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ALI3-Sharp7		BD-ALI3-SHARP7-G	
Avnet Design Services			
www.em.avnet.com			
Function		Sheet Number	
01-Cover		01	
02-ALI3 Adapter Board		02	

Revision / History

V0:

Draft version for internal review

V1:

Revise components
Mated PCB V1

V2:

Revise components
Made PCB wider, changed PN from HKADS-13-02-HW-0100 to BD-ALI3-SHARP3-G

7/8/2014

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 Avnet Engineering Services	
Title: Sheet 01 - Cover	
Size: B	Document Number: ALI3-Sharp7
Date: 7/8/2014	Sheet 1 of 2

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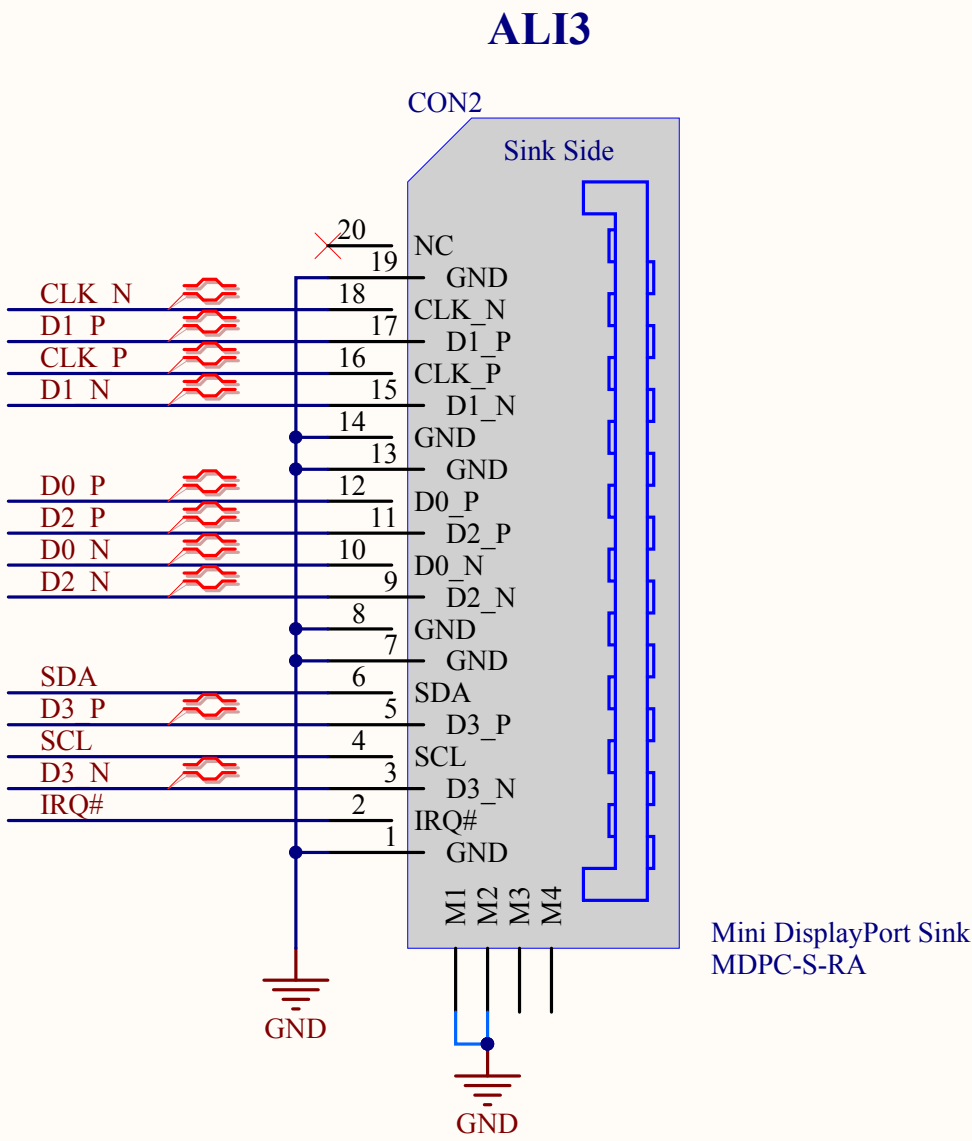
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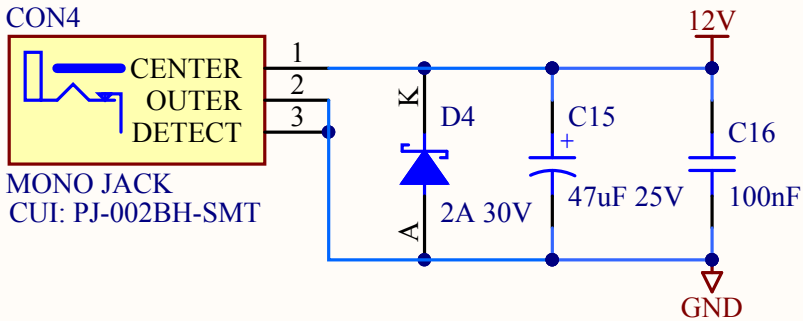
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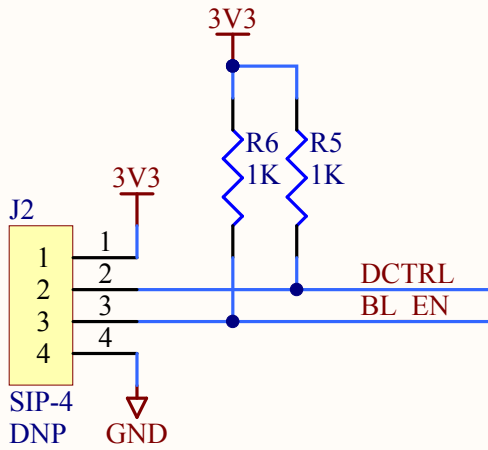
ALI3 Sharp7 Adapter Board



