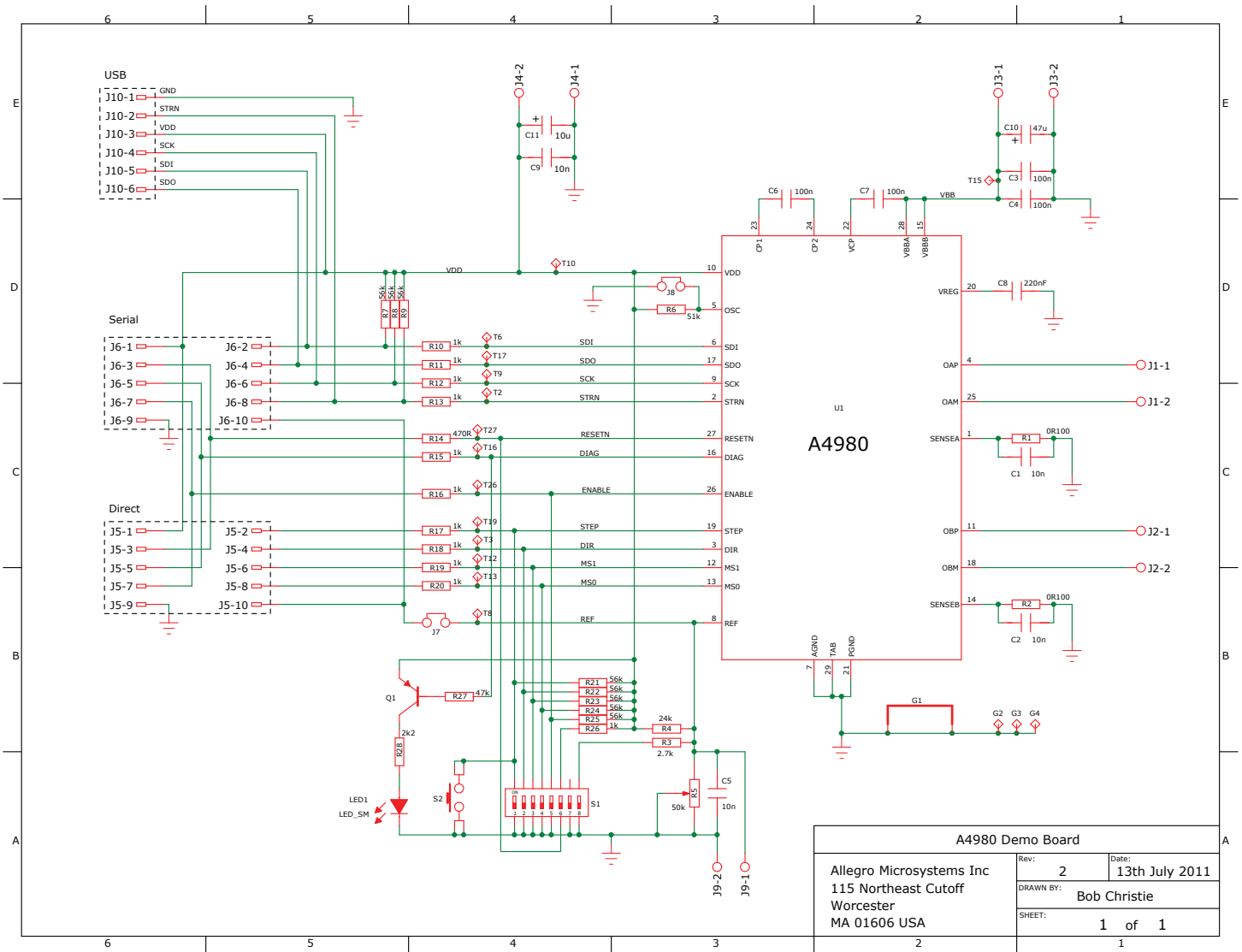


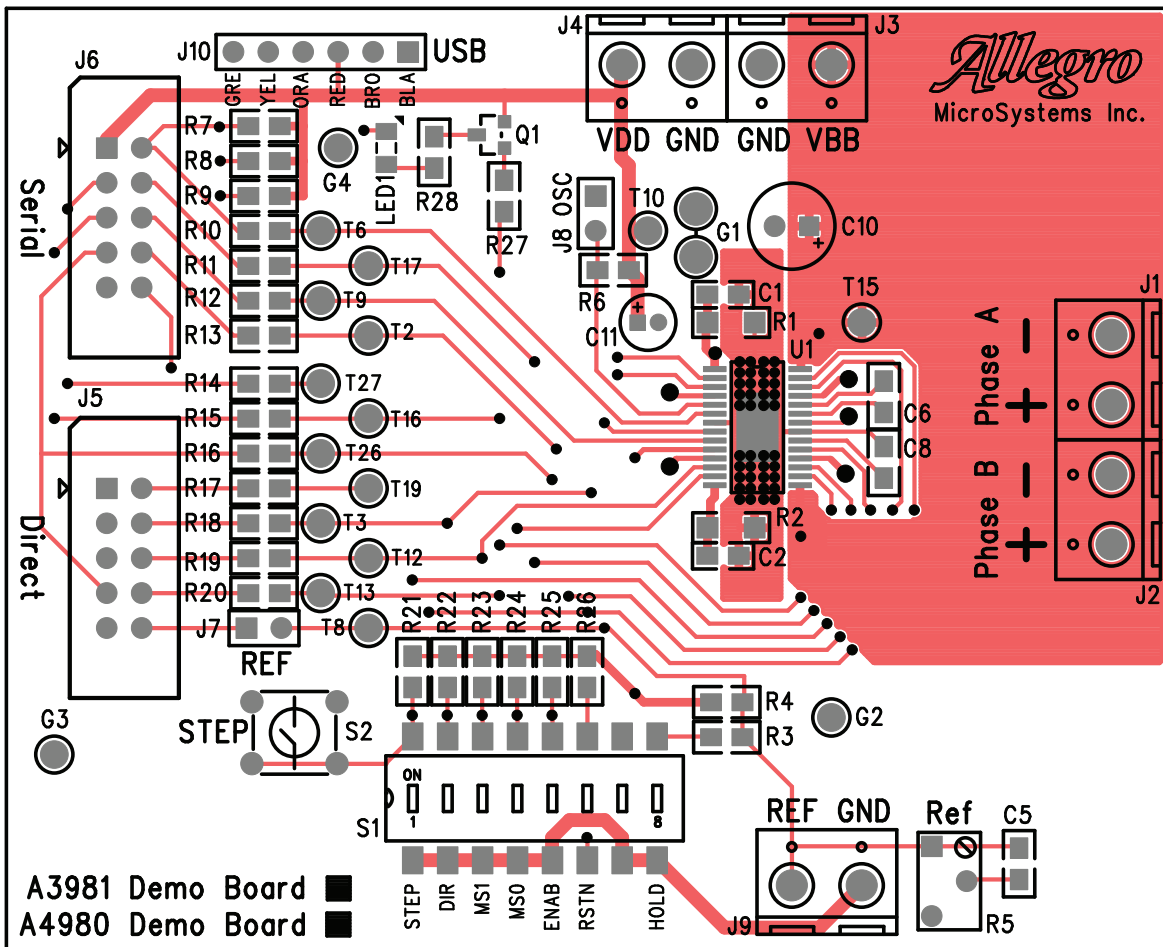
Demo Board Schematic/Layout

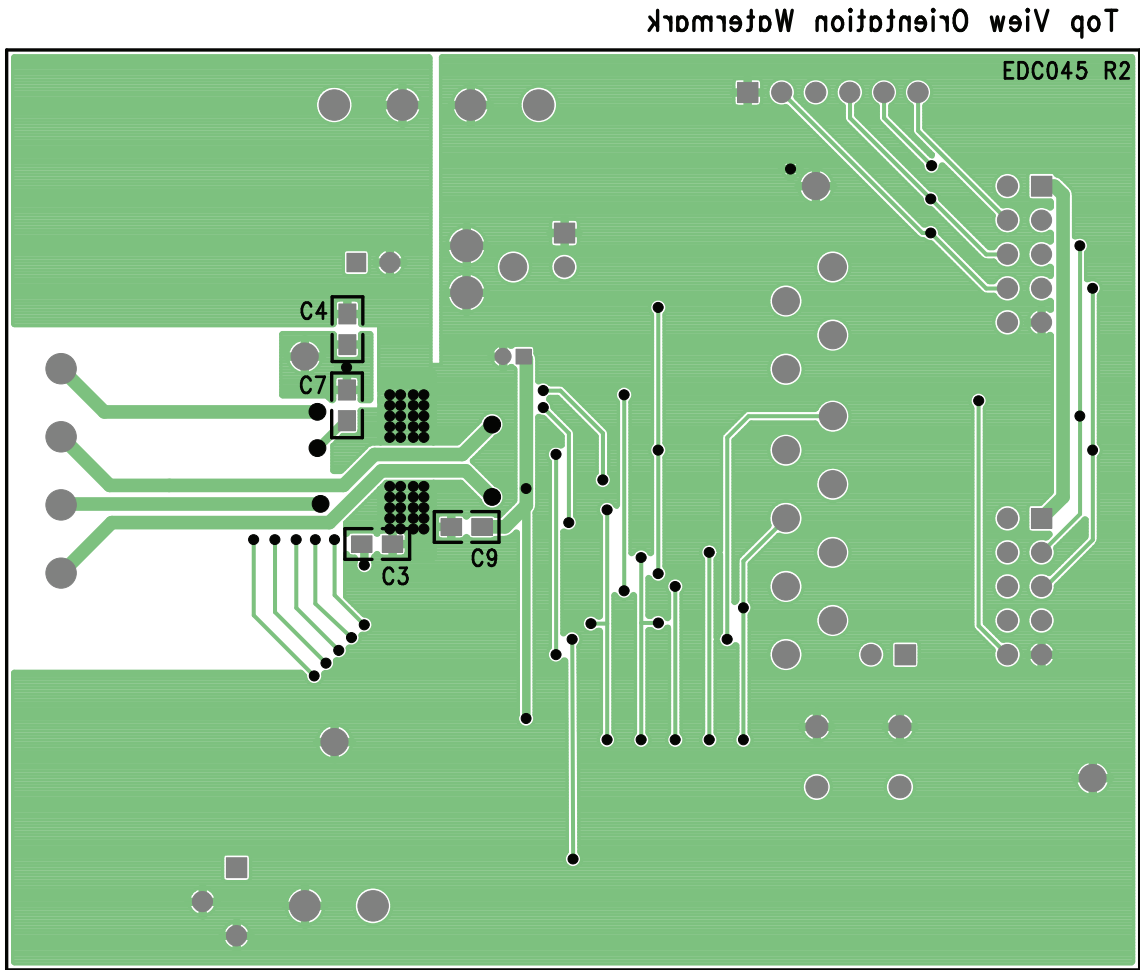
SCHEMATIC



LAYOUT

Top View Orientation Watermark





BILL OF MATERIALS

A4980 Demonstration Board Rev2 Component List (EDC045R2)					All parts RoHS Compliant
Part	Value	Package	Description	RS Part	
C1	10nF	0805	Ceramic Chip Cap. >=16V, X7R	298-9309	
C2	10nF	0805	Ceramic Chip Cap. >=16V, X7R	298-9309	
C3	Btm 100nF	0805	Ceramic Chip Cap. >=50V, X7R	264-4416	
C4	Btm 100nF	0805	Ceramic Chip Cap. >=50V, X7R	264-4416	
C5	10nF	0805	Ceramic Chip Cap. >=16V, X7R	298-9309	
C6	100nF	0805	Ceramic Chip Cap. >=50V, X7R	264-4416	
C7	Btm 100nF	0805	Ceramic Chip Cap. >=50V, X7R	264-4416	
C8	220nF	0805	Ceramic Chip Cap. >=25V, X7R	390-996	
C9	Btm 10nF	0805	Ceramic Chip Cap. >=16V, X7R	298-9309	
C10	47uF	2.5mm Pitch, 6.3mm Dia	Electrolytic Alu Cap. >=50V, 85deg	365-4278	
C11	10uF	1.5mm Pitch, 4mm Dia	Electrolytic Alu Cap. >=16V, 85deg	116-789	
G1	\	1.2mm Hole Pairs, 12mm Pitch	Ground Bar, 20swg Tinned Copper Wire	355-063	
G2	\	1mm PCB Hole	Test Terminal, Black	262-2179	
G3	\	1mm PCB Hole	Test Terminal, Black	262-2179	
G4	\	1mm PCB Hole	Test Terminal, Black	262-2179	
