

TOSHIBA Bi-CMOS INTEGRATED CIRCUIT SILICON MONOLITHIC

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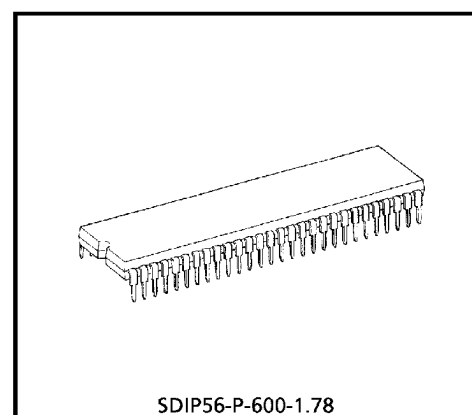
PAL / NTSC 1CHIP (IF + VCD PROCESSOR) IC

TB1231CN is the IF & Video processing IC for PAL/NTSC color TV system. This IC demodulates PAL/NTSC PIF, SIF and composite video signal to R/G/B primary colors and Audio signals. This IC can constitute Multi-Color System by combined with TA1275AZ (SECAM Processor).

TB1231CN has the analog R/G/B interface, therefore it is easy to make up PIP system by using this IC.

Because of the built-in video and audio switch, TB1231CN can deal with an external channel without extra switch.

TB1231CN has an I²C BUS interface. Various controls (Brightness, Color etc.) can be done via two bus lines.



SDIP56-P-600-1.78

Weight : 5.55g (Typ.)

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FEATURES**IF stage**

- Intercarrier Input
- Double Time Constant IF AGC
- Bus Controlled RF AGC
- Bus Controlled PIF VCO
- L-SECAM Demodulation
- PLL SIF Demodulation (For 4.5~6.5MHz multi-SIF, Thank coil-less)

Video stage

- Built-in Video Switch (2 Inputs / 1 Output)
- Built-in Chroma Trap
- Built-in Y Delay Line
- Black Expansion
- DL Type Sharpness Control

Chroma stage

- 1 X'tal for Multi-System (3.58MHz / 4.43MHz / M-PAL / N-PAL)
- Built-in 1H DL
- Built-in BPF / TOF
- SECAM R-Y, B-Y Input
- Automatic Color System Detection
- Fsc Continuous Wave Output

Text stage

- Fast Blanking
- Analog R / G / B Interface
- Cut-Off / Drive Adjustment
- ABCL

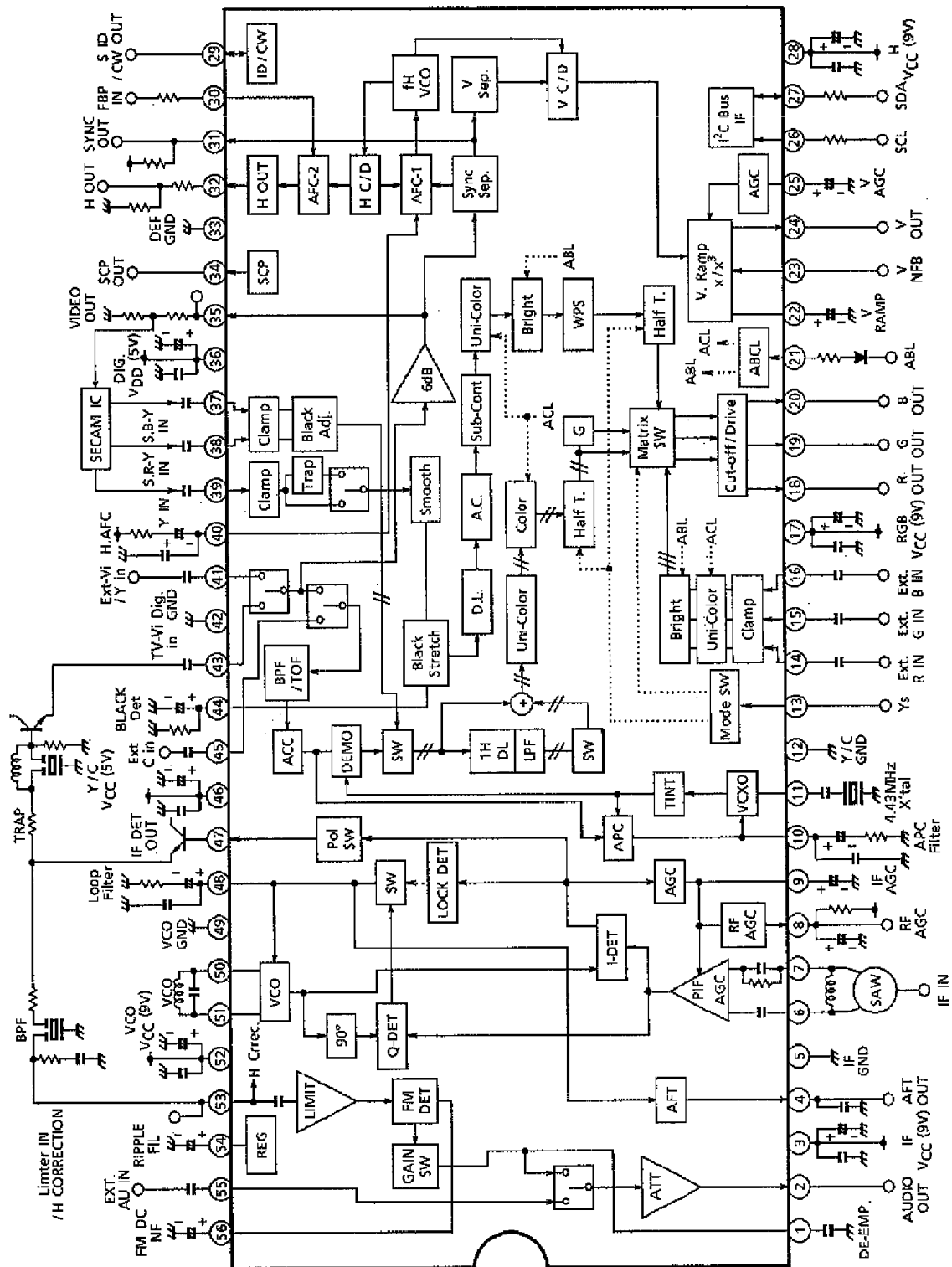
Deflection stage

- Resonator less H-VCO
- Dual Horizontal AFC
- Horizontal Phase Control
- Vertical Phase & Amplitude Control
- H / V Lock Detection
- Sand Castle Pulse Output (HD + VD + Gate Pulse)
- No Vertical Output Mode

Audio Stage

- Built-in Audio Switch (2 Inputs / 1 Output)
- Built-in Audio Attenuator

BLOCK DIAGRAM



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