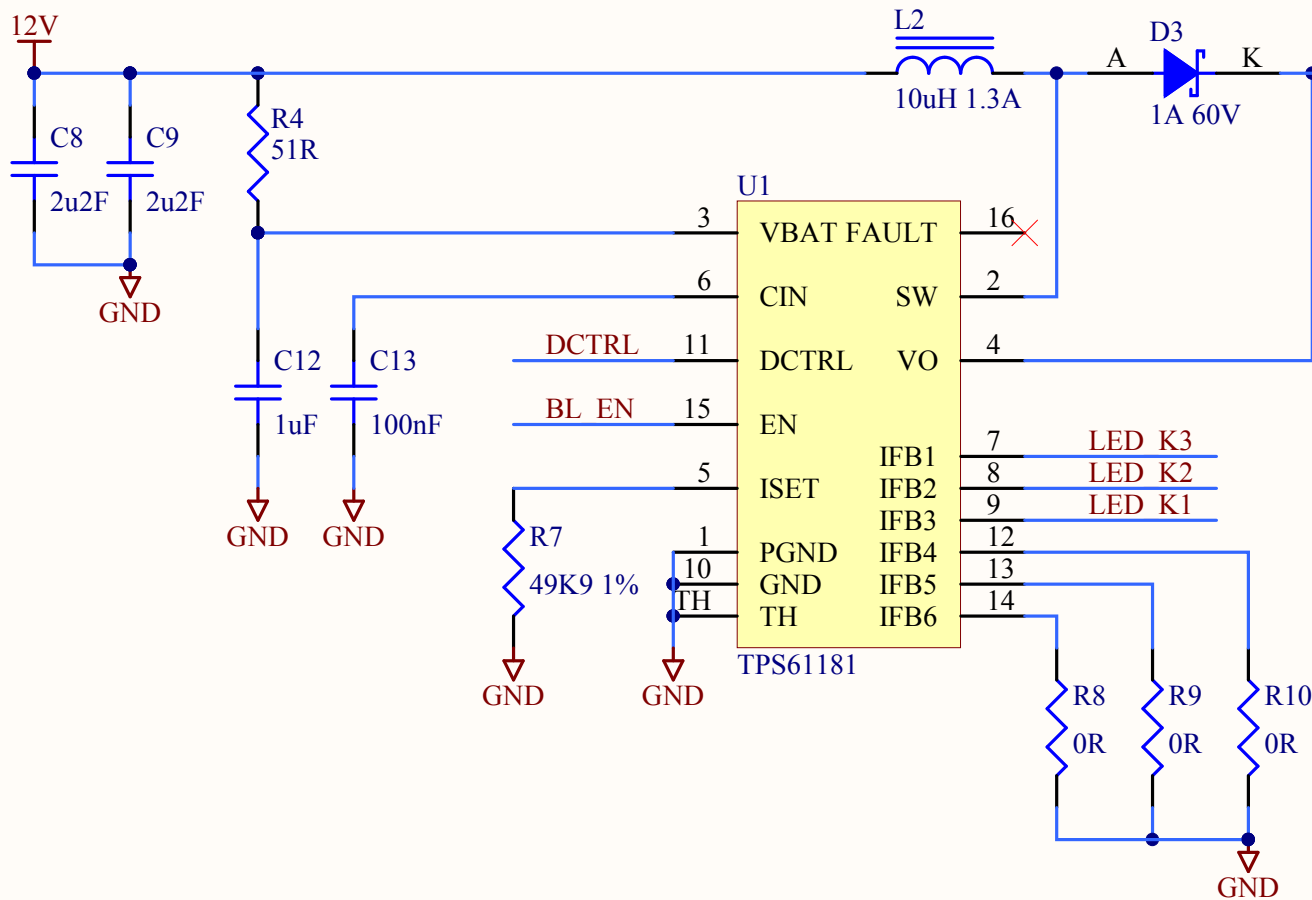
