

Change Log

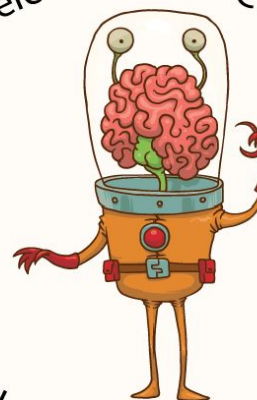
Changes in -03:

- * Change clock resistor.
- * Move switches slightly to give clearance for lifter board.
- * Add adjustable regulator & jumper to select FILTIN source.

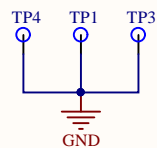
Changes in -02:

- * Add test points for GND, Trig.
- * Add 100K pull-up on JTAG, nRST.
- * Fixed size of holes in XTAL pins.
- * Add pull-downs on capacitors.
- * LEDs moved from switches to beside terminals.
- * Addition of 5V switch.

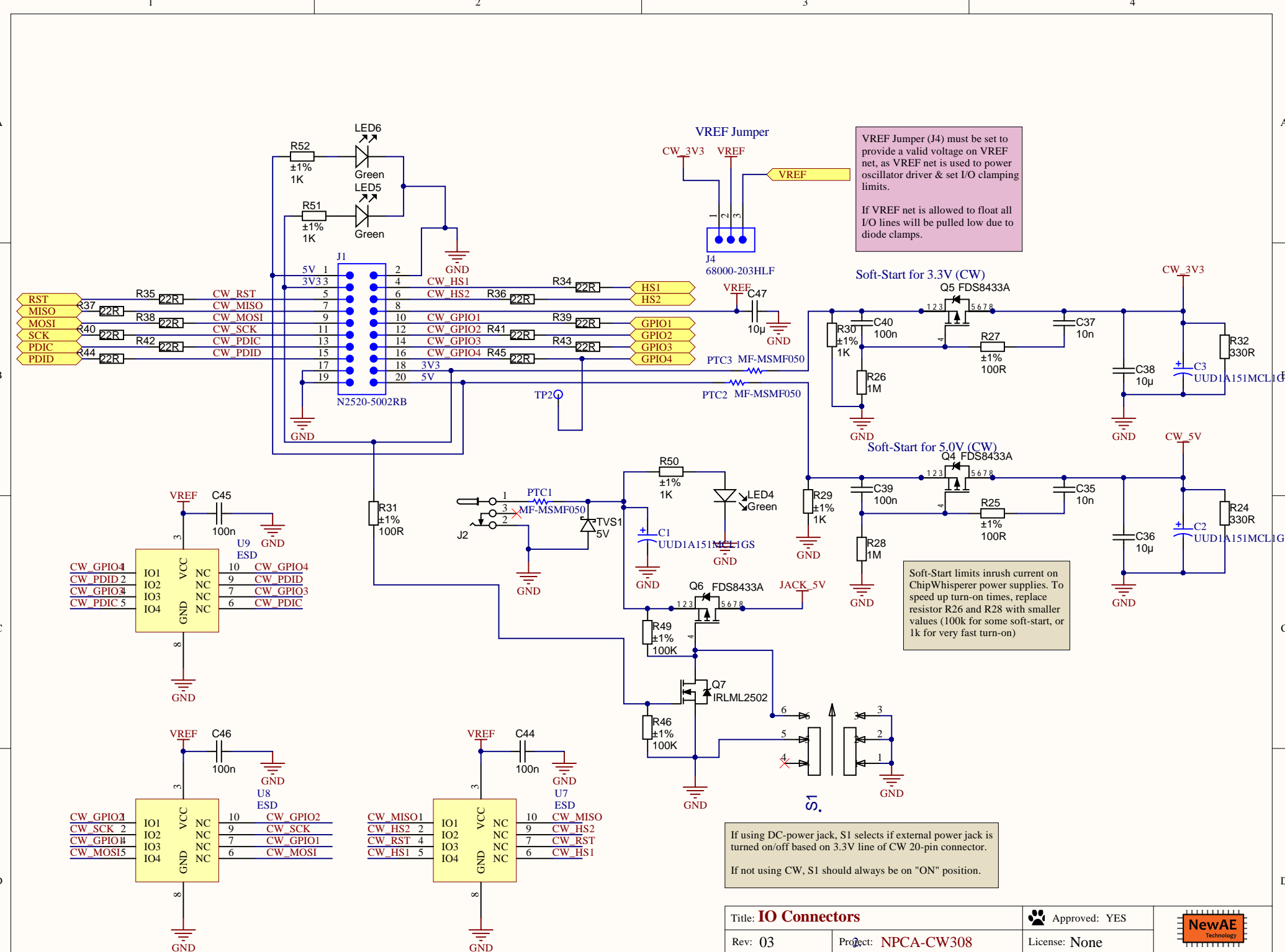
Welcome to the CW308



Allow Me to Probe You.



Title: Mechanical & Notes		Approved: YES	
Rev: 03	Project: NPCA-CW308	License: None	
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File: CW308_Mechanical.SchDoc			



VREF Jumper (J4) must be set to provide a valid voltage on VREF net, as VREF net is used to power oscillator driver & set I/O clamping limits.

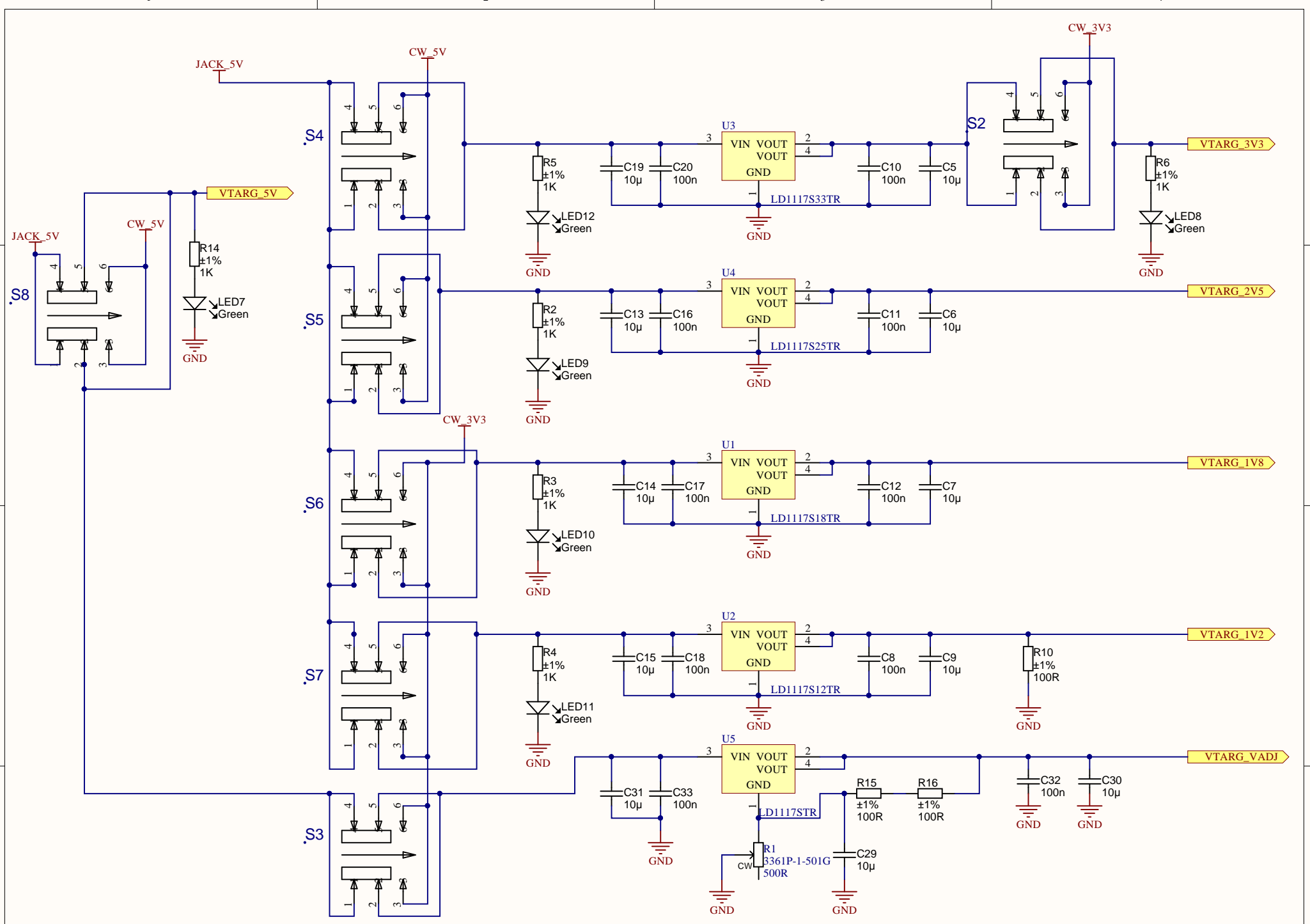
If VREF net is allowed to float all I/O lines will be pulled low due to diode clamps.

