Filename: TIDA-00654_BOM.xls Variant: 001

Reference Design#

TIDA-00654

Designator	Quantity	y Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
!PCB	1		Printed Circuit Board			Any	-	-
+OUT, -OUT, IN+, IN-, PD1, PD2, Vcm1, Vcm2	8		Connector, SMT, End launch SMA 50 ohm	SMA End Launch	142-0701-851	Emerson Network Power	-	-
C1, C2, C7, C8, C19, C20, C25, C26	8	0.01uF	CAP, CERM, 0.01uF, 25V, +/-20%, X7R, 0306	0306	LLL185R71E103MA01L	MuRata		
C3, C4, C5, C6, C21, C22, C23, C24	8	2200pF	CAP, CERM, 2200pF, 50V, +/-20%, X7R, 0306	0306	LLL185R71H222MA01L	MuRata		
C9, C18, C27	3	0.01uF	CAP, CERM, 0.01uF, 16V, +/-10%, X7R, 0603	0603	GRM188R71C103KA01D	MuRata		
C10, C13, C14, C28, C32, C34	6	10uF	CAP, TA, 10uF, 10V, +/-10%, 0.9 ohm, SMD	3216-18	TPSA106K010R0900	AVX		
C11, C29, C36, C42, C43, C44	6	0.1uF	CAP, CERM, 0.1uF, 10V, +/-10%, X5R, 0402	0402	C1005X5R1A104K	TDK		
C12, C17, C30	3	0.01uF	CAP, CERM, 0.01uF, 25V, +/-10%, X7R, 0402	0402	C1005X7R1E103K	TDK		
C35, C37	2	10uF	CAP, CERM, 10uF, 16V, +/-10%, X5R, 0805	0805	EMK212BJ106KG-T	Taiyo Yuden		
C38, C39	2	0.01uF	CAP, CERM, 0.01uF, 16V, +/-10%, X7R, 0402	0402	C1005X7R1C103K	TDK		
C40, C41	2	47pF	CAP, CERM, 47pF, 50V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1H470JZ01	MuRata		
GND1, GND2, TPG1, TPG2	4	Black	Test Point, TH, Multipurpose, Black		5011	Keystone Electronics		
Jpd1, Jpd2, JV+, JV-	4		Header, TH, 100mil, 2x1, Gold plated, 230 mil above insulator	TSW-102-07-G-S	TSW-102-07-G-S	Samtec, Inc.	-	-
L1, L2, L3	3	330 ohm	Ferrite Bead, 330 ohm @ 100 MHz, 1.5 A, 0603	0603	BLM18SG331TN1D	MuRata		
R1, Ri1+	2	365	RES, 365, 1%, 0.063 W, 0402	0402	CRCW0402365RFKED	Vishay-Dale		
R2, Ri1-	2	22.6	RES, 22.6, 1%, 0.063 W, 0402	0402	CRCW040222R6FKED	Vishay-Dale		
R7, R21, R22, Ri2-	4	0	RES, 0, 5%, 0.063 W, 0402	0402	CRCW04020000Z0ED	Vishay-Dale		
R12, R13	2	0	RES, 0 ohm, 5%, 0.1W, 0603	0603	CRCW06030000Z0EA	Vishay-Dale		
R14	1	10.0k	RES, 10.0k ohm, 1%, 0.063W, 0402	0402	CRCW040210K0FKED	Vishay-Dale		
R16, R17, R18, R19	4	22.1	RES, 22.1 ohm, 1%, 0.063W, 0402	0402	CRCW040222R1FKED	Vishay-Dale		
Ro1+, Ro1-, 'R20	3	0	RES, 0 ohm, 5%, 0.063W, 0402	0402	ERJ-2GE0R00X	Panasonic		
Rcm1+, Rcm1-, Rcm2+, Rcm2-	4	1.00k	RES, 1.00k ohm, 1%, 0.1W, 0603	0603	CRCW06031K00FKEA	Vishay-Dale		
Rf1+, Rf1-	2	127	RES, 127, 1%, 0.063 W, 0402	0402	CRCW0402127RFKED	Vishay-Dale		
Ro2+, Ro2-	2	40.2	RES, 40.2 ohm, 1%, 0.063W, 0402	0402	CRCW040240R2FKED	Vishay-Dale		
Rsd1, Rsd2	2	49.9	RES, 49.9 ohm, 1%, 0.1W, 0603	0603	CRCW060349R9FKEA	Vishay-Dale		
SH-Jpd1_2-OPEN, SH-Jpd2_2-OPEN, SH-JV+_1-2, SH-JV1-2	4	1x2	Shunt, 100mil, Gold plated, Black		382811-6	AMP		
U1	1		8GHz Ultra Wideband Fully Differential Amplifier, RMS0014A	RMS0014A	LMH5401RMS	Texas Instruments		None
U3	1		USB FIFO IC, 28SSOP	SSOP28	FT245RL	FTDI		
U4	1		Ultra Low Noise, 150mA Linear Regulator for RF/Analog	SDB06A	LP5900SD-1.8/NOPB	Texas Instruments		
			Circuits Requires No Bypass Capacitor, 6-pin LLP, Pb-Free					
USB	1		MINI USB 2.0 SMT TYPE AB 5 CONTACTS R/A, SMD	9.2x9.9x4 mm	651-305-142-821	Wurth Elektronik eiSos		
V1+, V2+	2	Red	Test Point, TH, Multipurpose, Red		5010	Keystone Electronics		
V1-, V2-	2	Yellow	Test Point, Multipurpose, Yellow, TH	Yellow Multipurpose Testpoint	5014	Keystone		
Z1, Z2	2	0.2uF	Filter, LC, 0.2uF, 1806, SMT	1806	NFM41PC204F1H3L	MuRata		
C15, C16, C31, C33	0		CAP, CERM, xxxF, xxV, [TempCo], xx%, [PackageReference]		Used in BOM report	Used in BOM report		
C45, C46	0		CAP, CERM, xxxF, xxV, [TempCo], xx%, [PackageReference]	0402	Used in BOM report	Used in BOM report		
FID1, FID2, FID3	0		Fiducial mark. There is nothing to buy or mount.	Fiducial	N/A	N/A		
R3, R4, R5, R6, R8, R9, R10, R11	0		RES, xxx ohm, x%, xW, [PackageReference]	0402	Used in BOM report	Used in BOM report		
R15	0	301	RES, 301 ohm, 1%, 0.1W, 0603	0603	CRCW0603301RFKEA	Vishay-Dale		
RB1+, RB1-, RB2+, RB2-, Rtcm1, Rtcm2	0		RES, xxx ohm, x%, xW, [PackageReference]	0603	Used in BOM report	Used in BOM report		
U2	0		5 GHz Ultra Wideband Digital Variable Gain Amplifier	16UQFN	LMH6401	TI		None

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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