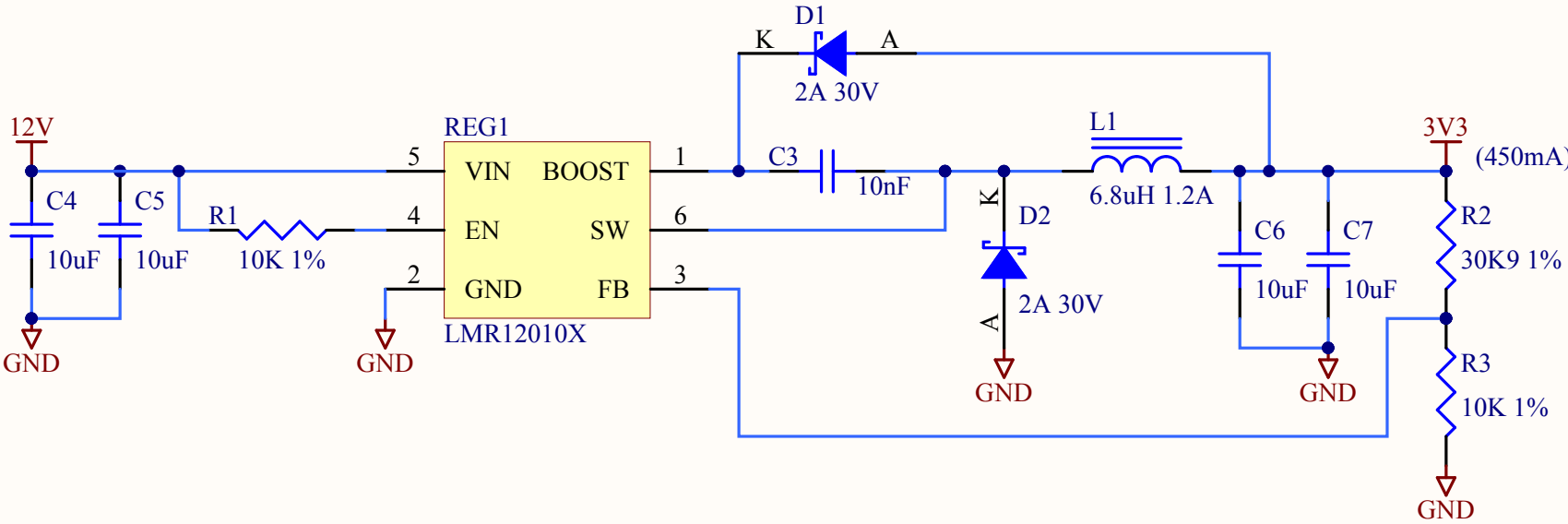
External 12V



