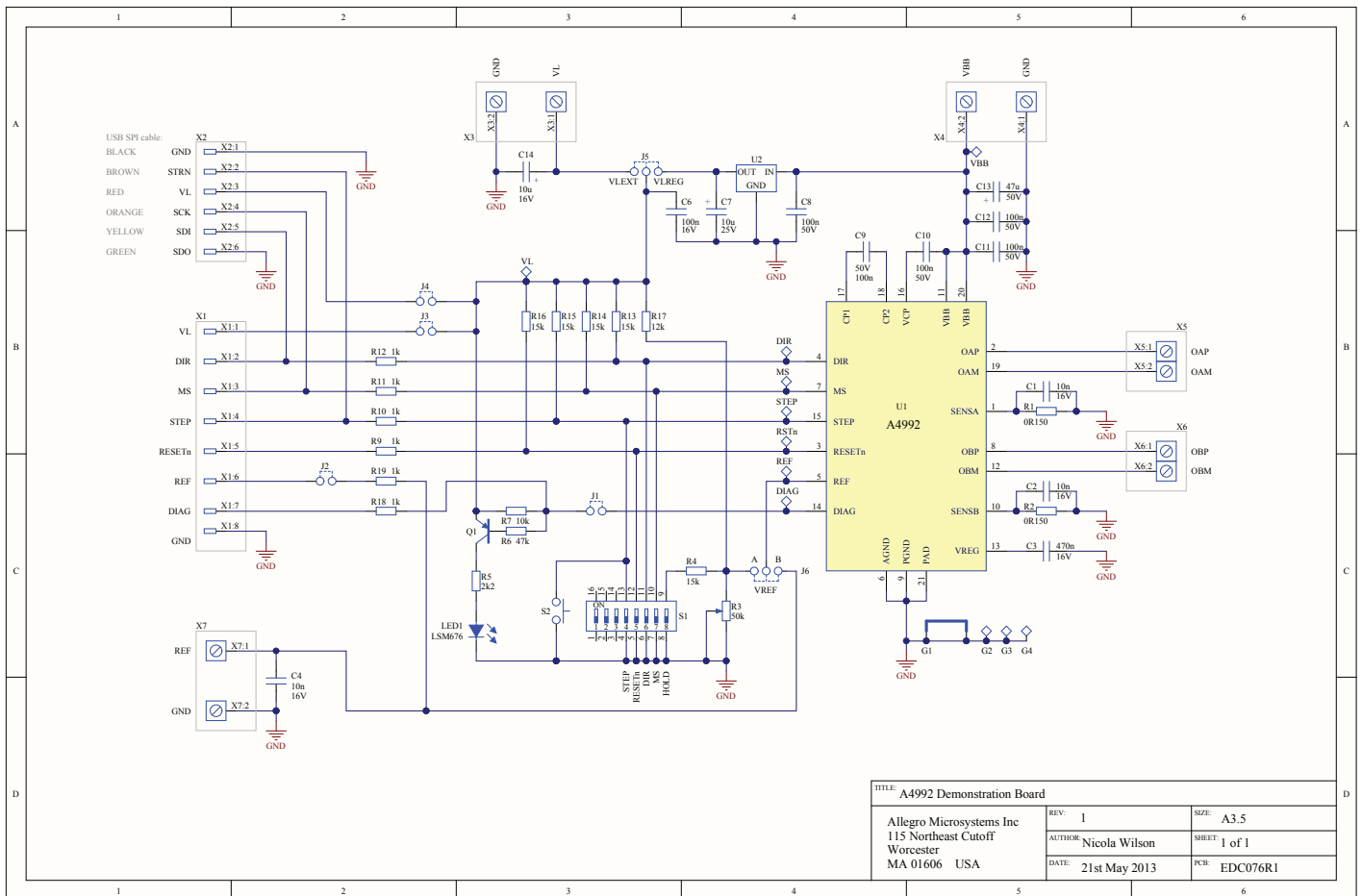
