

Bill of Materials

TI DESIGNS: Optimized Radar System Design Using 66AK2L06DSP+ARM® SoC and ADC14X250

TIDEP0060

Item	Qty	Reference	Part Description	Manufacturer	Manufacturer Part Number	PCB Footprint
1	12	C1, C2, C3, C8, C9, C10, C15, C18, C267, C268, C269, C270	CAP, CERM, 0.1 µF, 6.3 V, +/- 10%, X5R, 0201	TDK	C0603X5R0104K0308C	0201
2	8	C4, C5, C6, C11, C12, C13, C16, C19	CAP, CERM, 0.01 µF, 6.3 V, +/- 10%, X5R, 0201	TDK	C0603X5R0103K	0201
3	4	C7, C14, C17, C350	CAP, CERM, 1µF, 10V, +/-10%, X5R, 0603	TDK	C1608X5R1A105K	0603L
4	4	C20, C21, C22, C23	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402	MuRata	GCM155R71C104KA55D	0402
5	2	C272, C273	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0201	Samsung	CL03A104KP3NNNC	0201L
6	2	C512, C549	CAP, CERM, 1µF, 16V, +/-10%, X5R, 0603	TDK	C1608X5R1C105K	0603L
7	32	C313, C314, C315, C316, C317, C319, C320, C321, C322, C323, C324, C325, C326, C327, C528, C529, C530, C531, C532, C533, C534, C535, C536, C537, C538, C539, C540, C541, C542, C545, C546, C548	CAP, CERM, 0.1µF, 10V, +/-10%, X5R, 0402	TDK	C1005X5R1A104K	0402L
8	1	C518	CAP, CERM, 0.01µF, 16V, +/-10%, X7R, 0402	TDK	C1005X7R1C103K	0402L
9	2	C543, C550	CAP, CERM, 3900pF, 25V, +/-5%, COG/NPO, 0603	TDK	C1608COG1E392J	0603L
10	2	C544, C551	CAP, CERM, 47pF, 50V, +/-5%, COG/NPO, 0603	AVX	06035A470JAT2A	0603L
11	1	C547	CAP, CERM, 10µF, 10V, +/-10%, X5R, 0805	Kemet	C0805C106K8PACTU	0805L
12	4	L1, L2, L3, L13	Ferrite Bead, 120 ohm @ 100 MHz, 0.55 A, 0402	MuRata	BLM15AG1215N1D	0402
13	12	L20, L21, L22, L23, L24, L25, L26, L27, L28, L29, L30, L31	1.5A Ferrite Bead, 330 ohm @ 100MHz, SMD	MuRata	BLM18SG331TN1D	0603
14	5	R1, R2, R3, R15, R16	RES, 4.75 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04024K75FKED	0402
15	10	R4, R5, R6, R7, R8, R9, R10, R12, R13, R14	RES, 1.00 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04021K00FKED	0402
16	7	R11, R17, R18, R19, R83, R151, R152	RES, 10.0, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040210R0FKED	0402
17	1	R20	RES, 100, 0.1%, 0.063 W, 0402	Susumu Co Ltd	RG1005P-101-8-T5	0402
18	1	R41	RES, 3.0 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW04023K00JNED	0402
19	2	R147, R154	RES, 270 ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603270RJNEA	0603L
20	1	R148	RES, 2.32k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-072K32L	0603L
21	2	R149, R153	RES, 619 ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-07619RL	0603L
22	1	R150	RES, 1.3k ohm, 5%, 0.1W, 0603	Yageo America	RC0603JR-071K3L	0603L
23	2	Status1, Status2	LED, Green, SMD	Lite-On	LTST-C190GKT	LED_LTST-C190
24	1	U1	Smallcell Baseband Processor with 4 C66x DSP Cores / 2 ARM A15 Cores / JESD / CPRI / SGMII / PCIe	Texas Instruments	TCI6630K2L	BGA900C80P30X30_2500X2500X355
25	1	U2	ADC14X250 14-Bit 250 MSPS ADC With 5.0 Gb/s JESD204B Outputs	Texas Instruments	ADC14X250	S-PVQFN-N32
26	1	U11	Low-Noise Clock Jitter Cleaner with Dual Loop PLLs, NKD0064A	Texas Instruments	LMK04828BISQ/NOPB	NKD0064A
27	1	U12	High Stability Standard TCXO	Rakon	IT2100F	IT2100F

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