M52771SP

NTSC/PAL TV SIGNAL PROCESSOR

DESCRIPTION

The M52771SP is a single chip CTV processor which has VIF/SIF, luminance, chrominance, mono sound, OSD display, RGB interface, and deflection.

And it is possible to control each parameters by I²C bus. A baseband 1H delay line is built-in, and conjunction with SECAM decoder M52325AP simplifies multi system CTV chassis.

FEATURES

- Built-in 1H Delay Line using Bi-CMOS technology
- Multistandard PLL demodulator for IF
- Alignment - free sound demodulator
- Flexible source selection with internal CVBS and external CVBS or Y/C input signal
- Audio switch integrated
- Integrated chroma trap and bandpass filters with auto-calibration
- Luminance delay line integrated
- RGB control circuit with cut-off and drive
- Linear RGB inputs and fast blanking
- Horizontal synchronaization with two control loops and alignment-free H-oscillator
- Vertical count-down circuit
- Vertical saw tooth generator integrated
- I²C Bus control of various functions
- Easy interfacing with SECAM decoder for multistandard applications
- Small amount of peripheral components

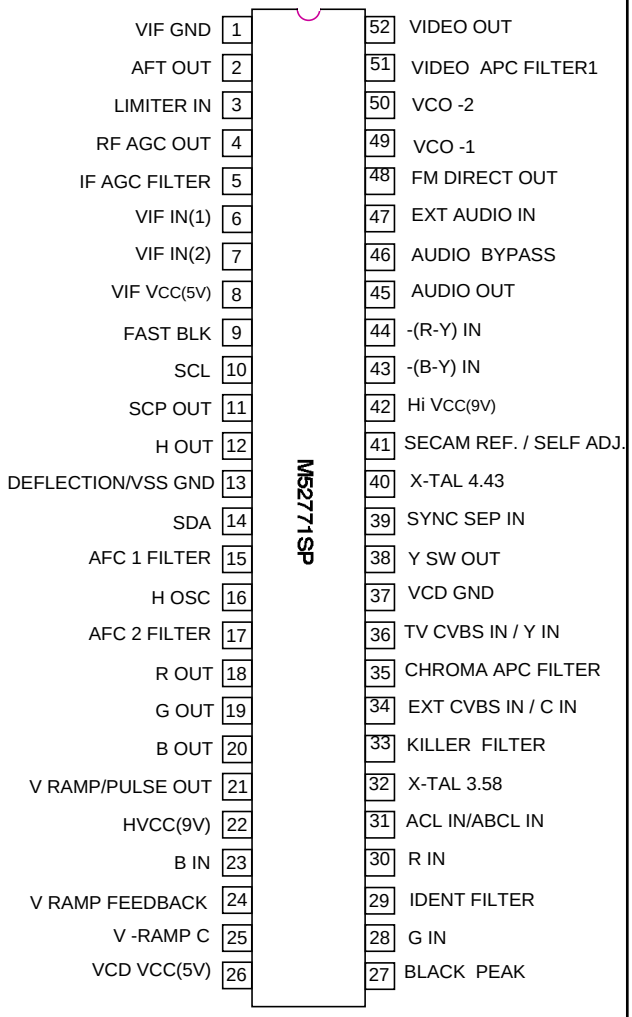
APPLICATION

NTSC/PAL TELEVISION

QUICK REFERENCE DATA

• Supply voltage	pin8(VIF), pin26(video/chroma)	5.0V
	pin22(Start-up), pin42(Output Stage)	9.0V
• Supply current	pin8 and pin26	107mA
	pin22 and pin42	56mA
• Input signals	VIF input sensitivity	48dBμ
	SIF limiting sensitivity	43dBμ
	External audio input	920mV rms
	External CVBS/Y inputs	1V$_{P-P}$
	External chroma input (burst amplitude)	0.3V$_{P-P}$
	External RGB inputs	0.7V$_{P-P}$
	Fast blanking Internal TV	0 to 1.3V
	External RGB	1.7 to 3.3V
	BLK	3.7 to 5V
	-(R-Y) input	1.05V$_{P-P}$
	-(B-Y) input	1.33V$_{P-P}$

