

QPS component tests

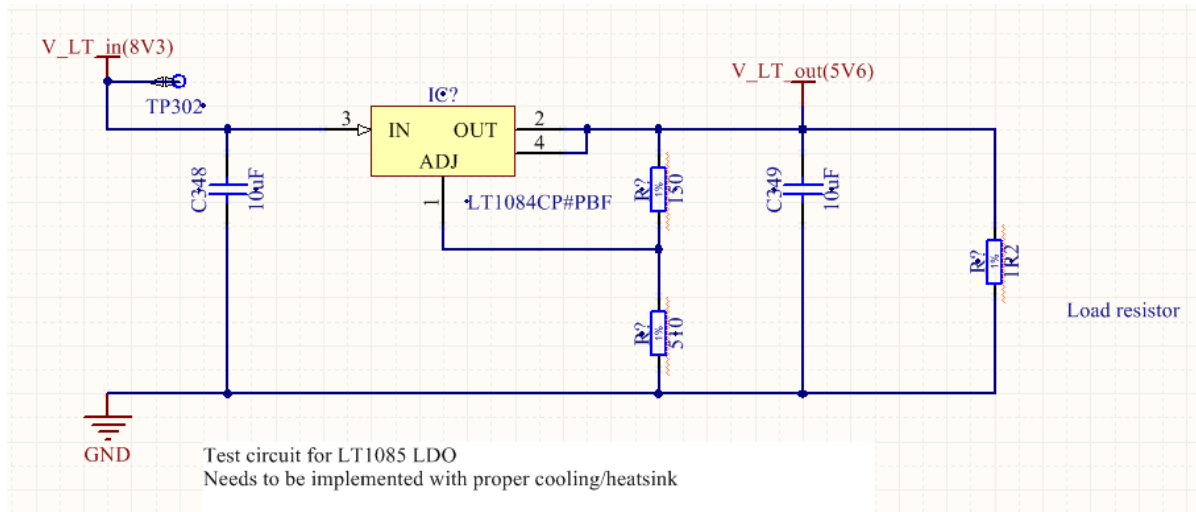
Component overview

- LT1084 LDO regulator
- LT1930 step-up converter
- TPS7A4901 LDO regulator
- TPS7A3001 LDO regulator

General requirements

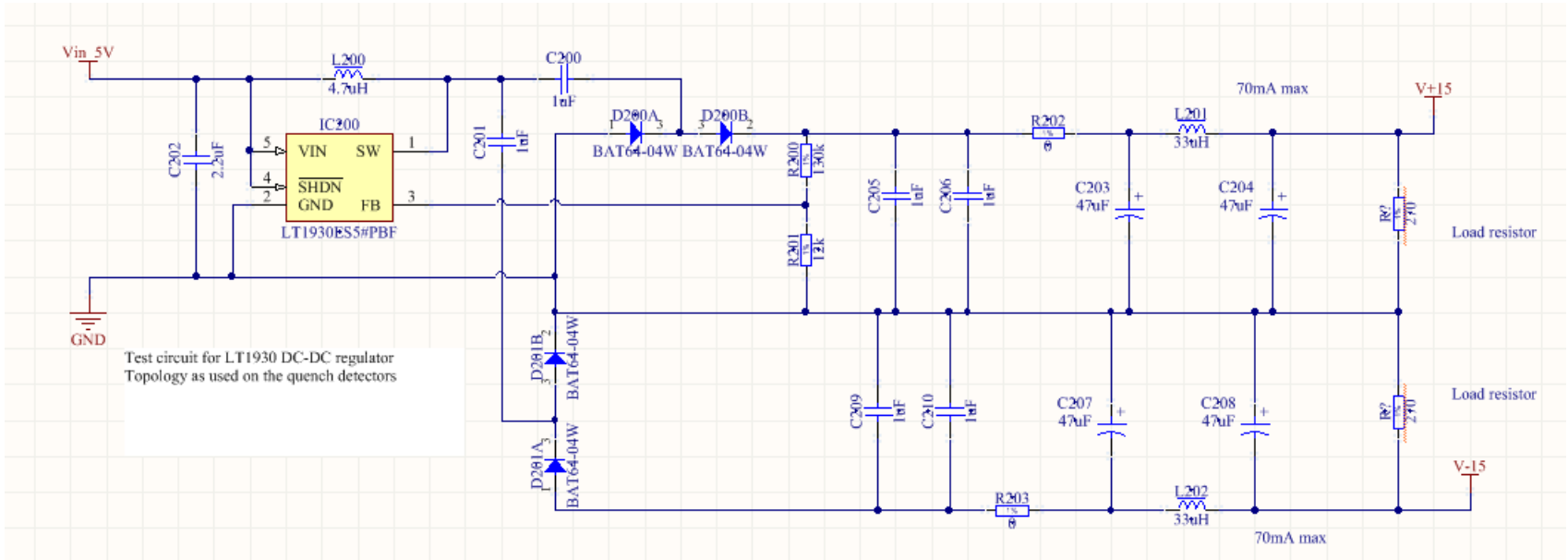
- Life test up to 1kGy
- Test 3 pieces of each component
- Test time > 1h
- Use components in specified configuration
- Load to 80%
- Continuous monitoring > 10Hz of:
 - Input current
 - Voltage at input
 - Voltage at output

LT1084



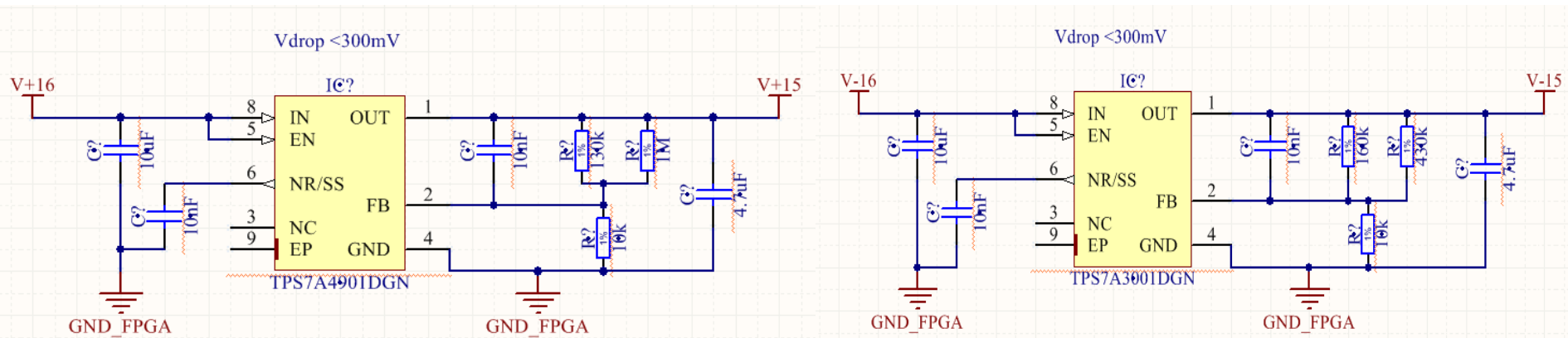
- Load to 80% of rated current of 5A
- Proper cooling (heat sinks) has to be provided

LT1930



- 1MHz switch-mode regulator 5V \rightarrow \approx \pm 15V configuration

TPS7A4901 & TPS7A3001



- Load TPS7A4901 with 120mA
- Load TPS7A3001 with 160mA
- If more convenient +/-15V → +/-14V conversion can be done