Bill of Materials

TIDA-00617									
Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number			
1	1	FB1	500	Bead, Ferrite, 2000mA, 60m-ohm	Steward	MI1206L501R-10			
2	1	FB2	500	Bead, Ferrite, 2000mA, 60m-ohm	Steward	MI1206L501R-10			
,	1	FB3	500	Bead, Ferrite, 2000mA, 60m-ohm	Steward	MI1206L501R-10			
	1	FB4	500	Bead, Ferrite, 2000mA, 60m-ohm	Steward	MI1206L501R-10			
	1	C2	0.01uF	Capacitor, Caramic, 100V, X7R, 10%	STD	STD			
6	1	C3	0.01uF	Capacitor, Ceramic, 100V, X7R, 10%	STD	STD			
7	1	C4	0.01uF	Capacitor, Ceramic, 100V, X7R, 10%	STD	STD			
	1	CS	0.01uF	Capacitor, Ceramic, 100V, X7R, 10%	STD	STD			
9	1	C11	0.01uF	Capacitor, Ceramic, 100V, X7R, 10%	STD	STD			
10	1	C37	0.01uF	Capacitor, Ceramic, 100V, X7R, 10%	STD	STD			
11	1	C36	0.022uF	Capacitor, Caramic, 50V, X7R, 10%	STD	STD			
12	1	C32	0.47uF	Capacitor, Ceramic, 16V, X7R, 10%	STD	STD			
13	1	C33	0.47uF	Capacitor, Ceramic, 16V, X7R, 10%	STD	STD			
14	1	C34	0.47uF	Capacitor, Caramic, 16V, X7R, 10%	STD	STD			
15	1	O6	1000pF	Capacitor, Caramic, 100V, X7R, 10%	STD	STD			
16	1	C8	1000pF	Capacitor, Caramic, 100V, X7R, 10%	STD	STD			

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number
17	1	C28	1000pF	Capacitor, Ceramic, 100V, X7R, 10%	STD	STD
18	1	C25	1uF	Capacitor, Caramic, 16V, X7R, 10%	STD	STD
19	1	C29	1uF	Capacitor, Caramic, 25V, X7R, 10%	STD	STD
20	1	C38	1uF	Capacitor, Caramic, 16V, X7R, 10%	STD	STD
21	1	C31	330pF	Capacitor, Ceramic, 50V, C0G, 10%	STD	STD
22	1	C35	DNP	Capacitor, Ceramic, 50V, X7R, 10%	STD	STD
23	1	C7	0.1uF	Capacitor, Ceramic, 100V, X7R, 10%	STD	STD
24	1	C9	0.1uF	Capacitor, Ceramic, 100V, X7R, 10%	STD	STD
25	1	C15	0.1uF	Capacitor, Ceramic, 100V, X7R, 10%	STD	STD
26	1	C19	0.1uF	Capacitor, Ceramic, 100V, X7R, 10%	STD	STD
27	1	C1	1000pF	Capacitor, Ceramic, 2kV, X7R, 15%	STD	STD
28	1	C10	1000pF	Capacitor, Ceramic, 2kV, X7R, 15%	STD	STD
29	1	C17	1uF	Capacitor, Ceramic, 100V, X7R, 10%	STD	STD
30	1	C18	1uF	Capacitor, Ceramic, 100V, X7R, 10%	STD	STD
31	1	C20	47uF	Capacitor, Ceramic, 10V, X5R, 15%	STD	STD
32	1	C21	47uF	Capacitor, Ceramic, 10V, X5R, 15%	STD	STD
33	1	C22	47uF	Capacitor, Ceramic, 10V, X5R, 15%	STD	STD
34	1	C26	2200pF	Capacitor, Ceramic, 2KV, X7R, 15%	STD	STD
35	1	C27	22uF	Capacitor, Aluminum, 25V, 20%	Panasonic	EEE-FK1E220R
36	1	C23	330uF	Capacitor, Aluminum, 6.3V, 20%	Panasonic	EEE-FK0J331XP
37	1	C24	330uF	Capacitor, Aluminum, 6.3V, 20%	Panasonic	EEE-FK0J331XP