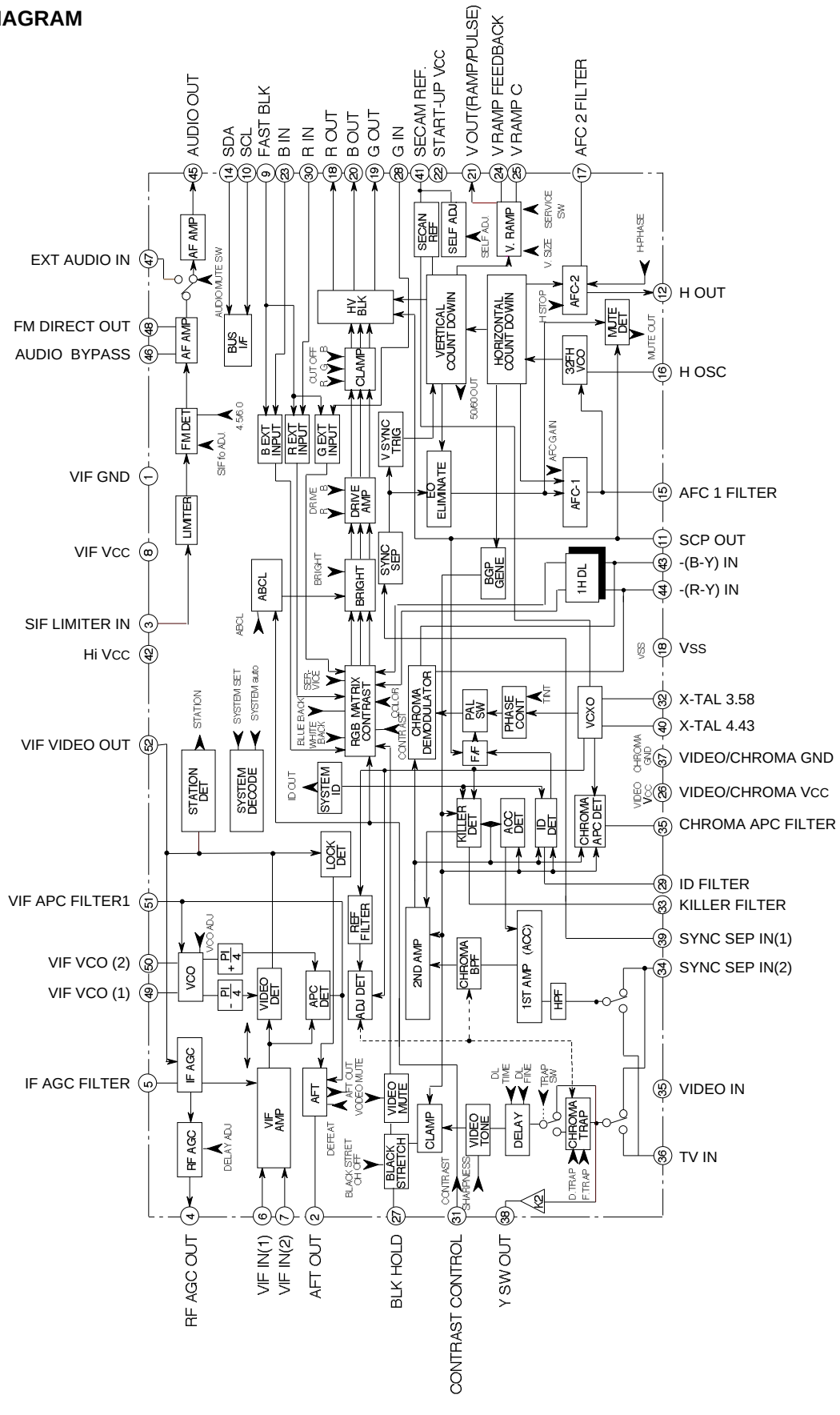
PIN CONFIGURATION (TOP VIEW)



QUTLINE 52P4B

• Output signals	VIF CVBS det out	2.2V$_{P-P}$
	RF AGC output range	0.3 to 8.7V
	Video switch out	2.1V$_{P-P}$
	RGB output Pedestal voltage	2.2V
	amplitude	4.2V$_{P-P}$
	Horizontal output amplitude	4.0V$_{P-P}$
	Vertical ramp amplitude	2.0V$_{P-P}$

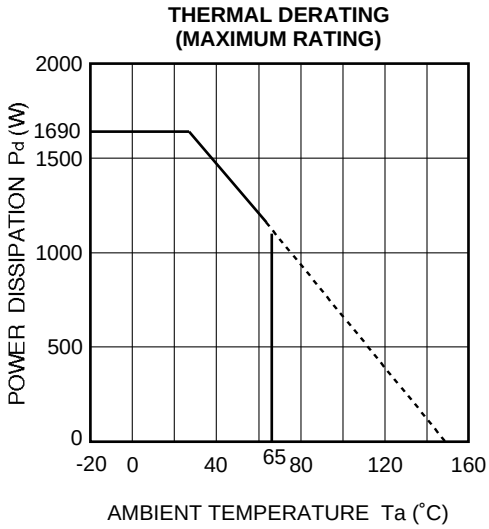
BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Ratings	Unit
V_{CC}	Supply voltage	0.0, 10.0	V
P_d	Power dissipation	1690	mW
Kq	Thermal derating	13.52	mW/˚C
T_{opr}	Operating temperature	-20 to +65	˚C
T_{stg}	Storage temperature	-40 to +125	˚C

TYPICAL CHARACTERISTICS



APPLICATION EXAMPLE

