

DC105 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1, C4, C7, C9, C13, C16, C21, C22, C27, C33, C37, C41, C46, C55	14	0.1uF	C0603C104J3RACTU	Kemet	CAP, CERM, 0.1 uF, 25 V, +/- 5%, X7R, 0603	0603
2	C2, C23, C24, C34, C39, C45	6	10uF	GRM21BR71A106KA73L	MuRata	CAP, CERM, 10 uF, V, +/- 10%, X7R, 0805	0805
3	C3, C49	2	22uF	CL32B226KAJNFNE	Samsung Electro-Mechanics	CAP, CERM, 22 uF, 25 V, +/- 10%, X7R, 1210	1210
4	C5, C25, C31, C40, C44	5	1uF	CGA3E1X7R1C105K080AC	TDK	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
5	C6, C8, C10, C11, C12, C15, C42, C43, C50, C51, C53, C54	12	1uF	C0603C105K3RACTU	Kemet	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
6	C14, C17, C48, C52, C56	5	10uF	C1206C106K3RACTU	Kemet	CAP, CERM, 10 uF, 25 V, +/- 10%, X7R, 1206_190	1206_190
7	C19, C35, C47	3	0.033uF	CGA4J2C0G1H33J125AA	TDK	CAP, CERM, 0.033 uF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0805	0805
8	C26, C32	2	1000pF	C0603C102F3GACTU	Kemet	CAP, CERM, 1000 pF, 25 V, +/- 1%, C0G/NP0, 0603	0603
9	C30, C38, C57	3	0.01uF	C0603C103F3GACTU	Kemet	CAP, CERM, 0.01 uF, 25 V, +/- 1%, C0G/NP0, 0603	0603
10	D1, D2	2	16V	MMSZ4703T1G	ON Semiconductor	Diode, Zener, 16 V, 500 mW, SOD-123	SOD-123
11	D3	1	Green	APT2012LZGCK	Kingbright	LED, Green, SMD	LED_0805
12	D4, D5, D6	3	5.6V	MMSZ4690T1G	ON Semiconductor	Diode, Zener, 5.6 V, 500 mW, SOD-123	SOD-123
13	D7	1	3V	MMSZ4683T1G	ON Semiconductor	Diode, Zener, 3 V, 500 mW, SOD-123	SOD-123
14	H2, H3	2		RM3x6MM Z701	APM HEXSEAL	Machine Screw Pan PHILLIPS M3	
15	H4, H5, H6, H7	4		SJ-5303 (CLEAR)	3M	Bump-on, Hemisphere, 0.44 X 0.20, Clear	Transparent Bump-on
16	H8, H9	2		9774050360R	Würth Elektronik	ROUND STANDOFF M3 STEEL 5MM	ROUND STANDOFF M3 STEEL 5MM
17	J1	1		QTH-030-01-L-D-A	Samtec	Header(Shrouded), 19.7mil, 30x2, Gold, SMT	Header (Shrouded), 19.7mil, 30x2, SMT
18	J2	1		TSW-109-07-G-D	Samtec	Header, 100mil, 9x2, Gold, TH	9x2 Header
19	J3, J6	2		142-0701-801	Cinch Connectivity	Connector, End Launch SMA, 50 ohm, SMT	End Launch SMA
20	J4, JP4, JP5, JP6, JP7	5		TSW-103-07-G-S	Samtec	Header, 100mil, 3x1, Gold, TH	3x1 Header
21	J5, J7, J12	3		0393570003	Molex	Terminal Block, 3.5 mm, 3x1, Tin, TH	Terminal Block, 3.5 mm, 3x1, TH
22	J8, J14	2		901-144-8RFX	Amphenol RF	SMA Straight Jack, Gold, 50 Ohm, TH	SMA Straight Jack, TH
23	J10, J11, J13	3		ED555/2DS	On-Shore Technology	Terminal Block, 3.5mm Pitch, 2x1, TH	7.0x8.2x6.5mm
24	JP1, JP3	2		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
25	R1, R2, R4, R17, R21, R29, R31, R33, R41, R44, R47, R51, R59, R67, R71, R72, R74, R78, R81, R84, R90, R92, R96	23	0	RC0603JR-070RL	Yageo	RES, 0, 5%, 0.1 W, 0603	0603
26	R3, R25, R49, R65, R70, R86	6	10.0k	RC0603FR-0710KL	Yageo	RES, 10.0 k, 1%, 0.1 W, 0603	0603
27	R5	1	0.047	ERJ-L03KF47MV	Panasonic	RES, 0.047, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
28	R6	1	120k	RG1608P-124-B-T5	Susumu Co Ltd	RES, 120 k, 0.1%, 0.1 W, 0603	0603
29	R7, R11, R15, R69	4	0.1	ERJ-L03KF10CV	Panasonic	RES, 0.1, 1%, 0.1 W, AEC-Q200 Grade 1, 0603	0603
30	R8, R9, R10, R12, R13, R14, R16, R18	8	10.0	CRCW060310R0FKEAHP	Vishay-Dale	RES, 10.0, 1%, 0.25 W, AEC-Q200 Grade 0, 0603	0603
31	R19, R20, R68, R91	4	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
