 22pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	02-04373	C322	GRM1555C1H220JA01D	PREFERRED	MURATA	0402
20	1	BLM15HG102SN1	FILTER, INDUCTOR TYPE, 10000HM@100MHZ, 25%,250mA, 0402, SMD	04-00032	L1	BLM15HG102SN1D	PREFERRED	MURATA	0402
21	2	15nH	INDUCTOR, CHIP, 15nH, -5%/+5%, 0.46A, -55DEGC/+125DEGC, 0402, SMD	03-06555	L172 L193	LQW15AN15NJ00D	PREFERRED	MURATA	0402
22	1	43nH	INDUCTOR, CHIP, 43nH, -5%/+5%, 0.25A, -55DEGC/+125DEGC, 0402, SMD	03-06595	L173	LQW15AN43NJ00D	PREFERRED	MURATA	0402
23	1	22nH	INDUCTOR, RF APPLICATION, WIREWOUND COIL, 22nH, -5%/+5%, 0.31A, -55DEGC/+125DEGC, 0402, SMD	03-06144	L174	LQW15AN22NJ00B	PREFERRED	MURATA	0402
24	2	27nH	,, -	03-06594	L192 L201	LQW15AN27NJ00D	PREFERRED	MURATA	0402
25	2	SFM-110-02-S-D-A-K-TR	CONNECTOR, HEADER, FEMALE, STRAIGHT, 2 ROWS, 20 PINS, PITCH 1.27mm, SMD	06-02251	P1 P2	SFM-110-02-SM-D-A-K-TR	PREFERRED	SAMTEC	
26	1	SMA-10V21-TGG	CONNECTOR, COAX RF, STRAIGHT, FEMALE, 1 PIN, SMD	06-02188	P3	SMA-10V21-TGG	PREFERRED	HUS-TSAN	
28	1	0	RESISTOR, JUMPER, -55DEGC/+155DEGC, 0402, SMD	01-01784	R12	RK73Z1ETTP	PREFERRED	KOA SPEER	0402
29	1	56k	RESISTOR, THICK FILM, 56k, -1%/+1%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	01-16848	R141	RK73H1ETTP5602F	PREFERRED	KOA SPEER	0402



## **Bill of Materials**

em Number	Quantity	Value	Description	Part Number	Part Reference	MPN	NOTE Status	Manufacturer	PCB Package
30	1	18	RESISTOR, THICK FILM, 18, -5%/+5%, 0.063W, 50V, -55DEGC/+155DEGC,	01-11618	R171	RESISTOR_0402_18_+/-	PREFERRED		0402
			0402, SMD			5%_50V_0.063W_M_+/-200PPM		selection	
31	1	0	RESISTOR, JUMPER, 3 PORTS, -55DEGC/+155DEGC, 0402, SMD	01-16574	R181	RK73Z1ETTP	PREFERRED	KOA SPEER	0402
32	0	DNM	RESISTOR, DO NOT MOUNT, 0402, SMD	01-02472	R321 R322	DNM	PREFERRED	DO NOT MOUNT	0402
33	0	DNM	IC, ANALOG, HIGH PSRR FAST RF LOW DROPOUT REGULATOR IN WAFER	18-01358	U2	TPS79330DBVR	NOT_PREFERRED	_	SOT23-5
			CHIP SCALE, VIN:2.7V TO 5.5V, VOUT: 3V, SOT23-5, SMD					INSTRUMENTS	
34	1	CC120xRHB	IC, ANALOG RF, CC120xRHB, N/A, QFN32, SMD	18-28112	U3	CC120xRHB	PREFERRED	TEXAS INSTRUMENTS	QFN32
35	1	40MHz	CRYSTAL, OSCILATOR, 40MHz, -15PPM/DEGC/+15PPM/DEGC, 100V, - 20DEGC/+75DEGC, SMD	12-00469	X1	NX3225SA 40MHz EXS00A-CS03880	PREFERRED	NIHON DEMPA KOGYO CO., LTD	
36	0	DNM	CRYSTAL, OSCILATOR, TBD, 2.3V TO 3.6V, -30DEGC/+85DEGC, , SMD	12-00451	X2	TG_5021CG	PREFERRED	Epson Toyocom	

## IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, enhancements, improvements and other changes to its semiconductor products and services per JESD46, latest issue, and to discontinue any product or service per JESD48, latest issue. Buyers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All semiconductor products (also referred to herein as "components") are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its components to the specifications applicable at the time of sale, in accordance with the warranty in TI's terms and conditions of sale of semiconductor products. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by applicable law, testing of all parameters of each component is not necessarily performed.

TI assumes no liability for applications assistance or the design of Buyers' products. Buyers are responsible for their products and applications using TI components. To minimize the risks associated with Buyers' products and applications, Buyers should provide adequate design and operating safeguards.

TI does not warrant or represent that any license, either express or implied, is granted under any patent right, copyright, mask work right, or other intellectual property right relating to any combination, machine, or process in which TI components or services are used. Information published by TI regarding third-party products or services does not constitute a license to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

Reproduction of significant portions of TI information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI components or services with statements different from or beyond the parameters stated by TI for that component or service voids all express and any implied warranties for the associated TI component or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

Buyer acknowledges and agrees that it is solely responsible for compliance with all legal, regulatory and safety-related requirements concerning its products, and any use of TI components in its applications, notwithstanding any applications-related information or support that may be provided by TI. Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards which anticipate dangerous consequences of failures, monitor failures and their consequences, lessen the likelihood of failures that might cause harm and take appropriate remedial actions. Buyer will fully indemnify TI and its representatives against any damages arising out of the use of any TI components in safety-critical applications.

In some cases, TI components may be promoted specifically to facilitate safety-related applications. With such components, TI's goal is to help enable customers to design and create their own end-product solutions that meet applicable functional safety standards and requirements. Nonetheless, such components are subject to these terms.

No TI components are authorized for use in FDA Class III (or similar life-critical medical equipment) unless authorized officers of the parties have executed a special agreement specifically governing such use.

Only those TI components which TI has specifically designated as military grade or "enhanced plastic" are designed and intended for use in military/aerospace applications or environments. Buyer acknowledges and agrees that any military or aerospace use of TI components which have *not* been so designated is solely at the Buyer's risk, and that Buyer is solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI has specifically designated certain components as meeting ISO/TS16949 requirements, mainly for automotive use. In any case of use of non-designated products, TI will not be responsible for any failure to meet ISO/TS16949.

Products Applications

Audio www.ti.com/audio Automotive and Transportation www.ti.com/automotive Communications and Telecom **Amplifiers** amplifier.ti.com www.ti.com/communications **Data Converters** dataconverter.ti.com Computers and Peripherals www.ti.com/computers **DLP® Products** www.dlp.com Consumer Electronics www.ti.com/consumer-apps

DSP **Energy and Lighting** dsp.ti.com www.ti.com/energy Clocks and Timers www.ti.com/clocks Industrial www.ti.com/industrial Interface interface.ti.com Medical www.ti.com/medical logic.ti.com Logic Security www.ti.com/security

Power Mgmt power.ti.com Space, Avionics and Defense www.ti.com/space-avionics-defense

Microcontrollers <u>microcontroller.ti.com</u> Video and Imaging <u>www.ti.com/video</u>

RFID www.ti-rfid.com

OMAP Applications Processors <u>www.ti.com/omap</u> TI E2E Community <u>e2e.ti.com</u>

Wireless Connectivity <u>www.ti.com/wirelessconnectivity</u>