J1	\	2x1.2mm, 200mils Pitch	2-Way Screw Terminal	425-8720	
J2	\	2x1.2mm, 200mils Pitch	2-Way Screw Terminal	425-8720	
J3	\	2x1.2mm, 200mils Pitch	2-Way Screw Terminal	425-8720	
J4	\	2x1.2mm, 200mils Pitch	2-Way Screw Terminal	425-8720	
J5	\	2x5 pins, 100mils Pitch	10pin Double Row IDC Ribbon Header	542-8784	
J6	\	2x5 pins, 100mils Pitch	10pin Double Row IDC Ribbon Header	542-8784	
J7	\	2x1mm Holes, 2.54mm Pitch	Jumper Header, 2-Way	251-8086	
J8	\	2x1mm Holes, 2.54mm Pitch	Jumper Header, 2-Way	251-8086	
J9	\	2x1.2mm, 200mils Pitch	2-Way Screw Terminal	425-8720	
J10	\	SIL : 0.1" pitch x6	6-Way SIL Header	360-6308	
(J10 alternative)	\	SIL : 0.1" pitch x72	36-Way SIL Header (use for multiple boards)	251-8632	
LED1	LS M676	SMT 2pin, 2.3x1.3mm Body	TopLED, Red, 20mA	654-5919	
PCB	\	1.6mm FR4, 2 layer, 2oz Cu	A4980 Demo Rev2 PCB (EDC045R2)	\	
Q1	BC857B	SOT23	PNP Transistor, 0.1A, 45V	288-581A	
R1	0R100	1206	SM chip resistor	Farnell 1779445	
R2	0R100	1206	SM chip resistor	Farnell 1779445	
R3	2k7	0805	SM chip resistor	223-0483	
R4	24k	0805	SM chip resistor	Farnell 933-2901	
R6	51k	0805	SM chip resistor	Farnell 933-4653	
R7	56k	0805	SM chip resistor	618-1571	
R8	56k	0805	SM chip resistor	618-1571	
