

## Comments on SpRC-V5

- 1) AVDD lines should have one 100nF type 0402 capacitor near SVX4 pin 2 or 15 and one 0402 capacitor 2.2 uF (Digikey 490-4518-1-ND) near connector.
- 2) The one of the internal layers should have large AGND area at least near the signal strips. The signals from the strips are all referenced to AGND, therefore this part of PCB should be surrounded by AGND.
- 3) The AGND should be connected to DGND in one point using zero ohm resistor 0603 type.
- 4) The AGND should be routed to the 3 pins in parallel on the connector. It should be routed on the carrier board in parallel to all SpRCs and to several pins of the main power connector.
- 5) Pins 4, 5(PB127), 6, 7, 8, 9, 10(RB127), 11(WB127), 12(AGND), 13(QVDD), 23(BNBR), 63(TNBR), 59(SGND), 60(SVDD), 67(DVDD), 68(DGND), 71(AVDD), 77(ISET), 78(AVDD), 80(TERM)PAD should be disconnected.
- 6) Pin 3(ISET) should be connected via 10nF capacitor to AVDD.
- 7) Pins 24(PRIOUT), 25(PRIOUTB), 61( PRIINB), 62(PRIIN) should be routed to the connector.
- 8) The pin 22 (ISLOPE) should be connected via resistor 36K to AGND, not DVDD, it was mistake on the SRCv4.
- 9) Pin 20 (D0MODE) should be connected to DGND, not DVDD,
- 10) U7 and all related components R15, R16 should be removed. The limiting resistor R14 1.0M and filtering capacitor C143 22nF type 0805 (445-2281-1-ND) should stay.
- 11) U6 and all related components R22, should be removed.
- 12) Pin 1 (Vcal) should be routed to the connector.
- 13) We need an option to connect common line of all Rnxxx resistors (ADC\_IVBIAS) either to HVBias or to the AGND.