

MARUTI SUZUKI INDIA LTD (MSIL) - VENDOR MANUAL

VENDOR: SPARK MINDA - ADVANCED DISPLAY DIV

PART: 9-INCH HD DIGITAL CLUSTER (SMARTPLAY PRO+)

MODEL: BREZZA ZXI+ / GRAND VITARA (ALL DIGITAL)

DOC NO: MSIL-WI-DIGITAL-05 | **REV:** 6.0

1.0 STATION A: LCD & TOUCH PANEL BONDING (CLEAN ROOM)

- **1.1 Environment:** Class 1000 Clean Room. Air Shower is mandatory for entry.
- **1.2 Inspection:** Check the 9" TFT Glass for "Micro-Scratches" under 1000 Lux Light.
- **1.3 FPC Insertion (Main Display):** Unlock the 60-Pin LVDS Connector on the Motherboard and insert the FPC (Flexible Printed Circuit) with Gold Contacts Facing DOWN. Push the black latch to lock and ensure it is flush. **Defect:** If the FPC is inserted crooked, the screen will show "Vertical Lines."

2.0 STATION B: HUD (HEAD-UP DISPLAY) INTERFACE

- **2.1 HUD Port:** This unit drives the external HUD. Connect the 10-Pin Data Cable to Port J3 and apply "Kapton Tape" (Yellow) over the connector to prevent vibration looseness.
- **2.2 Heat Sink Assembly:** This digital unit generates significant heat. Apply exactly 1.5g of Thermal Paste to the GPU (Graphics Processor). Screw the Aluminum Backplate (Heat Sink). The torque setting for the Aluminum Backplate Heat Sink is strictly 0.6 Nm.

3.0 STATION C: HOUSING & CAN BUS WAKE-UP

- **3.1 Rear Cover:** Snap-fit the plastic back cover and ensure no wires are pinched.
- **3.2 Power-On Test (Current Draw):** Supply 12V DC. **Sleep Mode Current Limit:** The sleep mode current limit must be < 1mA, which is critical to prevent battery drain.
Wake-Up: Send CAN Message ID 0x100 (Ignition ON). The screen must boot the "Suzuki Logo" within 1.5 seconds.

4.0 STATION D: FINAL OPTICAL & TOUCH TEST

- **4.1 Dead Pixel Check:** Display the "All Black" pattern and look for stuck White/Red/Green dots. **Tolerance:** Strictly 0 Dead Pixels allowed in Center Zone (Zone A).
- **4.2 Backlight Bleed:** Check corners for "White Light Leakage" in a dark room.
- **4.3 Software Version:** Connect the OBD Tool and verify the Firmware Version is v5.4.2 (India Map Update). If the version is old, mark it for "Re-Flash" and send it to the Rework Station.