

The block diagram illustrates the system architecture of the TSC1000, showing the flow of data and power between various components.

Input/Output and Control:

- VIDEO:** BNC and S-VIDEO inputs feed into the **DECODER** (IC02, TW9919, Vdd 3.3V / 2.5V).
- Audio:** Audio and PC inputs feed into the **AUDIO SWITCH / AMP** (IC601 / IC602, NJM2235M / TDA7053AT).
- DVI:** DVI input feeds into the **AUDIO SWITCH / AMP** and the **EEPROM** (IC07, 24LC21A) via the **DVI IIC BUS**.
- DECODER:** Outputs **VDIN** to the **SCALER** (IC01, TSU66AWVJ, Vdd 3.3V / 1.8V) and **Analog R,G,B** to the **AUDIO SWITCH / AMP**.
- SCALER:** Outputs **LVDS OUTPUT** to the **PANEL** and **IIC BUS** signals to the **MICOM** (IC04, WT61P4PLCC, Vcc 5V / 3.3V).
- MICOM:** Controls the **DECODER**, **AUDIO SWITCH / AMP**, **EEPROM** (IC06, AT24C16AN), and **SPEAKER**. It also receives **IIC BUS** signals from the **DECODER** and **EEPROM** (IC07).
- EEPROM (IC06):** Provides **5V** to the **INVERTER MODULE BOARD**.
- INVERTER MODULE BOARD:** Provides **INVERTER 12V** to the **PANEL** and the **1.8V REGULATOR**.
- PANEL:** Receives **LVDS OUTPUT** from the **SCALER** and **PANEL POWER** from the **FET** (IC05, FDS4435).
- FET (IC05):** Provides **5V** to the **PANEL** and **OnPANEL** to the **MICOM**.
- SDRAM (IC03, HY57V641620HGT):** Provides **5V** to the **DECODER** and **IIC BUS** signals to the **MICOM**.
- X-TAL (XV01, 27MHz):** Provides **5V** to the **DECODER**.
- X-TAL (XS01, 14.31818MHz):** Provides **5V** to the **SCALER**.
- X-TAL (XM01, 24MHz):** Provides **5V** to the **EEPROM** (IC06).

Power Regulation:

- ADAPTOR:** Provides **12V** to the **5V REGULATOR** (IC801, MIC4576-5.0BU) and **INVERTER 12V**.
- 5V REGULATOR (IC801):** Provides **5V** to the **DECODER**, **SCALER**, **AUDIO SWITCH / AMP**, **EEPROM** (IC07), and the **3.3V REGULATOR** (IC802, IC804).
- 3.3V REGULATOR (IC802, IC804):** Provides **3.3V** to the **DECODER**, **SCALER**, and **EEPROM** (IC06).
- 2.5V REGULATOR (IC803):** Provides **2.5V** to the **DECODER**.
- 3.3V REGULATOR (IC805):** Provides **3.3V** to the **SCALER** and the **1.8V REGULATOR**.
- 1.8V REGULATOR (IC806):** Provides **1.8V** to the **DECODER**.