

AN5374S

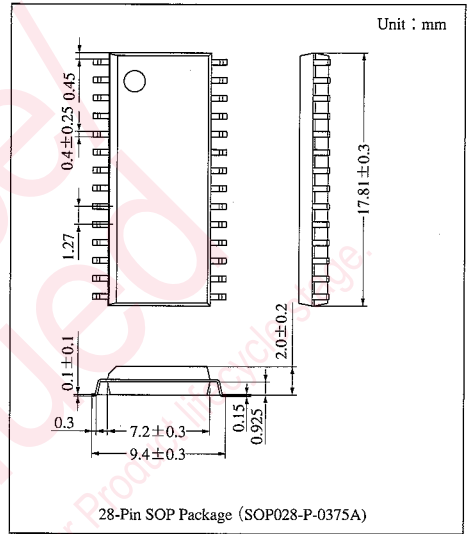
SECAM Trans-Code Processor IC for LCD TV

Overview

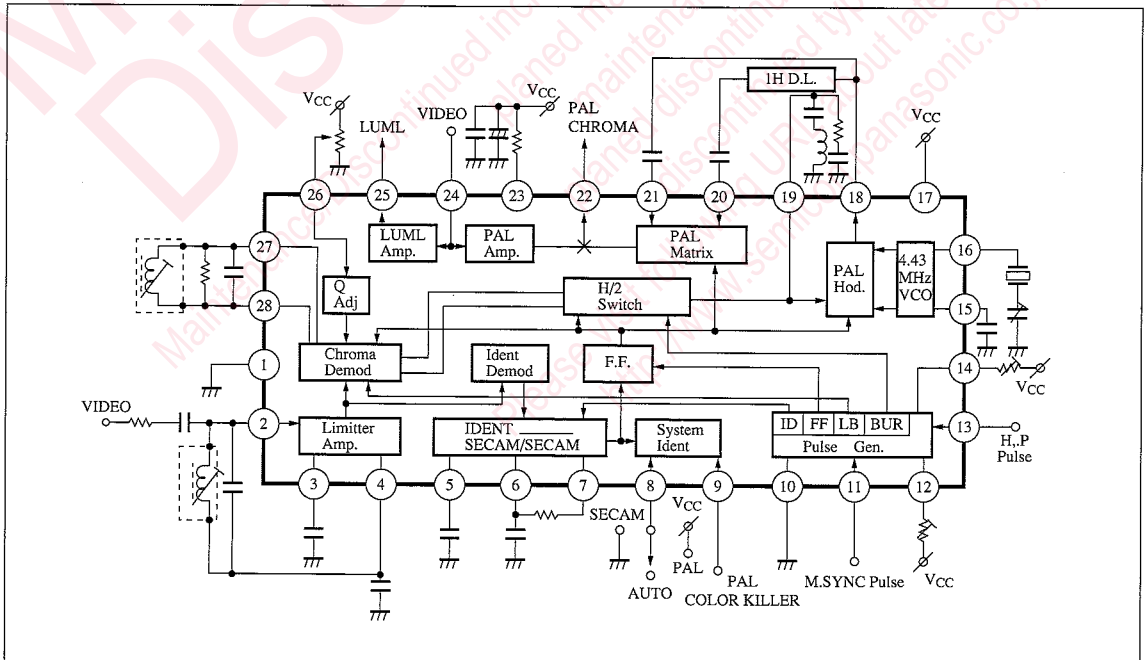
The AN5374S is a SECAM trans-code processor IC for LCD TV. It demodulates SECAM signals and converts to output quasi-PAL signal.

Features

- Low voltage, low current operation : $V_{CC}=4.7V$
 $I_{CC}=20mA$ typ.
- SECAM trans-code processing
- SECAM/PAL automatic discrimination



Block Diagram



■ Absolute Maximum Ratings

Parameter	Symbol	Rating		Unit
		min	max	
Supply voltage	V_{CC}	5.5		V
Supply current	I_{CC}	28		mA
Power dissipation	P_D	154		mW
Operating ambient temperature ^{note)}	T_{opr}	-20 to +70		°C
Storage temperature ^{note)}	T_{stg}	-55 to +125		°C
Pin② voltage	V_{2-1}	0	V_{CC}	V
Pin③ voltage	V_{3-1}	0	V_{CC}	V
Pin④ voltage	V_{4-1}	0	V_{CC}	V
Pin⑤ voltage	V_{5-1}	0	V_{CC}	V
Pin⑦ voltage	V_{7-1}	0	V_{CC}	V
Pin⑧ voltage	V_{8-1}	0	3.7	V
Pin⑨ voltage	V_{9-1}	0	V_{CC}	V
Pin⑩ voltage	V_{10-1}	0	V_{CC}	V
Pin⑪ voltage	V_{11-1}	0	V_{CC}	V
Pin⑬ voltage	V_{13-1}	0	V_{CC}	V
Pin⑮ voltage	V_{15-1}	0	V_{CC}	V
Pin⑰ voltage	V_{19-1}	0	V_{CC}	V
Pin⑳ voltage	V_{20-1}	0	V_{CC}	V
Pin㉑ voltage	V_{21-1}	0	V_{CC}	V
Pin㉒ voltage	V_{23-1}	0	V_{CC}	V
Pin㉓ voltage	V_{26-1}	0	V_{CC}	V
Pin㉔ voltage	V_{27-1}	$V_{28} - 3$	$V_{28} + 3$	V
Pin㉕ voltage	V_{28-1}	$V_{27} - 3$	$V_{27} + 3$	V
Pin⑥ current	I_6	-0.3	1	mA
Pin⑫ current	I_{12}	0	1	mA
Pin⑭ current	I_{14}	0	1	mA
Pin⑰ current	I_{16}	-2	0.4	mA
Pin⑱ current	I_{18}	-4	0.1	mA
Pin㉑ current	I_{22}	-4	0.1	mA
Pin㉒ current	I_{24}	-2	0	mA
Pin㉓ current	I_{25}	-4	0.1	mA

Note) $T_a = 25^\circ\text{C}$ except operating ambient temperature and storage temperature.

■ Recommended Operating Range ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Range
Operating supply voltage range	V_{CC}	4.2V to 5.2V

ICs for
TV

■ Pin Descriptions

Pin No.	Pin name	Pin No.	Pin name
1	GND	15	4.4MHz OSC DC playback capacitor
2	SECAM signal input	16	4.4MHz input (Crystal)
3	Limiter feedback	17	Power supply (4.7V Typ.)
4	Limiter feedback	18	PAL modulation signal output
5	Identification capacitor	19	De-emphasis circuit
6	System discriminant holding cap.	20	Delay signal input (DL)
7	System discriminant sensitivity setting	21	Direct signal input (ST)
8	System forcing switch	22	Chroma output
9	PAL color killer discriminant input	23	Reference bias power supply (V_X)
10	Sand castle pulse input (CRT)	24	Y/PAL amp. input
11	Hor. Sync. pulse input (\square)	25	Luminance output
12	Burst Insertion pulse rise position setting	26	FM Detection Q Adj.
13	HP pulse input (\square)	27	Discriminator
14	Identification detection pulse position setting	28	Discriminator

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