

# Title **Power Input**

Size: **Orcad A**

Number: **LM-008**

Revision: **A**

Date: **10/13/2017**

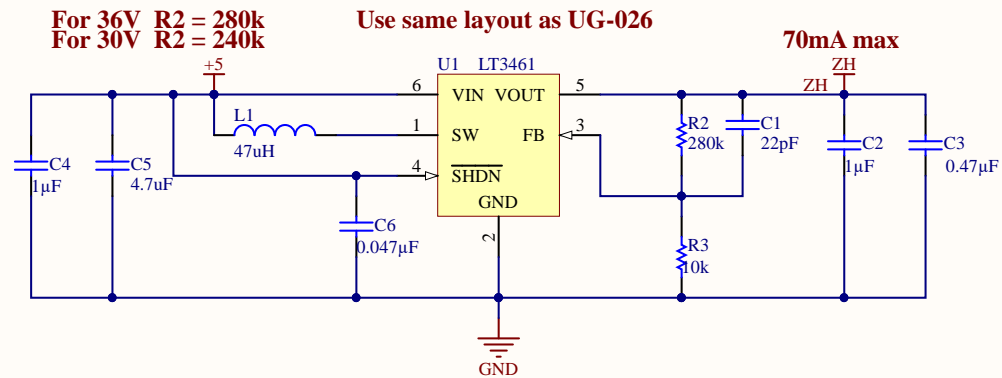
Time: **2:27:18 PM**

Sheet **1** of **2**

File: **C:\Users\zls\Desktop\Land\_Meter\_PCB\LM-008\LM-008\Power\_Input.SchDoc**

**ZLS Corporation**  
7801 North Lamar Blvd.  
Suite E-184  
Austin, Texas 78752 USA  
(512) 453-0288





Title **36V DC-DC Converter**

Size: **Orcad A**

Number: **LM-008**

Revision:-

Date: **10/13/2017**

Time: **2:27:18 PM**

Sheet **2** of **3**

File: **C:\Users\zls\Desktop\Land\_Meter\_PCB\LM-008\LM-008\36V\_Supply.SchDoc**

**ZLS Corporation**  
7801 North Lamar Blvd.  
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Austin, Texas 78752 USA  
(512) 453-0288



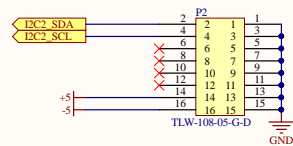
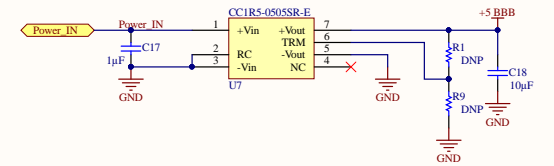
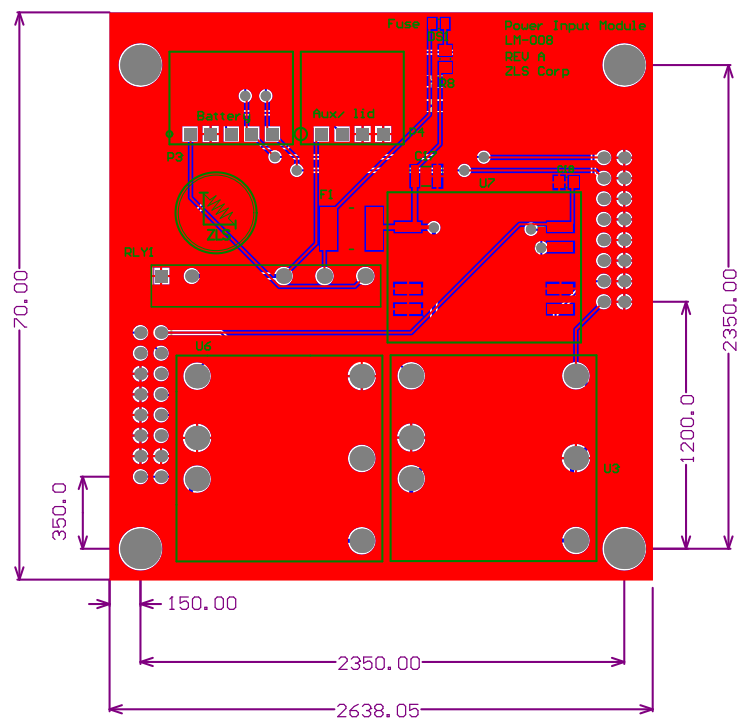


Diagram illustrating the SPI0 pin connections:

- SPI0\_CS0
- SPI0\_MOSI
- SPI0\_MISO
- SPI0\_SCLK

Title <b>Main</b>			ZLS Corporation
			7801 North Lamar Blvd.
Size: <b>Tabloid</b>	Number: <b>LM-008</b>	Revision: *	Suite E-184
			Austin, Texas 78752 USA
Date: <b>10/13/2017</b>	Time: <b>2:27:18 PM</b>	Sheet <b>3</b> of <b>3</b>	(512) 453-0288
File: C:\Users\zls\Desktop\Land Meter PCB\LM-008\LM-008.LM-008.SchDoc			