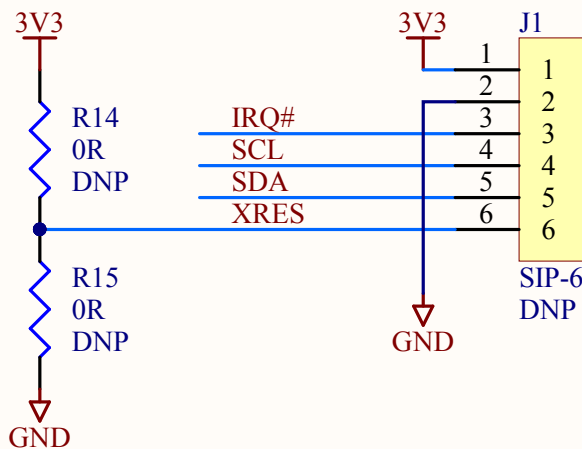
Ext. Backlit Control



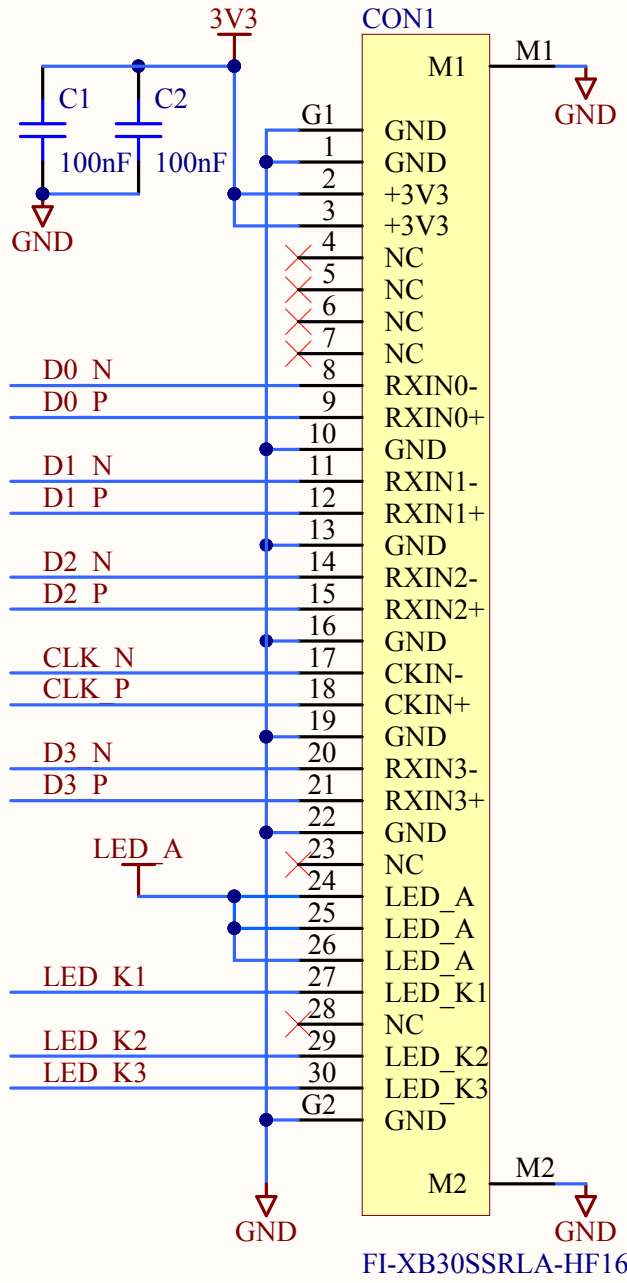