32	R24, R36, R38, R46, R58, R63, R66	7	1.00k	CRCW06031K00FKEA	Vishay-Dale	RES, 1.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
33	R26, R27, R53, R54	4	1.00k	ERA3AEB102V	Panasonic	RES, 1.00 k, 0.1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
34	R34, R55, R64	3	37.4	RC0603FR-0737R4L	Yageo	RES, 37.4, 1%, 0.1 W, 0603	0603
35	R37, R43	2	10.0	TNPW060310R0BEEA	Vishay-Dale	RES, 10.0, 0.1%, 0.1 W, 0603	0603
36	R39, R40	2	15.0	CRCW060315R0FKEA	Vishay-Dale	RES, 15.0, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
37	R61, R62, R76, R77, R79	5	1.0	ESR10E2PJ1R0	Rohm	RES, 1.0, 5%, 0.4 W, AEC-Q200 Grade 0, 0805	0805
38	R80	1	11.3k	RC0603FR-0711K3L	Yageo	RES, 11.3 k, 1%, 0.1 W, 0603	0603
39	R87, R88	2	100	CRCW0603100R0FKEA	Vishay-Dale	RES, 100, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
40	R94	1	3.01	CRCW06033R01FKEA	Vishay-Dale	RES, 3.01, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
41	SH-J1, SH-J2, SH-J3, SH-J4, SH-J5, SH-J6	6	1x2	SPC025YAN	Sullins Connector Solutions	Shunt, 100mil, Flash Gold, Black	Closed Top 100mil Shunt
42	TP17, TP18	2		1573-2	Keystone	Terminal, Turret, TH, Double	Keystone1573-2
43	U1	1		REF6225IDGKR	Texas Instruments	High-Precision Voltage Reference with Integrated High-Bandwidth Buffer, DGK0008A (VSSOP-8)	DGK0008A
44	U2	1		BR24G32FVT-3AGE2	Rohm	IC: BUS EEPROM (2-Wire), TSSOP-8	TSSOP-8
45	U3	1		AD5T12L11PW	Texas Instruments	24-bit, wide-bandwidth, low-power, delta-sigma analog-to-digital converter, PW0020A (TSSOP-20)	PW0020A
46	U4, U6, U7	3		OPA192IDBVR		Precision, Rail-to-Rail Input/Output, Low Offset Voltage, Low Input Bias Current Op Amp with E-trim, 4.5 to 36 V, -40 to 125 degC, 5-Pin SOT-23 (DBV), Green (RoHS & no Sb/Br), Tape and Reel	DBV0005A
47	U5	1		THS4551IDGKR	Texas Instruments	Low Noise, Precision, 150MHz, Fully Differential Amplifier, DGK0008A (VSSOP-8)	DGK0008A
48	U8	1		TPS7A4700RGWR	Texas Instruments	36V, TA, 4, 1uVRMS, RF Low-Dropout (LDO) Voltage Regulator, RGW0020A (VOFN-20)	RGW0020A
49	U9	1		TPS7A3001DRBR	Texas Instruments	Vin -3V to -36V, -200mA, Ultra-Low-Noise, High-PSRR, Low-Dropout (LDO) Linear Regulator, DRB0008A (VSON-8)	DRB0008A
50	Y1	1		SG-2108TF 25.0000ML3	Epson	Oscillator, 25 MHz, SMD	SMD, 2x2.5mm
51	C18	0	470pF	GRM1885C1H471JA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
52	C20, C36	0	390pF	CC0603FRNP09BN391	Yageo America	CAP, CERM, 390 pF, 50 V, +/- 1%, C0G/NP0, 0603	0603
53	C28	0	0.01uF	C0603C103F3GACTU	Kemet	CAP, CERM, 0.01 uF, 25 V, +/- 1%, C0G/NP0, 0603	0603
54	C29	0	1000pF	GRM1885C1E102JA01D	MuRata	CAP, CERM, 1000 pF, 25 V, +/- 5%, C0G/NP0, 0603	0603
55	C58, C59	0	10pF	GRM1885C1H100JA01D	MuRata	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
56	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
57	J9, JP2	0		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
58	R22, R57	0	10.0	TNPW060310R0BEEA	Vishay-Dale	RES, 10.0, 0.1%, 0.1 W, 0603	0603
59	R23, R28, R30, R32, R35, R42, R45, R48, R50, R52, R56, R60, R73, R75, R82, R83, R89, R93	0	0	RC0603JR-070RL	Yageo	RES, 0, 5%, 0.1 W, 0603	0603
60	R85	0	0	RC0805JR-070RL	Yageo America	RES, 0, 5%, 0.125 W, 0805	0805
61	R95	0	10.0	CRCW060310R0FKEAHP	Vishay-Dale	RES, 10.0, 1%, 0.25 W, AEC-Q200 Grade 0, 0603	0603