

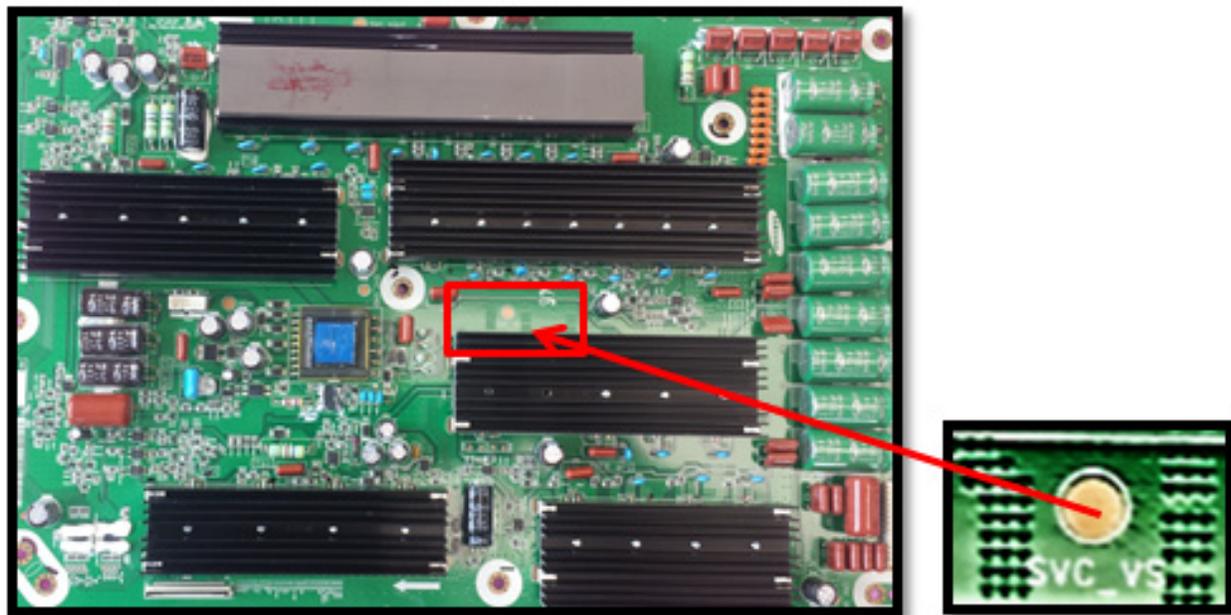
Troubleshooting and Repairing PN64F8500s with Y Board Failure (No or Intermittent Power)



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In the field, you may encounter a PN64F8500 with a “Trouble Powering On” or “Won’t Power On” issue. When this occurs, the actual root cause may be a No VSCAN or Intermittent VSCAN condition.

This article will step you through a simple and cost effective component repair procedure for this type of failure. This is especially important since it will also reduce the cost to the customer for out of warranty repairs.



To troubleshoot for a VSCAN failure, follow these steps:

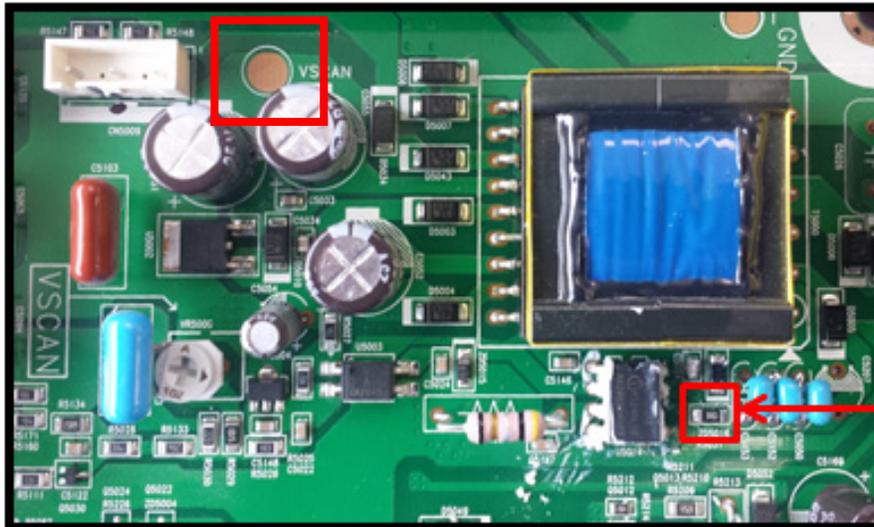
1. Measure VS at the SVC_VS Test Point Pad. See the illustration above for the location. If VS reads approximately 210Vdc (and then begins to drop with the power on) continue with VSCAN troubleshooting.
 - If SVC_VS reads near 0Vdc at power on, the problem is not a VSCAN circuit failure.
 - If it stays near 0Vdc during start up, check the Y and X Main Boards for shorted FETS.
2. Measure the VSCAN Test Pad (-190Vdc Normal / 0Vdc Failure). See the illustration on the next page for the location. If it measures 0Vdc during start-up, there is likely a VSCAN failure.

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continued



VSCAN Test Pad



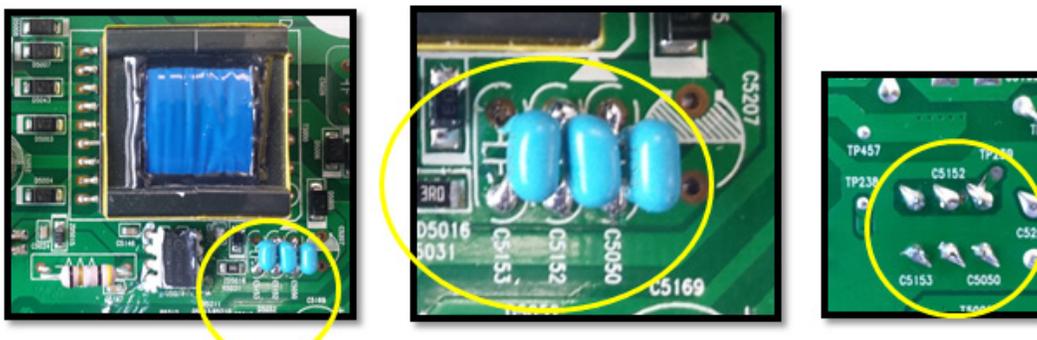
Resistor R5031



OPTION: Additionally, you can measure the 15Vdc VCC to the Vscan circuit IC on either side of chip resistor R5031. If it reads lower than 15Vdc, the repair failure is verified. However, in intermittent power on conditions, it may read near normal at 15Vdc.

3. If you've confirmed the VSCAN failure, carefully replace Capacitors C5153 / C5152 / C5150. (These 10 microfarad, 25V ceramic capacitors will be made available from Samsung Parts. Call Tech Support for details at 1-888-751-4086 [ASC/SSD] or 1-866-894-0637 [FE/ME].)

Snip off each capacitor with diagonal cutters, then tack-solder the new capacitors into position at the top of the board beginning with the center capacitor location for ease of installation. Inspect both the top and bottom of the board solder pads.



Note: Since the Y-Board is multi layer, its safer to snip off each capacitor than trying to unsolder them.

4. When done, verify the operation of the TV and adjust VS, Vscan, VA, and VE (if available) according to the Panel Label.