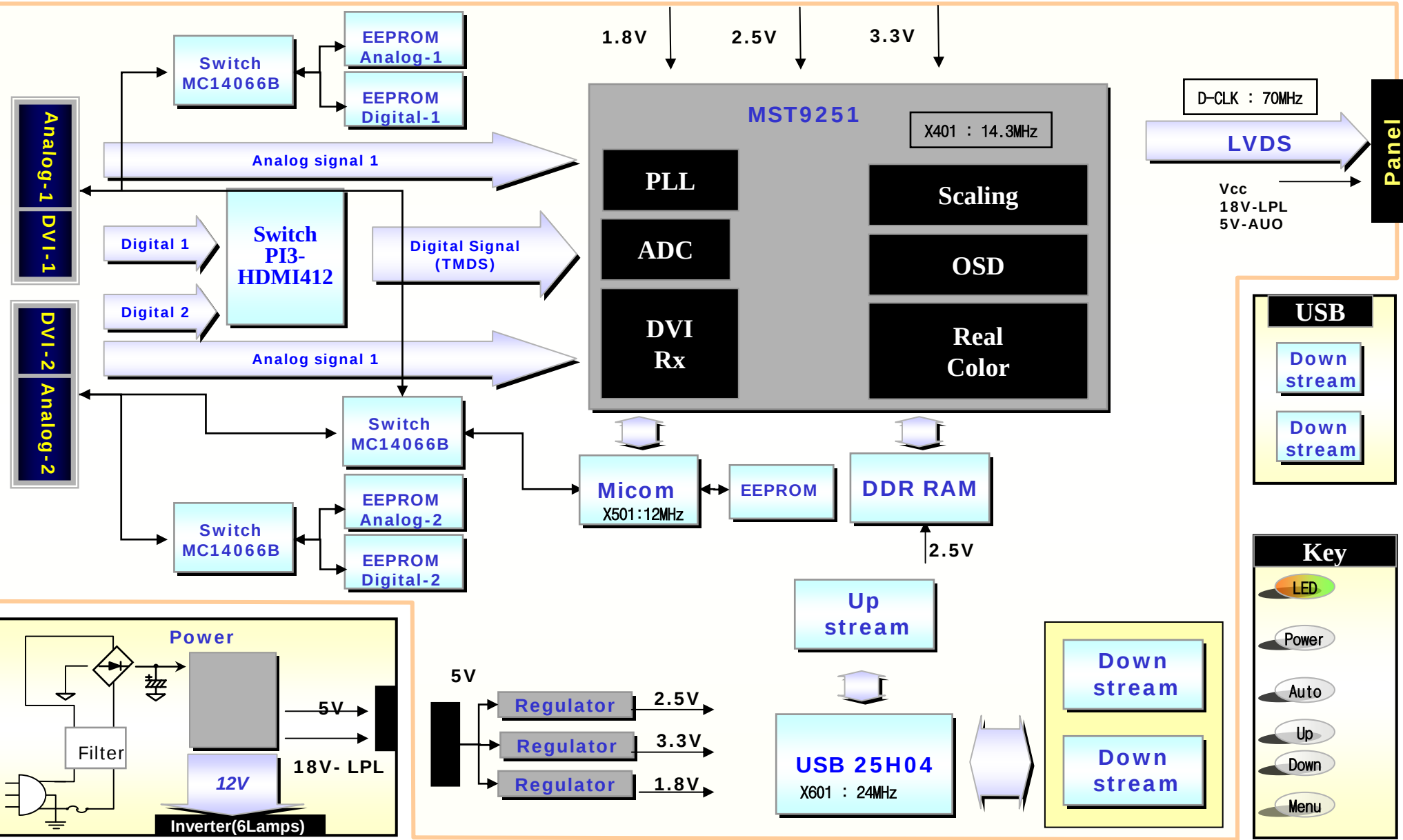


APPENDIX D
: BLOCK DIAGRAM

Block diagram(LH2065N)



DESCRIPTION OF BLOCK DIAGRAM

1. Video Controller Part & Display Data Transmitter Part.(MST9251A)

This part amplifies the level of video signal for the digital conversion and converts from the analog video signal to the digital video signal using a pixel clock.

The pixel clock for each mode is generated by the PLL.

The range of the pixel clock is from 25MHz to 205MHz.

This part consists of the Scaler, DDR-RAM IC which stores program data, Reset IC.

The Scaler gets the video signal converted analog to digital, interpolates input to 1600 * 1200 resolution signal and outputs 8-bit R, G, B signal to transmitter.

Especially pre-amp / ADC / Video controller/ Transmitter are merged to one chip 'MST9251A' by M-star.

This part transmit digital signal from the Scaler to the receiver of module.

2. Power Part.

This part consists of the 3.3V, 2.5V and 1.8V regulators to convert power which is provided 5V in Power board.

18V is provided for LCD panel .

Also, 5V is converted 3.3V, 2.5V and 1.8V by regulator. Converted power is provided for IC in the main board.