R9	56k	0805	SM chip resistor	618-1571	
R10	1k	0805	SM chip resistor	618-3583	
R11	1k	0805	SM chip resistor	618-3583	
R12	1k	0805	SM chip resistor	618-3583	
R13	1k	0805	SM chip resistor	618-3583	
R14	470R	0805	SM chip resistor	223-0376	
R15	1k	0805	SM chip resistor	618-3583	
R16	1k	0805	SM chip resistor	618-3583	
R17	1k	0805	SM chip resistor	618-3583	
R18	1k	0805	SM chip resistor	618-3583	
R19	1k	0805	SM chip resistor	618-3583	
R20	1k	0805	SM chip resistor	618-3583	
R21	56k	0805	SM chip resistor	618-1571	
R22	56k	0805	SM chip resistor	618-1571	
R23	56k	0805	SM chip resistor	618-1571	
R24	56k	0805	SM chip resistor	618-1571	
R25	56k	0805	SM chip resistor	618-1571	
R26	1k	0805	SM chip resistor	618-3583	
R27	47k	0805	SM chip resistor	223-0641	
R28	2k2	0805	SM chip resistor	223-0477	
R5	50k	3pin, 6.5x4.5mm Body	Multiturn Trim Resistor, Bourns 3266W	521-9293	
S1	\	16pin, 0.254mm Pitch	SM Switch, DIP, 8-Way	692-7093	
S2	\	6x6mm Body	Switch, SPST, Momentary, Button	378-6410	
T2	\	1mm PCB Hole	Test Terminal, Red	262-2185	
T3	\	1mm PCB Hole	Test Terminal, Red	262-2185	
T6	\	1mm PCB Hole	Test Terminal, Red	262-2185	
T8	\	1mm PCB Hole	Test Terminal, Red	262-2185	
T9	\	1mm PCB Hole	Test Terminal, Red	262-2185	
