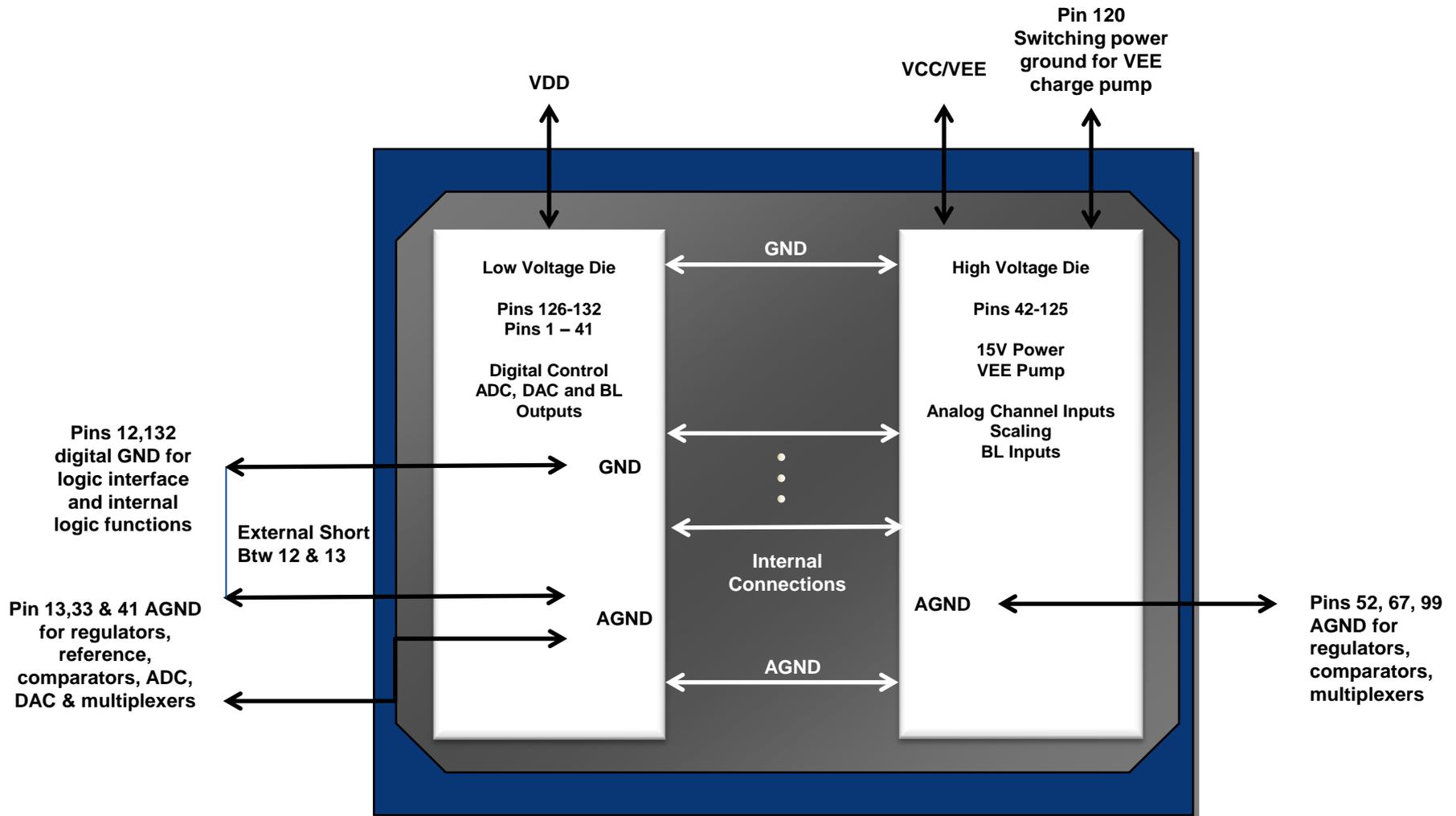




LX7730 Grounding Architecture & Notes

Dec 2015

LX7730 Die and Ground Architecture



LX7730 Grounding Notes

- All AGND & GND pins must be connected to solid ground planes. Although some ground connections are made internal to the device, low impedance external PCB grounding is essential for proper device operation.
- Analog and digital ground return currents should not flow through common traces.
- ADC bias resistors $R_{\text{ADC_DAC_OUT}}$ and $R_{\text{ADC_BIAS_IN}}$ should be located as close a possible to their respective pins and return to AGND pins 33 & 41 with no shared ground paths.
- AGND & GND should be tied together at pins 12 & 13.
- If the controller is located some distance from the system's "single point" ground, make that connection at pins 12 & 13.
- When using the an external VEE supply with the charge pump disabled pin 120 can be connected to the AGND plane, along with their respective bypass capacitors.