Comment	Description	Designator	Footprint	LibRef	Quantity
22pF	CAP CER 22PF 50V C0G/NPO 1206	C1	CAPC1206(3216)170_L	CMP-1037-04573-1	1
CAP CER 1UF 50V X7R 1210	CAP CER 1UF 50V X7R 1210	C2	CAPC1210(3225)100_N	CMP-1038-01123-1	1
CAP CER 0.47UF 50V X7R 1206	CAP CER 0.47UF 50V X7R 1206	C3	CAPC1206(3216)190_N	CMP-1037-04570-1	1
CAP CER 1UF 16V X7R 0805	CAP CER 1UF 16V X7R 0805	C4	CAPC0805(2012)145_N	CMP-1036-04795-1	1
4.7uF	CAP CER 4.7UF 16V X7R 0805	C5	CAPC0805(2012)145_M	CMP-1036-04750-1	1
CAP CER 0.047UF 16V X7R 0603	CAP CER 0.047UF 16V X7R 0603	C6	CAPC0805(2012)145_N	CMP-1036-04795-1	1
CAP CER 1UF 50V X7R 1210	CAP CER 1UF 50V X7R 1210	C7, C8	CAPC1206(3216)130_N	CMP-1037-04913-1	2
CAP CER 470PF 3KV X7R 1812	CAP CER 470PF 3KV X7R 1812	C9, C10, C11, C16	CAPC1812(4532)230_M	CMP-1040-00561-1	4
CAP CER 1UF 50V X7R 1210	CAP CER 1UF 50V X7R 1210	C12, C17	CAPC1210(3225)100_L	CMP-1038-00632-1	2
CAP CER 10UF 10V X7R 0805	CAP CER 10UF 10V X7R 0805	C13, C18	CAPC0805(2012)145_N	CMP-1036-04795-1	2
CAP CER 0.1UF 16V X7R 0805	CAP CER 0.1UF 16V X7R 0805	C14	CAPC0805(2012)145_N	CMP-1036-04795-1	1
CAP CER 10000PF 25V X7R 0805	CAP CER 10000PF 25V X7R 0805	C15	CAPC0805(2012)145_N	CMP-1036-04795-1	1
Lite-On LTST-S220KGKT Green LED, 571 nm 2012 (0805) Side View, Rectangle Lens SMD package	Lite-On LTST-S220KGKT Green LED, 571 nm 2012 (0805) Side View, Rectangle Lens SMD package	DS1	0805C_L	LED A/K	1
PCT		F1	CAPC7451X12N	PCT	1
47uH	FIXED IND 47UH 170MA 1.3 OHM SMD	L1	C1210	Inductor	1
TLW-108-05-G-D	CONN HEADER .100" 16POS DL GOLD	P1, P2	TLW-108-05-G-D	TLW-108-05-G-D	2
IPL1-105-01-F-S-RA		P3	IPL1-105-01-F-S-RA	IPL1-105-01-F-S-RA	1
IPL1-104-01-L-S-RA-K	IPL1-104-01-L-S-RA-K	P4	IPL1-104-01-L-S-RA-K	IPL1-104-01-L-S-RA-K	1
DNP	TBD	R1, R9	RESC0402(1005)_L	CMP-1011-00927-1	2
RES SMD 280K OHM 1% 1/8W 0805	RES SMD 280K OHM 1% 1/8W 0805	R2	RESC0805(2012)_M	CMP-1013-00017-1	1
RES SMD 10K OHM 1% 1/8W 0805	RES SMD 10K OHM 1% 1/8W 0805	R3	RESC0805(2012)_M	CMP-1013-00017-1	1
100K		R4	RESC0402(1005)_L	CMP-1011-00927-1	1
3K74 0.125W 1% 0805 (2012 Metric) SMD	3K74 0.125W 1% 0805 (2012 Metric) SMD	R5, R6	RESC0805(2012)_N	CMP-1013-00574-1	2
6.98K	RES SMD 6.98K OHM 1% 1/16W 0402	R7	RESC0402(1005)_L	CMP-1011-00927-1	1
RES SMD 4.7K OHM 1% 1/8W 0805	RES SMD 4.7K OHM 1% 1/8W 0805	R8	RESC0805(2012)_M	CMP-1013-00017-1	1
APF30312	PF Relays, 12 V Coil Voltage, 170 mW Nominal Operating Power, -40 to 85 degC, 5-Pin PF, Tube, Case, RoHS	RLY1	PNSC-PF-5- 2800x500x1500_V	CMP-1503-00270-1	1
LT3461	IC REG BOOST ADJ 0.3A TSOT23-6	U1	LT-S6-6-TSOT-23_N	CMP-0491-01698-1	1
BD90GA3WEFJ-E2	IC REG LDO 9V 0.3A 8HTSOP-J	U2	TSOP127P600X100-8N	BD90GA3WEFJ-E2	1
PXB15-24WD05/N	IC CONV DC-DC 15W DUAL 5V PCB	U3	PXB15-24WD05/N	CCG302412S	1
LT1763CS8-5#PBF	500 mA, Low Noise, LDO Micropower Regulator, 1.8 to 20 V Vin, 5 V Vout, 8-pin SOIC (S8-8), -40 to 125 degC, Pb-Free	U4	LT-S8-8_M	CMP-0476-01685-1	1
OPA188AIDBVR	Precision, Low Noise, Rail-to-Rail Output, Zero-Drift Operational Amplifier, 4 to 36 V, -40 to 125 degC, 5-pin SOT23 (DBV5), Green (RoHS & no Sb/Br)	U5	DBV0005A_M	CMP-0809-00005-2	1
CCG302412S	DC/DC CONVERTER 12V 2.5A PCB	U6	CCG30	CCG302412S	1
CC1R5-0505SR-E	CONV DC/DC 1.5W SNGL 5V 5V SMD	U7	CC1R5-0505SR-E	CC1R5-0505SR-E	1