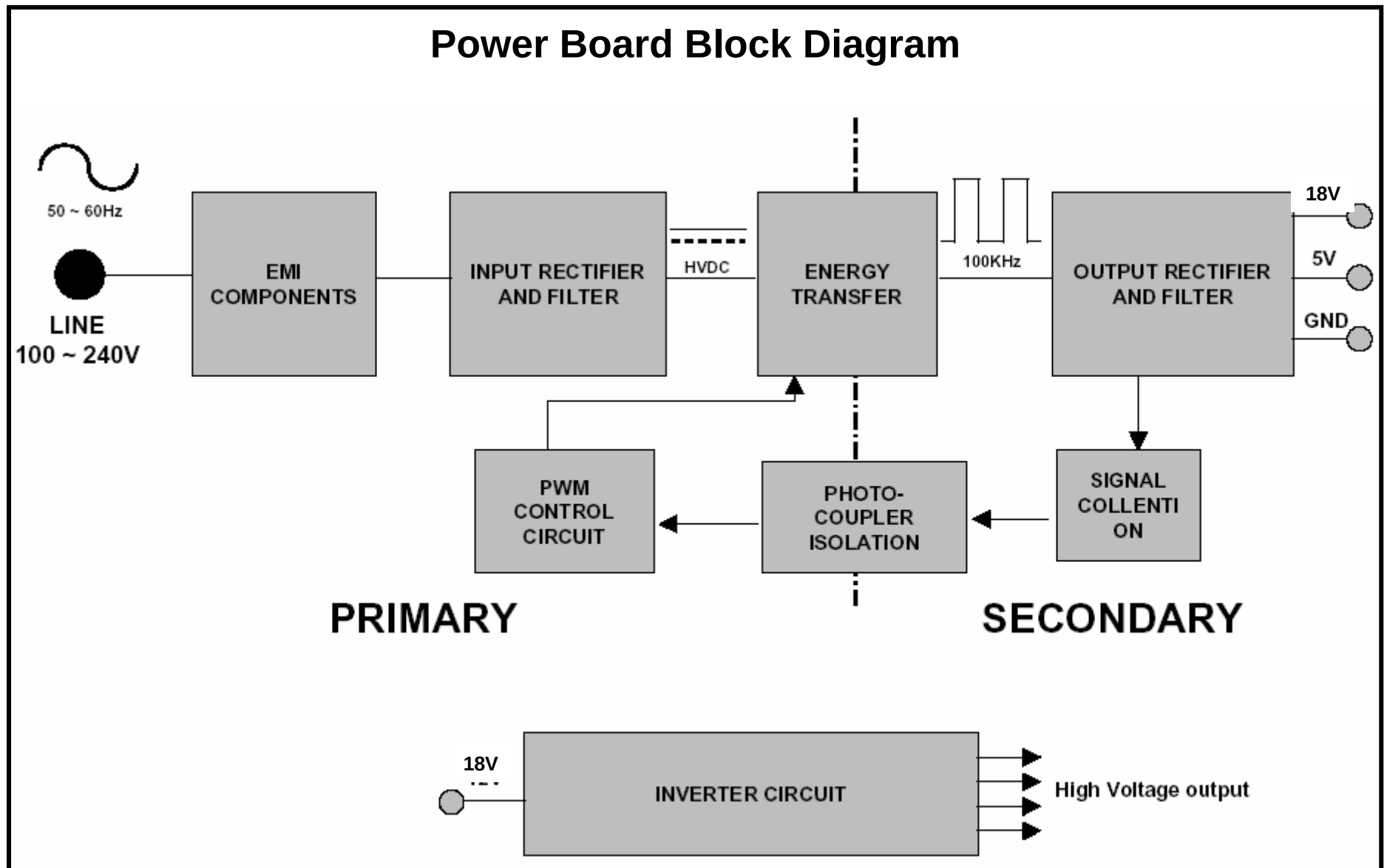
3. MICOM Part.

This part consists of EEPROM IC which stores control data the Micom.

The Micom distinguishes polarity and frequency of the H/V sync are supplied from signal cable.

The controlled data of each modes is stored in EEPROM.

Power Board Block Diagram



OPERATION DESCRIPTION OF LIPS

1. EMI components.

This part contains of EMI components to comply with global marketing EMI standards like FCC,VCCI CISPR, the circuit included a line-filter, across line capacitor and of course the primary protection fuse.

2. Input rectifier and filter.

This part function is for transfer the input AC voltage to a DC voltage through a bridge rectifier and a bulk capacitor.

3. Energy Transfer.

This part function is for transfer the primary energy to secondary through a power transformer.

4. Output rectifier and filter.

This part function is to make a pulse width modulation control and to provide the driver signal to power switch,to adjust the duty cycle during different AC input and output loading condition to achieve the dc output stabilized, and also the over power protection is also monitor by this part.

5. Photo-Coupler isolation.

This part function is to feed back the dc output changing status through a photo transistor to primary controller to achieve the stabilized dc output voltage.

6. Signal collection.

This part function is to collect the any change from the dc output and feed back to the primary through photo transistor

7. Inverter

The inverter converts from DC18V to AC 700V and operate back-light lamp of module.