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number
38	1	C16	47uF	Capacitor, Aluminum, 63V, x20%	Panasonic	EEE-FK1J470P
39	1	J1	520252	Connector, Jack, Modular, 8 POS	AMP	5520252-4
40	1	.12	520252	Connector, Jack, Modular, 8 POS	AMP	5520252-4
41	1	D15	1N4148W	Diode, Signal, 300-mA, 75-V, 350- mW	Diodes	1N4148W-7-F
42	1	D18	BAT54S	Diode, Dual Schottky, 200mA, 30V	On Semi	BAT54SWT1G
43	1	D19	BAT54S	Diode, Dual Schottky, 200mA, 30V	On Semi	BAT54SWT1G
44	1	D16	MBR0530	Diode, Schottky, 0.5A, 30V	On Semi	MBR0530T1G
45	1	D13	MURS120T3G	Diode, UtraFast Rectifier, 1-A, 200-V	On Semi	MURS120T3G
46	1	D1	B2100	Diode, Schottky, 2-A, 100-V	Diodes	B2100-13-F
47	1	D2	B2100	Diode, Schottky, 2-A, 100-V	Diodes	B2100-13-F
48	1	D3	B2100	Diode, Schottky, 2-A, 100-V	Diodes	B2100-13-F
49	1	D4	B2100	Diode, Schottky, 2-A, 100-V	Diodes	B2100-13-F
50	1	D6	B2100	Diode, Schottky, 2-A, 100-V	Diodes	B2100-13-F
51	1	D7	B2100	Diode, Schottky, 2-A, 100-V	Diodes	B2100-13-F
52	1	D8	B2100	Diode, Schottky, 2-A, 100-V	Diodes	B2100-13-F
53	1	D9	B2100	Diode, Schottky, 2-A, 100-V	Diodes	B2100-13-F
54	1	D10	B2100	Diode, Schottky, 2-A, 100-V	Diodes	B2100-13-F
55	1	D6	SMAJ58A	Diode, TVS, 58-V, 1W	Diodes	SMAJ58A-13-F
56	1	.19	PEC02SAAN	Header, Male 2-pin, 100mil snarinn	Sulfins	PEC02SAAN
57	1	Li	3.3uH	Inductor, SMT, 1.9A, 80 milliohm	Collcraft	LPS4018-332ML
58	1	L2	0.33uH	Inductor, SMT, 19.2A, 3.52	Collcraft	XAL5030-331ME

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number
59	1	U4	PC357N4J000F	Photocoupler, 300-600% CTR, 3.75KV Isolation	Sharp	PC357N4J000F
60	1	LI7	TCMT1107	IC, Photocoupler, 3750VRMS, 80- 160% CTR	Vishay	TCMT1107
61	1	R29	10K	Resistor, Chip, 1/16W, 1%	STD	STD
62	1	R33	10K	Resistor, Chip, 1/16W, 1%	STD	STD
63	1	R37	10K	Resistor, Chip, 1/16W, 1%	STD	STD
64	1	R48	10K	Resistor, Chip, 1/16W, 1%	STD	STD
65	1	R51	13.7K	Resistor, Chip, 1/16W, 1%	STD	STD
66	1	R19	15K	Resistor, Chip, 1/16W, 1%	STD	STD
67	1	R44	1K	Resistor, Chip, 1/16W, 1%	STD	STD
68	1	R21	24.9K	Resistor, Chip, 1/16W, 1%	STD	STD
69	1	R45	3.65K	Resistor, Chip, 1/16W, 1%	STD	STD
70	1	R36	332	Resistor, Chip, 1/16W, 1%	STD	STD
71	1	R49	41.2K	Resistor, Chip, 1/16W, 1%	STD	STD
72	1	R32	43.2	Resistor, Chip, 1/16W, 1%	STD	STD
73	1	R38	43.2	Resistor, Chip, 1/16W, 1%	STD	STD
74	1	R46	49.9	Resistor, Chip, 1/16W, 1%	STD	STD
75	1	R47	604	Resistor, Chip, 1/16W, 1%	STD	STD
76	1	R24	750K	Resistor, Chip, 1/16W, 1%	STD	STD
77	1	R26	63.4	Resistor, Chip, 1/10W, 1%	STD	STD
78	1	R22	39K	Resistor, Chip, 1/4W, 5%	STD	STD
79	1	R34	0.09	Resistor, Chip, 1/2W, 1%	STD	STD