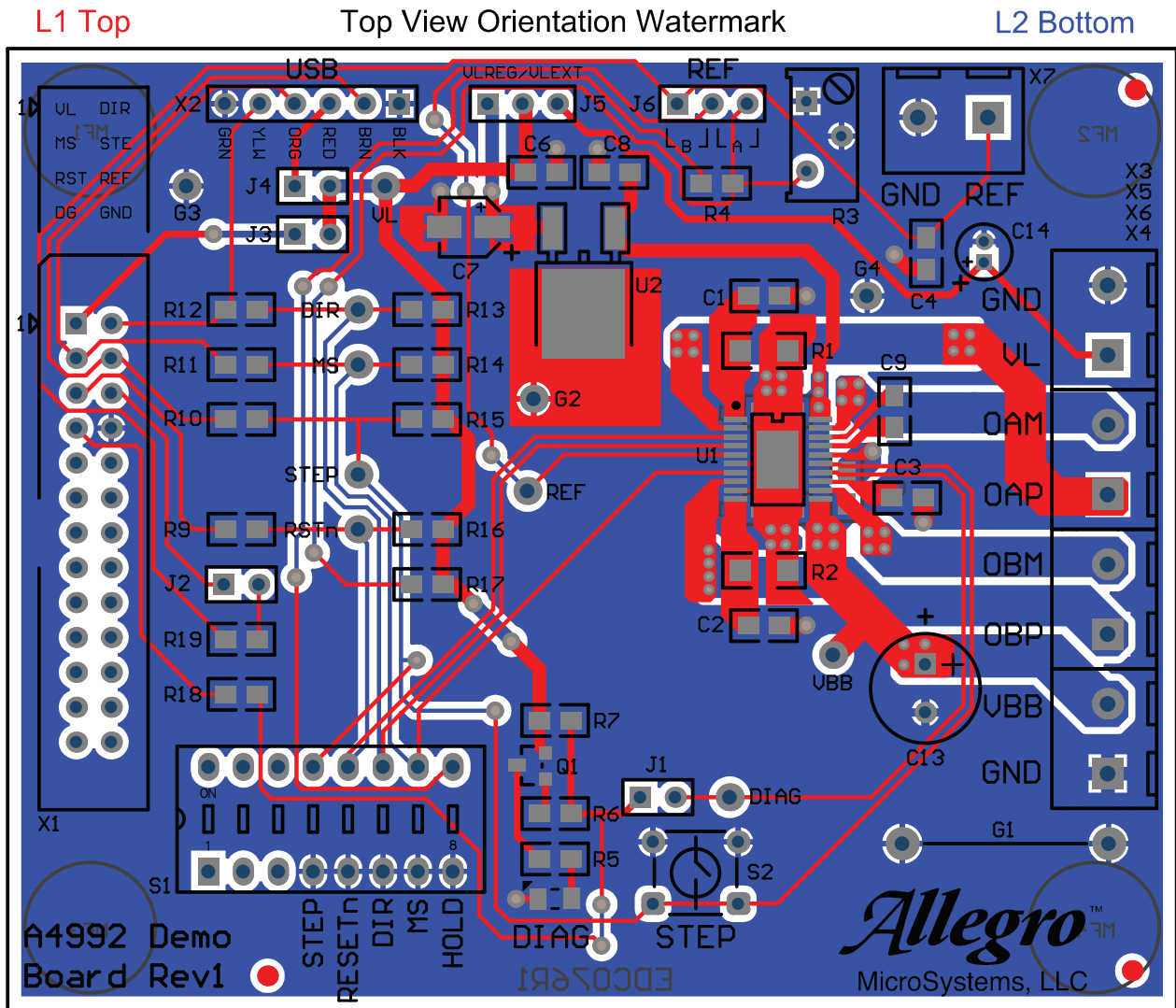