Power



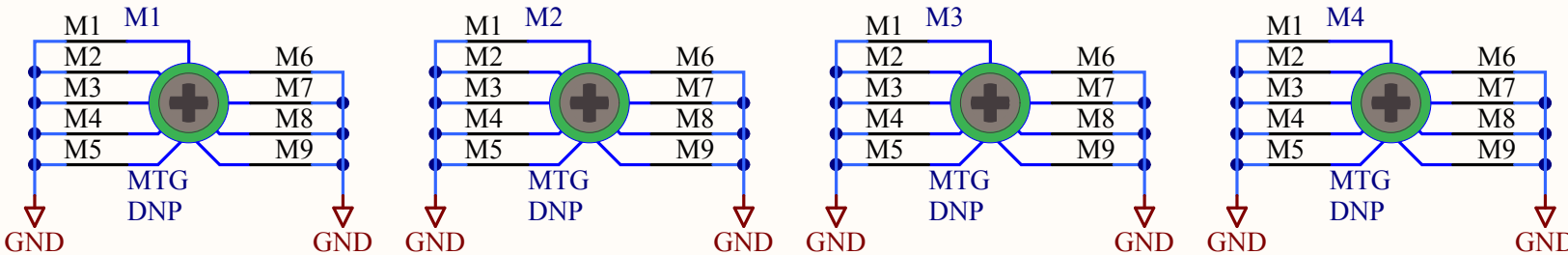
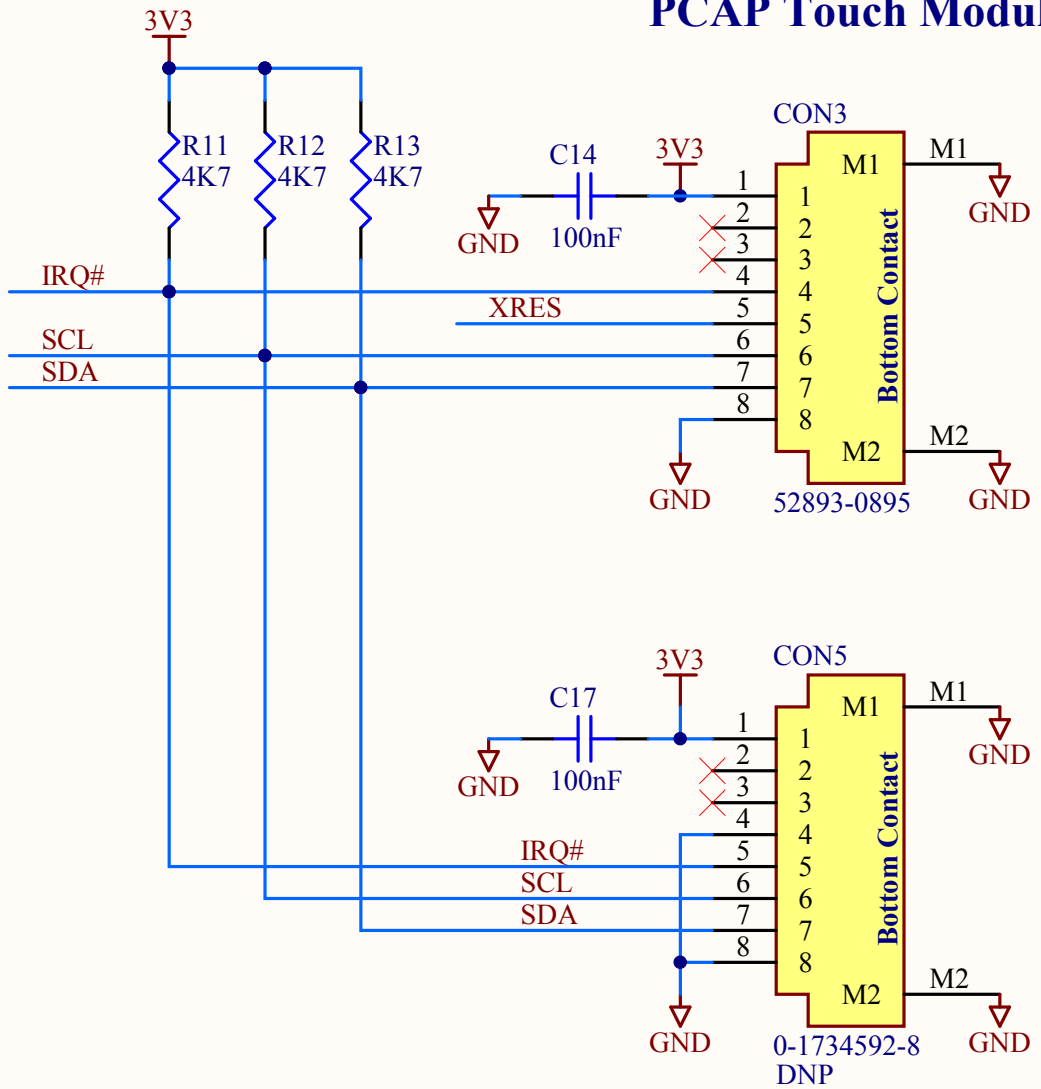
PCAP Development