T10	\	1mm PCB Hole	Test Terminal, Red	262-2185	
T12	\	1mm PCB Hole	Test Terminal, Red	262-2185	
T13	\	1mm PCB Hole	Test Terminal, Red	262-2185	
T15	\	1mm PCB Hole	Test Terminal, Red	262-2185	
T16	\	1mm PCB Hole	Test Terminal, Red	262-2185	
T17	\	1mm PCB Hole	Test Terminal, Red	262-2185	
T19	\	1mm PCB Hole	Test Terminal, Red	262-2185	
T26	\	1mm PCB Hole	Test Terminal, Red	262-2185	
T27	\	1mm PCB Hole	Test Terminal, Red	262-2185	
U1	A4980	eTSSOP28	Allegro A4980	\	
\	\	\	Jumper Shorting Link (Red, x2 Per Board)	251-8531	
\	\	\	Rubber Feet (x4 Per Board)	248-451	

BOARD BUILD NOTES:-

- (1) Jumper shorting link = Fit x2 per board.
- (2) Note: Ground bar = 20swg Tinned Copper Wire, Approx 10mm Height, Square Corner Formed-
- (3) Rubber Feet = Fit x4 per board, one in each corner (as near as possible).
- (4) Note: A4980 IC's to be supplied by Allegro in tubes.
- (5) Note: Final 'active' stage = board wash (no flux present on finished boards).
- (6) Note: No manufacturer stick-on labels on topside of pcb, bottom side only.
- (7) Mark on btm left silkscreen square (dot, in green fine tip permanent pen) A4980 IC is fitted (final stage after board wash & QC).



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