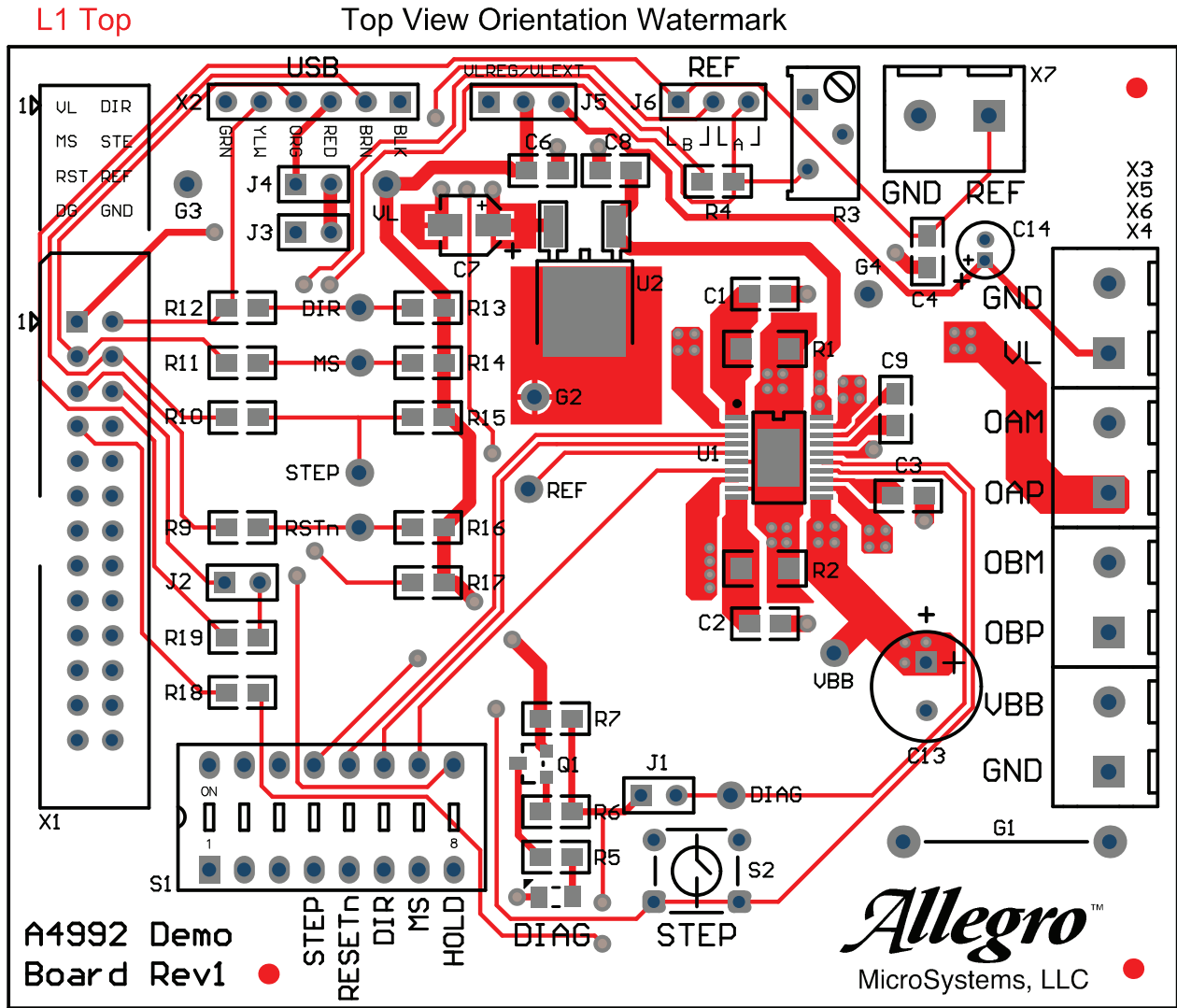
Demo Board Schematic/Layout

SCHEMATIC



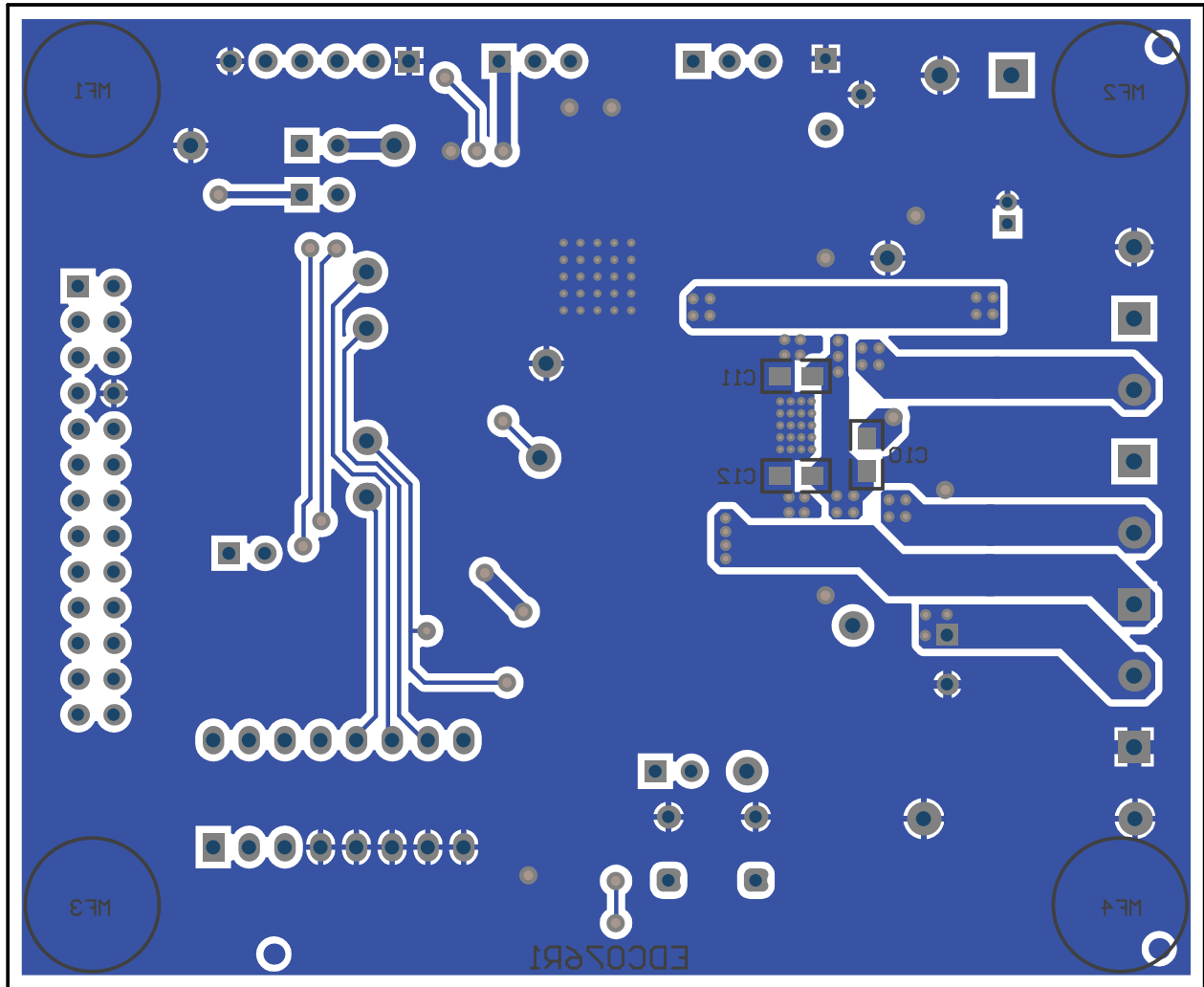
LAYOUT

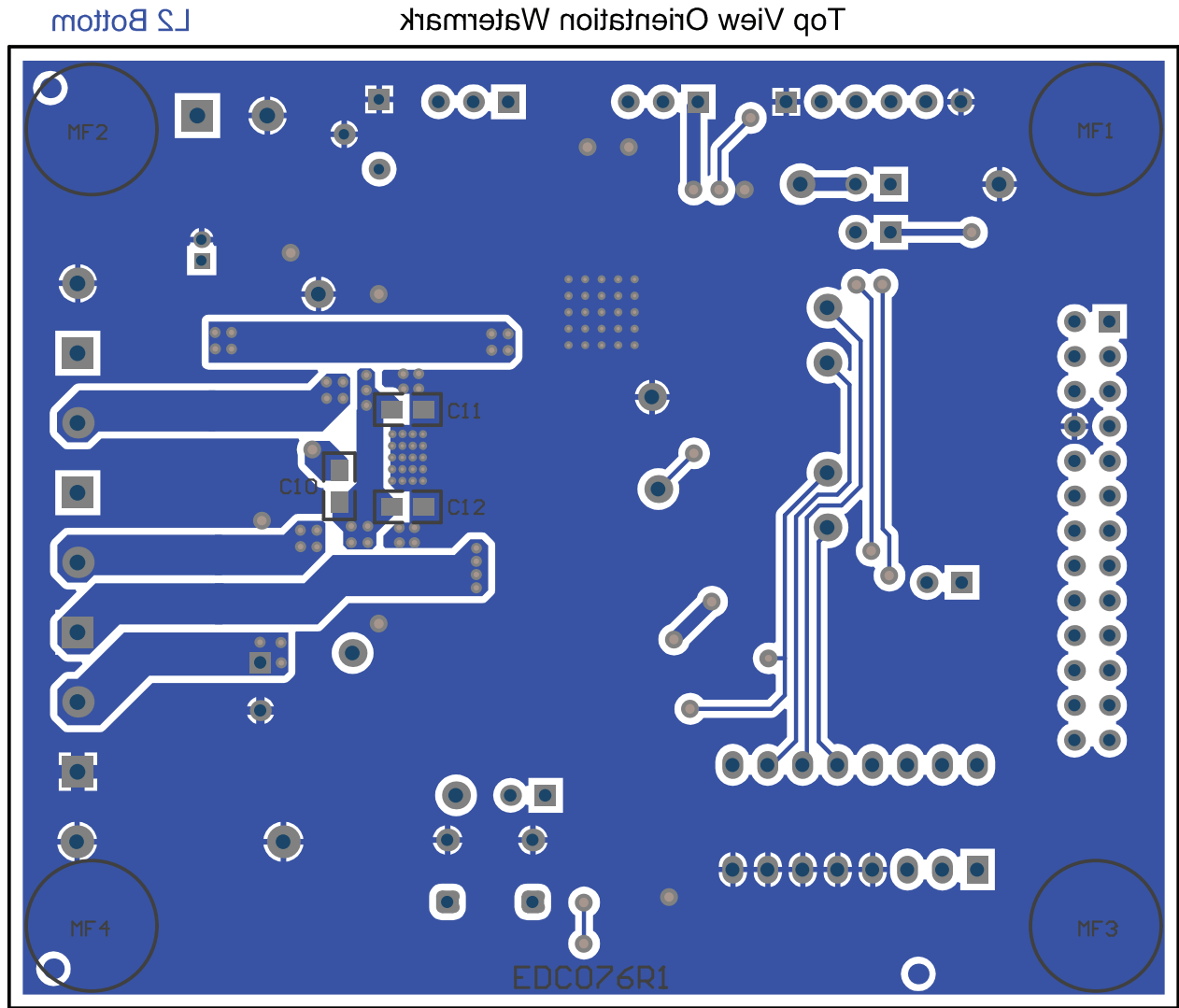




Top View Orientation Watermark

L2 Bottom





BILL OF MATERIALS

Designator	Value	Rating	Tol	Part Number	Footprint	Description	Qty	RS #	Farnell #
C1, C2	10n	16V	X7R	\	SM : 0805	Capacitor : Ceramic Chip	2	264-4371	\
C3	470n	10V	X7R	\	SM : 0805	Capacitor : Ceramic Chip	1	723-6379	\
C4	10n	10V	X7R	\	SM : 0805	Capacitor : Ceramic Chip	1	264-4371	\
C6	100n	16V	X7R	\	SM : 0805	Capacitor : Ceramic Chip	1	264-4416	\
C7	10u	10V	20%	\	SM : 2pin	Capacitor : Alu Electrolytic, Radial	1	568-711	\
C8, C9, C10, C11, C12	100n	50V	X7R	\	SM : 0805	Capacitor : Ceramic Chip	5	264-4416	\
C13	47u	50V	20%	\	TH : 8mm Dia, 3.5mm Pitch	Capacitor : Alu Electrolytic, Radial	1	711-1586	\
C14	10u	10V	20%	\	TH : 4mm Dia, 1.5mm Pitch	Capacitor : Alu Electrolytic, Radial	1	475-8848	\
DIAG, DIR, MS, REF, RSTn, STEP, VBB, VL	\	\	\	\	TH : 1mm Dia Hole	Test Point : Test Terminal, 1mm, Red	8	262-2185	\