Soft-Start limits inrush current on ChipWhisperer power supplies. To speed up turn-on times, replace resistor R26 and R28 with smaller values (100k for some soft-start, or 1k for very fast turn-on)

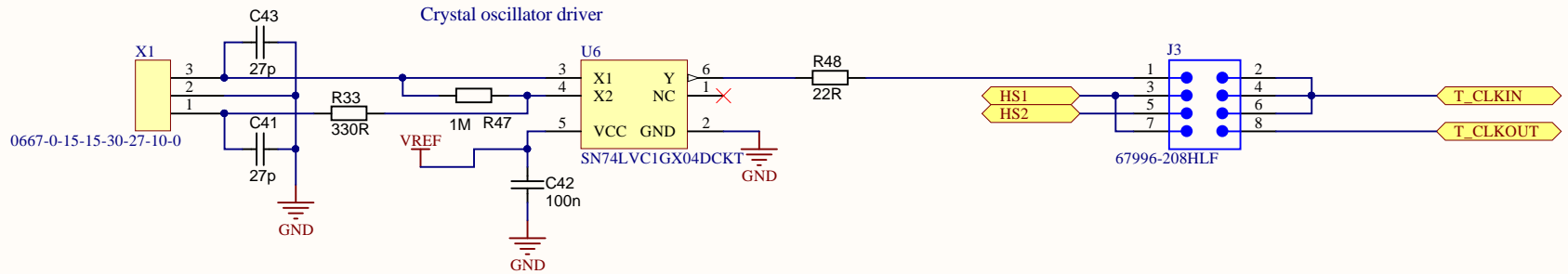
If using DC-power jack, S1 selects if external power jack is turned on/off based on 3.3V line of CW 20-pin connector.

If not using CW, S1 should always be on "ON" position.

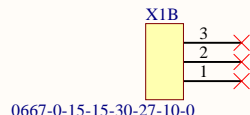
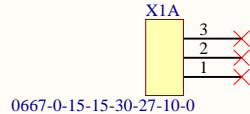
Title: IO Connectors		Approved: YES	
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Title: Target Linear Regulators		Approved: YES	
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X1 pins (for BOM purpose only)



Oscillator supply derived from VREF jumper (J4).
Oscillator should work with most 2 or 3-pin parallel resonance crystals where 18-24pF loading is expected.

Title: Crystal Oscillator		Approved: YES	
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