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number
80	1	R30	10	Resistor, Chip, 1W, 5%	STD	
81	1	RS	100K	Resistor, Chip, 1/16W, 1%	STD	STD
82	1	R23	24.9K	Resistor, Chip, 1/16W, 1%	STD	STD
83	1	R28	34K	Resistor, Chip, 1/16W, 1%	STD	STD
84	1	R1	75	Resistor, Chip, 1/16W, 1%	STD	STD
85	1	R2	75	Resistor, Chip, 1/16W, 1%	STD	STD
86	1	R3	75	Resistor, Chip, 1/16W, 1%	STD	STD
87	1	R4	75	Resistor, Chip, 1/16W, 1%	STD	STD
88	1	Ris	75	Resistor, Chip, 1/16W, 1%	STD	STD
89	1	R7	75	Resistor, Chip, 1/16W, 1%	STD	STD
90	1	R8	75	Resistor, Chip, 1/16W, 1%	STD	STD
91	1	R9	75	Resistor, Chip, 1/16W, 1%	STD	STD
92	1	R10	8.87K	Resistor, Chip, 1/16W, 1%	STD	STD
93	1	R25	10	Resistor, Chip, 1/10W, 5%	STD	STD
94	1	JS	ED555/2D8	Terminal Block, 2-pin, 6-A, 3.5mm	OST	ED656/2D8
95	1	J10	ED555/2D8	Terminal Block, 2-pin, 6-A, 3.5mm	OST	ED656/2D8
96	1	U8	TLV431A	IC, Shurt Regulator, 6V, 10mA, 1%	TI	TLV431ACDBVR
97	-1	TP1	5010	Test Point, Red, Thru Hole	Keystone	5010
98	1	TP3	5010	Test Point, Red, Thru Hole	Keystone	5010
99	-1	TP2	5013	Test Point, Orange, Thru Hole	Keystone	5013
100	-1	TP4	5013	Test Point, Orange, Thru Hole	Keystone	5013

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number
101	1	TP10	5013	Test Point, Orange, Thru Hole	Keystone	5013
102	1	TP15	5013	Test Point, Orange, Thru Hole	Keystone	5013
103	1	TP16	5013	Test Point, Orange, Thru Hole	Keystone	5013
104	1	U1	TPS23751PWP	IC. IEEE 802.3 AT PoE Interface &	n	TPS23751PWP
105	1	TP7	5016	Test Point, SM, 0.150 x 0.090	Keystone	5016
106	1	Q4	MMBT2907A	Trans, PNP, 40V, 200mA, 225mW	On Semi	MMBT2907ALT1G
107	1	Q6	MMBT3906	Trans. PNP. 40V. 200mA. 225m-W	On Semi	MMBT3906LT1G
108	1	Q6	BSC520N15NS3G	MOSFET, NChannel, 150V	Infineon	B9C520N15NS3G
109	1	Q3	CSD18504	MOSFET. NChan, 40V. 40A, 6.6 mi	Vishay	SIR422DP-T1-GE3
110	1	T1	749022011	Transformer. PoE Plus Giosbit Tran	Wurth Electronics	749022011
111	1	Т3	LTC0266-50	XFMR, SMT Gate Drive	LinkCom	LTC0266-50
112	1	T2	LDT0868-50	Transformer, SMT For PoE/PD, 25	LinkCom	LDT0866-50

IMPORTANT NOTICE FOR TI REFERENCE DESIGNS

Texas Instruments Incorporated ("TI") reference designs are solely intended to assist designers ("Buyers") who are developing systems that incorporate TI semiconductor products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products.

TI reference designs have been created using standard laboratory conditions and engineering practices. TI has not conducted any testing other than that specifically described in the published documentation for a particular reference design. TI may make corrections, enhancements, improvements and other changes to its reference designs.

Buyers are authorized to use TI reference designs with the TI component(s) identified in each particular reference design and to modify the reference design in the development of their end products. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER TI INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN, including but not limited to 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.

TI REFERENCE DESIGNS ARE PROVIDED "AS IS". TI MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. TI DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO TI REFERENCE DESIGNS OR USE THEREOF. TI SHALL NOT BE LIABLE FOR AND SHALL NOT DEFEND OR INDEMNIFY BUYERS AGAINST ANY THIRD PARTY INFRINGEMENT CLAIM THAT RELATES TO OR IS BASED ON A COMBINATION OF COMPONENTS PROVIDED IN A TI REFERENCE DESIGN. IN NO EVENT SHALL TI BE LIABLE FOR ANY ACTUAL, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY AND WHETHER OR NOT TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, ARISING IN ANY WAY OUT OF TI REFERENCE DESIGNS OR BUYER'S USE OF TI REFERENCE DESIGNS.

TI reserves 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 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 for TI components 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.

Reproduction of significant portions of TI information in TI data books, data sheets or reference designs 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.

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 that anticipate dangerous failures, monitor failures and their consequences, lessen the likelihood of dangerous failures 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 Buyer's 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 an agreement specifically governing such use.

Only those TI components that 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 that have *not* been so designated is solely at Buyer's risk, and 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.