LVR final QA checklist

1. Put on wrist strap, take LVR from box, **set all switches to values in table**

	CCMs	FPGA side		
	SW1	SW3	SW2	SW5
All	0001	1111	1111	0000

	CCMs
	SW6[ABCD]
1.2V	1010
1.5V	1100
2.5V	1000

	FPGA
	SW4
A	0000
MS	1111
MSA	1100

2. Slide LVR in frame, **tighten wedge locks**
3. Measure GND-Earth (**TP7-lugs**) separation **> 25kΩ** in both directions
4. Connect input BB, Rpi monitor, and turn on **PS to 6V**
   - [If fw not 2.06] Connect JTAG dongle, program with **fw tag 2.06**
5. **Adjust P1, P2, and P5** if the base voltages are not as expected (Vin_FPGA_1V5=1.5 V, Vin_FPGA_3V3=3.3 V, V_OPAMP_RAIL=5.5 V)
6. **Request WORD2** to confirm fw version is **2.06** and turn **all channels ON** with Rpi Butler
7. **Adjust the CCM potentiometers** if V_SENSE_MONi voltages are not 1.25V, 1.52V, or 2.51V
8. Check **UVL turns all channels OFF with input voltage** 4.3V (12A), 4.8V (15MS), 5.3V (25A)
   - Set input voltage back to 6V when you've checked
9. Change **SW1** to 0011 (or 1111), check over-temperature turns **channels off, LD7 LED turns on**
10. Set **channels to READY**, **adjust P3-P4** for V_SENSE to be 110-190 mV (better 120-140 mV)
11. Turn **channels OFF**, connect **MPSS cable and RJ45 sense lines** to each output
    1. **Scope to Single**, **"Ripple ON"** and see **smooth turn on**, plateaus above desired voltages
    2. Check **voltage drop across R75 and R91** is same
    3. **Disconnect sense lines**, see them match non-sensed channels
12. **Turn off PS, remove CCM8, move J22 jumpers** to right (connecting pins 4&6 and pins 3&5)
13. **Set a valid 'sub type'** in DB, remove CCMs as necessary. For each removed CCM, one of the switches on SW3/SW2 (and SW4 if slave) must be set to OFF
14. **Update the database**, and you are done!

8ch, FF

	INPUT		
5	CCM	CCM	4
6	CCM	CCM	3
7	CCM	CCM	2
8	CCM	CCM	1
OUTPUT		OUTPUT	

7ch, 7F

	INPUT		
5	CCM	CCM	4
6	CCM	CCM	3
7	CCM	CCM	2
8	open	CCM	1
OUTPUT		OUTPUT	

7ch, BF

	INPUT		
5	CCM	CCM	4
6	CCM	CCM	3
7	open	CCM	2
8	CCM	CCM	1
OUTPUT		OUTPUT	

6ch, 5F

	INPUT		
5	CCM	CCM	4
6	open	CCM	3
7	CCM	CCM	2
8	open	CCM	1
OUTPUT		OUTPUT	

6ch, BB

	INPUT		
5	CCM	CCM	4
6	CCM	open	3
7	open	CCM	2
8	CCM	CCM	1
OUTPUT		OUTPUT	

5ch, 9B

	INPUT		
5	CCM	CCM	4
6	open	open	3
7	open	CCM	2
8	CCM	CCM	1
OUTPUT		OUTPUT	

4ch, 0F

	INPUT		
5	open	CCM	4
6	open	CCM	3
7	open	CCM	2
8	open	CCM	1
OUTPUT		OUTPUT	

5ch, 1F

	INPUT		
5	CCM	CCM	4
6	open	CCM	3
7	open	CCM	2
8	open	CCM	1
OUTPUT		OUTPUT	

4ch, CC

	INPUT		
5	open	CCM	4
6	open	CCM	3
7	CCM	open	2
8	CCM	open	1
OUTPUT		OUTPUT	

6ch, F6

	INPUT		
5	CCM	open	4
6	CCM	CCM	3
7	CCM	CCM	2
8	CCM	open	1
OUTPUT		OUTPUT	

5ch, F4

	INPUT		
5	CCM	open	4
6	CCM	CCM	3
7	CCM	open	2
8	CCM	open	1
OUTPUT		OUTPUT	

4ch, F0

	INPUT		
5	CCM	open	4
6	CCM	open	3
7	CCM	open	2
8	CCM	open	1
OUTPUT		OUTPUT	

12M	12S	12A
15M	15S	25A