G1	\	\	\	\	TH : 15mm Pitch, 20swg	Ground Bar : Tinned Copper Wire	1	355-063	\
G2, G3, G4	\	\	\	\	TH : 1mm Dia Hole	Test Point : Test Terminal, 1mm, Black	3	262-2179	\
J1, J2, J3, J4	\	\	\	\	TH : SIL2, 2.54mm Pitch, 1x2	Jumper Header : Male 2-pin	4	251-8086	\
J5, J6	\	\	\	\	TH : SIL3, 2.54mm Pitch, 1x3	Jumper Header : Male 3-pin	2	251-8092	\
LED1	\	\	\	LSM676	SM : Proprietary, 2pin	LED : SMT, 2pin, Red	1	654-5919	\
MF1, MF2, MF3, MF4	\	\	\	\	SM : 9.5mm Dia	Mount : Rubber Foot	4	\	1165068
PCB	\	\	\	EDC076R1	FR4, 2oz Cu, 2 Layer	PCB : A4992 Demonstration Board	1	\	\
Q1	\	\	\	BC807	SM : SOT23	Transistor : PNP, 45V, 0.5A	1	436-7896	\
R1, R2	0R150	\	1%	\	SM : 1206	Resistor : Ceramic Chip	2	740-9160	\
R3	50k	\	1%	\	TH : 9.5x6mm	Resistor : Trim Pot, 3296Y	1	522-0221	\
R5	2k2	\	1%	\	SM : 0805	Resistor : Ceramic Chip	1	223-0477	\
R6	47k	\	1%	\	SM : 0805	Resistor : Ceramic Chip	1	223-0641	\
R7	10k	\	1%	\	SM : 0805	Resistor : Ceramic Chip	1	740-8975	\
