

CM2600 Flamingo 17" 70khz COLOR MONITOR

General Description :

The Flamingo 17" monitor is suitable for video timings in the range from 30-70khz horizontal and 50-120hz vertical frequencies.

1. Power supply.

The main power supply is build around the controller IC TDA1504, which drives the MOSFET 7105 (MTP6N60).

It is a fixed frequency (73khz) voltage mode configuration with secondary sensing via optocoupler.

The secondary supplies the following voltages: +180v, +80v, +13v, +8v, +5v, -6v, -13v.

For power saving and fault conditions, the IC can be set into low frequency burst mode via SCR 7154 (BT169B).

2. Micro processor.

The micro processor controls various functions:

H/V/SOG Sync input detection, sync output generation, I²C control for the Sync/Video/OSD processor, mode detection, S-cap switching, power saving On/Suspend/Off switching , User control and Factory alignment interfacing.

DDC can be either done via micro processor or external DDC EEPROM. Most User size/centering/geometry and color controls are done by I²C control, some auxiliary function re via PWM output.

3. Sync processing.

The H- and V-syncprocessing is taken care of by 7503 (TDA4854), which takes care of the following functions: H/V-sync tracking and catching, H-phase and Drive, E/W size and geometry, Video clamping and blanking, H-deflection B+ control, X-ray protection, V-size/shift

and linearity control and V-driver, power saving suspend.
All adjustment controls are controlled via I²C control.

4. Vertical output.

The vertical drive signal from the TDA4854 is amplified and boosted via the output booster 7404 (TDA4860). It operates as a power differential amplifier, supplied from +13v and -13v.
A +45v external voltage is used during flyback.

5. Horizontal defection.

The H-deflection is build around the diode modulator circuit, with takes care of generation of deflection current, E/W size and geometry control and EHT generation.

Three switchable S-capacitor stages are implementd, as well as a DC controllable linearity coil.

The Drive signal is amplified by the B+ controller 7621 (MTP6P20E), which amplifies the PWM signal from TDA4854.

6. Rotation circuit.

The screen rotation is controlled via a adjustable DC current into the CRT rotation coil. OP. Amp 7601 and pushpull booster take care of this.

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