

Supersport

FEATURES

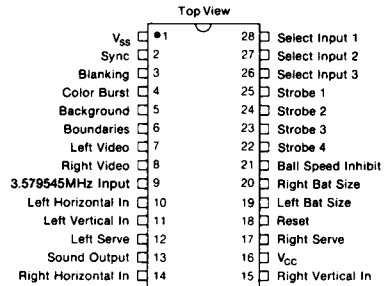
- Ten selectable games — tennis, hockey, soccer, squash, practice, gridball, basketball, basketball practice, one and two player target
- 625 Line (AY-3-8610) versions
- T.V. raster generator
- Two axis player motion
- Automatic on-screen scoring, 0-15
- Automatic ball speed-up after 7 hits or may be disabled by ball speed inhibit input
- Realistic ball service and scoring
- Score color keyed to player
- Independent player selectable bat size for handicapping
- Fast ball speed inhibit
- Five segment bats giving high, low, and horizontal ball angles
- Sound outputs for hit, rebound and score
- Shooting forwards in hockey and soccer

DESCRIPTION

The AY-3-8610 circuit has been designed to provide a TV 'game' function which gives active entertainment using a standard color or black and white domestic television receiver.

The circuit is intended to be battery powered and a minimum number of external components are required to complete the system.

PIN CONFIGURATION 28 LEAD DUAL IN LINE



VIDEO

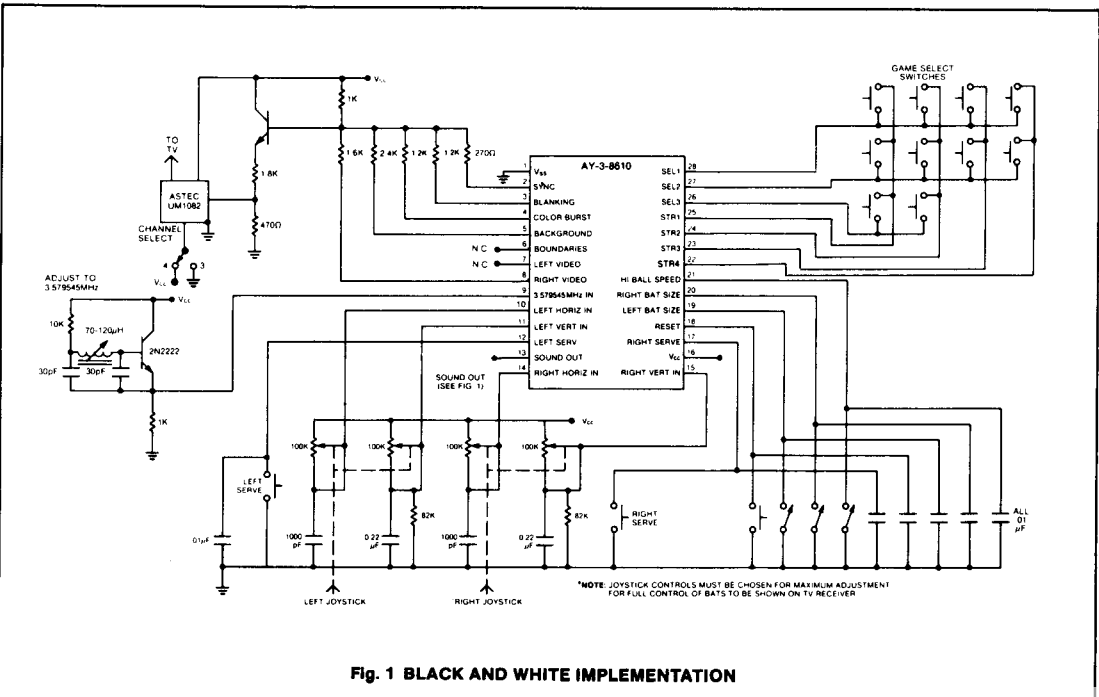


Fig. 1 BLACK AND WHITE IMPLEMENTATION

ELECTRICAL CHARACTERISTICS**Maximum Ratings***

Voltage on any Pin with Respect to V_{SS} Pin -0.2 to +12V
 Storage Temperature Range -20°C to +70°C
 Ambient Operating Temperature Range 0°C to +40°C

Standard Conditions (unless otherwise noted) $V_{CC} = +7.5$ to $+9.0$ V $V_{SS} = 0$ V

* Exceeding these ratings could cause permanent damage to these devices. This is a stress rating only and functional operation of these devices at these conditions is not implied — operating ranges are specified in Standard Conditions. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

Data labeled "typical" is presented for design guidance only and is not guaranteed.

Characteristics**	Min	Typ	Max	Units	Conditions
Clock Input					
Frequency	—	3.579545	—	MHz	
Logic '0'	0	—	0.5	V	50% duty cycle $\pm 5\%$
Logic '1'	$V_{CC} - 2$	—	V_{CC}	V	
Leakage	—	—	100	μ A	
Control Inputs 12, 17, 18, 19, 20, 21, 26, 27, 28					
Logic '0'	0	—	0.5	V	Max. contact resistance of 1K to V_{SS}
Logic '1'	$V_{CC} - 2$	—	V_{CC}	V	
Input Impedance	—	100	—	K Ω	Pull up to V_{CC}
Outputs Pins 2-8, & 13					
On	—	—	1	V	$I_{out} = 2$ mA
Off	—	—	100	μ A	$V_{out} = V_{CC}$ (open drain)
Outputs Pins 22-25					
On	—	—	1	V	$I_{out} = 0.5$ mA
Off	—	—	100	μ A	$V_{out} = V_{CC}$ (open drain)
Power supply current					
	—	—	60	mA	At $V_{CC} = +7.0$ V

**At 25°C & $V_{CC} = 6$ V