R9, R10, R11, R12, R18, R19	1k	\	1%	\	SM : 0805	Resistor : Ceramic Chip	6	223-0427	\
R4, R13, R14, R15, R16	15k	\	1%	\	SM : 0805	Resistor : Ceramic Chip	5	740-8997	\
R17	12k	\	1%	\	SM : 0805	Resistor : Ceramic Chip	1	223-0578	\
S1	\	\	\	\	TH : 2.54mm (100mils) Pitch	Switch : DIL, 8-way, Raised Actuator	1	690-3576	9479082
S2	\	\	\	\	TH : 6x6mm Body	Switch : Momentary, Tactile, SPST	1	378-6410	\
U1	\	\	\	A4992	SM : eTSSOP20	Device : Allegro Motor Driver	1	\	\
U2	\	\	\	LM2936DT-5.0	SM : DPAK	Voltage Regulator : 5V	1	535-8837	1286864
X1	\	\	\	\	TH : 2.54mm Pitch, 2x13	Connector : IDC 26-way Male Header	1	542-8835	9838287
X2	\	\	\	\	TH : SIL6, 2.54mm Pitch, 1x6	Connector : SIL6 Male Header	1	360-6308	9733337
X3, X4, X5, X6, X7	\	\	\	\	TH : 5.08mm (200mils) Pitch	Screw Terminal : 2-way, 200mil Pitch	5	425-8720	\
@Jx	\	\	\	\	\	Link : Jumper Short, Red	6	251-8531	\
\	\	\	\	\	\	ESD bag : 102x152mm (6x4")	1	182-8809	\

Green reference designator font: Components fitted to bottom side.

Revision History

Number	Date	Description
–	September 6, 2016	Initial release

Copyright ©2016, Allegro MicroSystems, LLC

Allegro MicroSystems, LLC reserves the right to make, from time to time, such departures from the detail specifications as may be required to permit improvements in the performance, reliability, or manufacturability of its products. Before placing an order, the user is cautioned to verify that the information being relied upon is current.

Allegro's products are not to be used in any devices or systems, including but not limited to life support devices or systems, in which a failure of Allegro's product can reasonably be expected to cause bodily harm.

The information included herein is believed to be accurate and reliable. However, Allegro MicroSystems, LLC assumes no responsibility for its use; nor for any infringement of patents or other rights of third parties which may result from its use.

For the latest version of this document, visit our website:

www.allegromicro.com