Sharp LVDS interface



PCAP Touch Module



Suggested Stack Up

1.4mil	5mil	L1 TOP LAYER	0.5oz Cu + 0.5oz Plate
0.7mil	47mil	L2 GND	0.5oz Cu
0.7mil	5mil	L3 PWR	0.5oz Cu
1.4mil	5mil	L4 BOTTOM LAYER	0.5oz Cu + 0.5oz Plate

Impedance Control	TraceWidth/Space	Impedance
Differential	4.5 / 7 / 4.5 (mil)	100 ohm 5%
Single Ended	5 (mil)	50 ohm 10%

Signal traces on L1 reference L2 plane & Signal traces on L4 reference L3 Plane

* Manufacturer should change the stack up to match the impedance control base on the PCB material used.

ALI3-SHARP7-PCB-A	HKADS-13-02-HW-0100
Ref Sch: U2	7/8/2014 1:31:12 PM
Board Thickness: 1.6mm 4 Layers FR4	
Top Layer	Top Overlay
Keep-Out Layer	
Mechanical 1	Mechanical 5

Board shall be fabricate - Performance Class II as per IPC-6011 & IPC-6012

Material: Per IPC-4101A/24/26/29/99, Copper Clad,

High Temperature FR4 Class Epoxy Glass Rated UL940V-0,

0.5 OZ Copper for External Layers & 0.5 OZ Copper for Internal Layers.

Must be RoHS compliant & survive a Lead-Free AssemblyMax reflow of 260 DEG C (6 Passes)

Td Rating: >340 DEG C

Z Axis CTE < 3.5%

Tg > 170 DEG C (Min)

