

UTC1379

LINEAR INTEGRATED CIRCUIT

1-CHIP DEFLECTION SYSTEM

DESCRIPTION

The UTC1379 consists of a vertical system including function and a horizontal system including an AFC function. It is for use in small size color TVs, B/W TV receivers and monitors.

FUNCTIONS

Horizontal Section

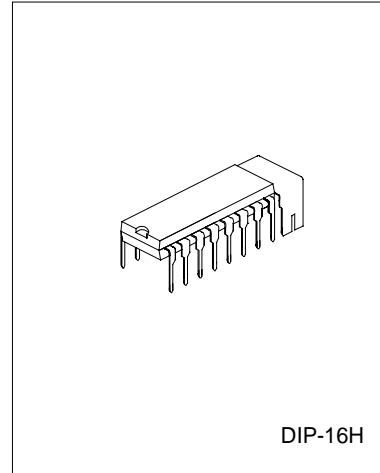
- *SYNC separation
- *Horizontal Oscillators
- *Horizontal Pre-drivers
- *Horizontal AFCs
- *Shunt Regulator(Typical 6.7V)

Vertical Section

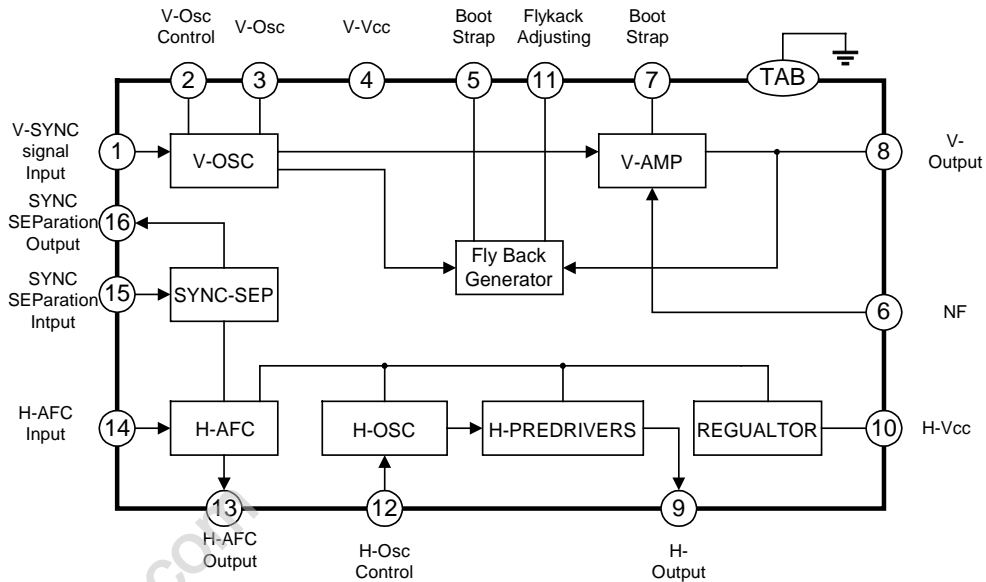
- *Vertical Oscillator
- *Vertical Pre-drivers
- *Vertical Output
- *Fly-back generators

FEATURES

- *Low Power consumption, direct deflection coil driving capability(Fly-back voltage two times as high supply voltage is supplied during fly-back period only)
- *Variable circuit of vertical retrace time on chip



BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

Characteristic	Symbol	Value	Unit
Vertical Supply Voltage	Vcc	15	V
Horizontal Supply Current	I10	30	mA
Vertical output Current	I8	-500~+500	mA peak
Horizontal output Current(pulse)	I9	-15~+5	mA
Fly-back generator Output current	I5	-500~+500	mA peak
Operating Temperature	Topr	-20 to +75	$^{\circ}\text{C}$
Storage Temperature	Tstg	-55 to 155	$^{\circ}\text{C}$
Power dissipation(note)	Pd	1.3	W

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$, Vcc=12V,,I10=12mAunless otherwise specified)

Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Recommended Vertical Supply Voltage	Vcc		9.6	12	14	V
Horizontal Supply Current	I10		6.5	12	18	mA
Vertical Supply current	ICC(1)	SWA=2		85	100	mA
Vertical supply Current	ICC(2)	No Input signal,SWA=2	6	12	20	mA
Vertical free Running Frequency	Fvo	SWA=1	55	60	65	Hz
Drift of Vertical Free-Running Frequency	fvo/Vcc	fvo=fvo(14.4V)-fvo(9.6V) SWA=2		0.8	2	Hz
	fvo/TA	fvo=fvo(-20 $^{\circ}\text{C}$)-fvo(70 $^{\circ}\text{C}$) SWA=2		1.5	2	Hz
Vertical output Center Voltage	Vmid	SWA=2	5.3	5.8	6.3	V
Vertical Output Current	I8	SWA=2	450	500	550	mA p-p
Horizontal Supply Voltage	V10	SWB=2	6.2	6.7	7.2	V
Horizontal free running frequency	fHO	I10=12mA SWB=1	15	15.75	16.5	kHz
Horizontal Output Pulse Width	tHPW	fHO=15.75kHz,SWB=2	23	25	27	us
Horizontal Output Current	I9	SWB=2	0.8	1.3	2.0	mA