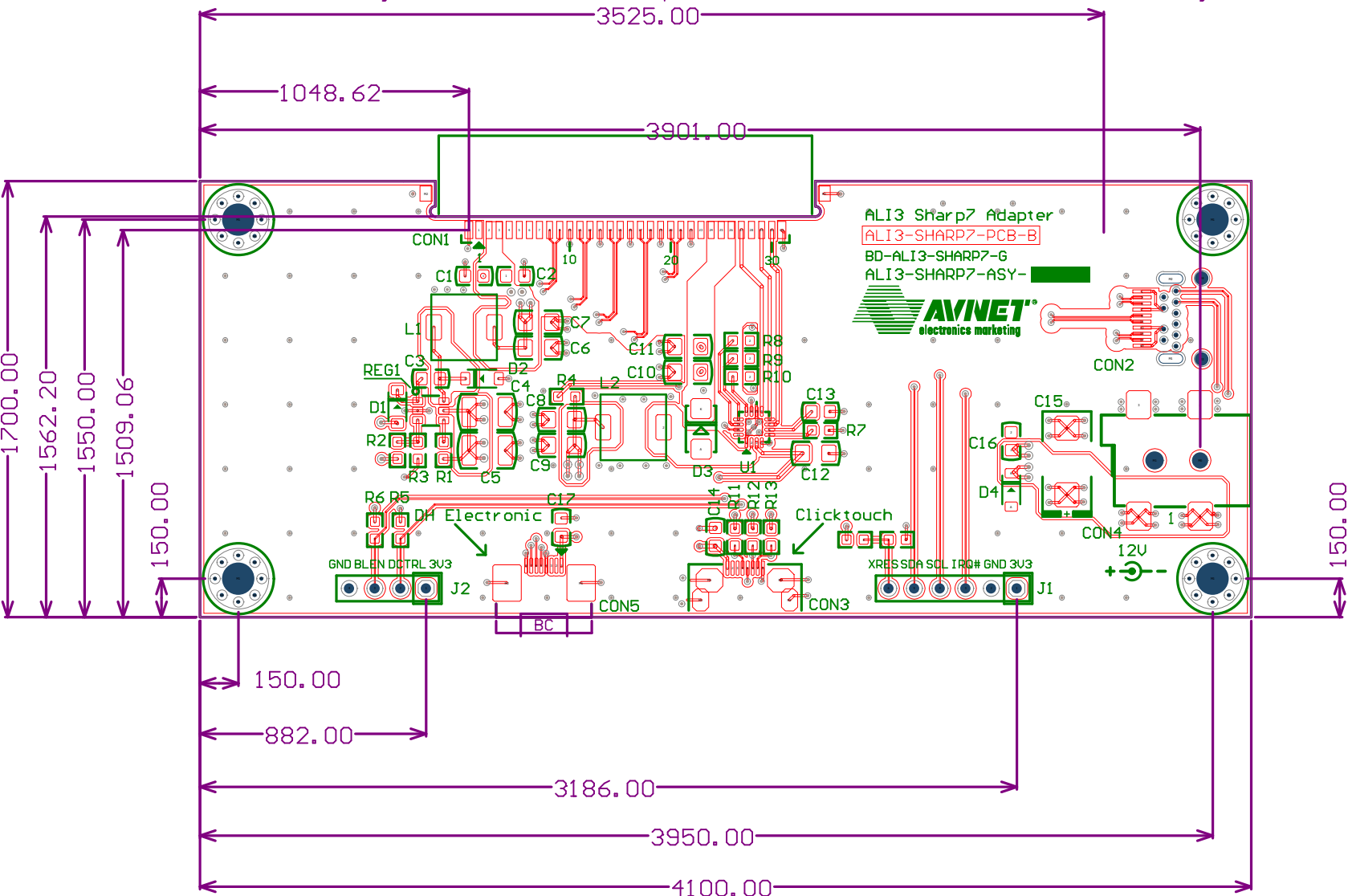
Solder Mask: SMOBC Per IPC-SM-840C, Class T, Must be RoHS Compliant

TYP LPI, 0.0002 Min to 0.0008 Max measured over copper plating,

must clear all lands as indicated on gerber solder mask layers, (Color = Red)

Finish: Electro-less Nickel Immersion Gold (ENIG), 2~8 Micro Inches Gold Over 150~250 Mirco Inches Nickel

This Assembly shall be RoHS Compliant. Vendor shall deliver assembly with accompanying certificate of compliance.



ALI3-SHARP7-PCB-A	HKADS-13-02-HW-0100
Ref Sch: U2	7/8/2014 1:31:13 PM
Board Thickness: 1.6mm 4 Layers FR4	
Top Overlay	
Keep-Out Layer	
Mechanical 5	

