



## Description

PT2129A is a high performance electronic fan controller LSI. Speed control, on-timer, off-timer, rhythm wind, sleep mode, head swing and/or light controls are all built into a single chip. Indicator LED output, buzzer output, key control input, as well as remote control decoding circuitry are all provided to build a full function electronic fan with remote control capability having the highest performance with the least external components. Pin assignments and application circuit are optimized for easy PCB layout and cost saving for electronic fan application.

## Features

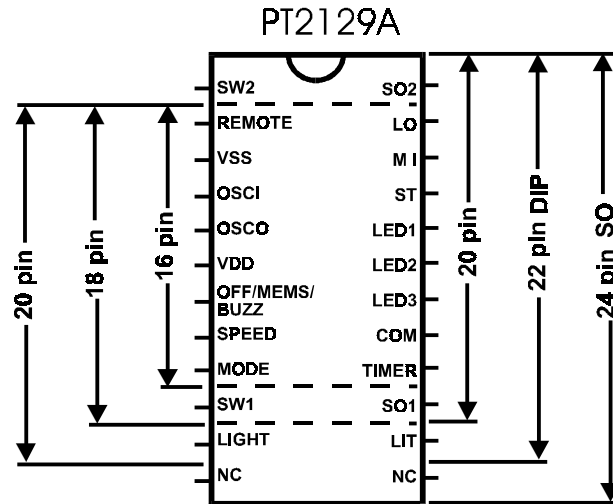
- High performance CMOS technology
- Low power consumption
- DIP or SO package(22 pin SO not available)
- Up to 3 dependent/independent swing-head/light outputs
- Available in 16, 18, 20, 22, 24 pin package for none, one set or two sets swing head and/or light control
- Built-in remote control decoding circuitry with mask option custom code***
- Optional independent light control
- 90 seconds cycle/6 seconds per step (off step 3 seconds) rhythm wind pattern
- Four operation modes: ordinary, rhythm, ordinary sleep and rhythm sleep.
- Memory start-up mode*
- Preset start-up timer up to 15 hours***
- 2-3 seconds middle wind start-up (mask option)

## Applications

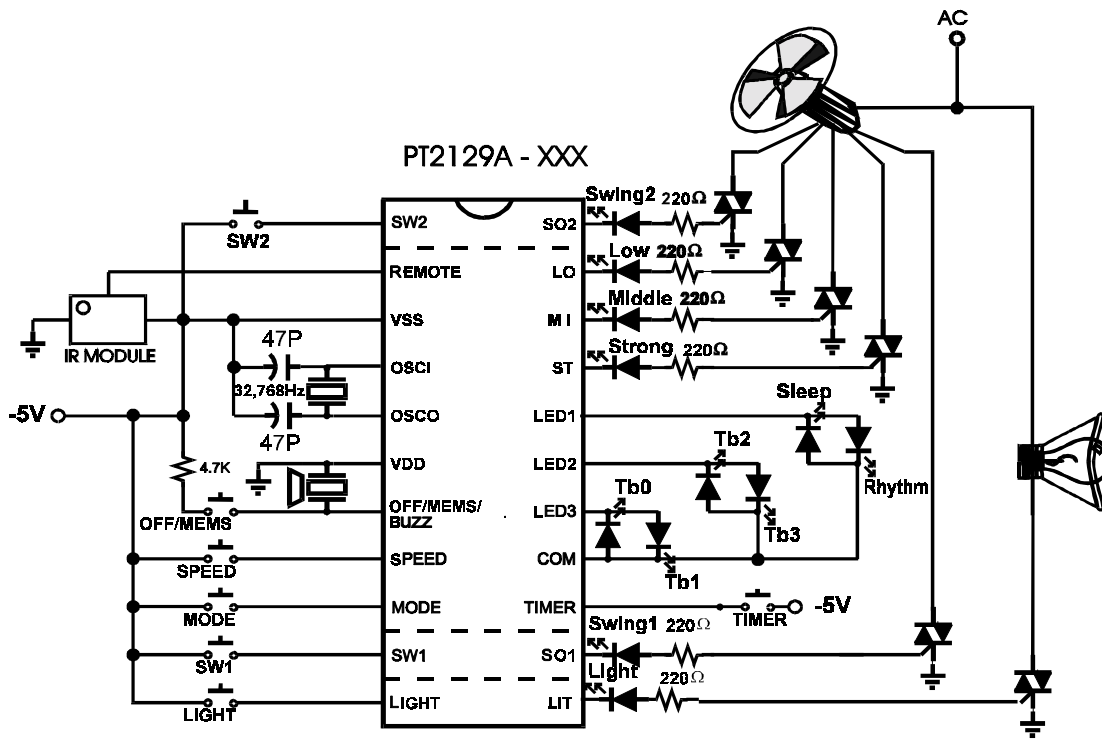
- Optimized for fan application
  - Suitable for heater fan, cooling fan, and other home appliances with remote control, timer and/or output level control
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### Pin Configuration



### Application Circuits

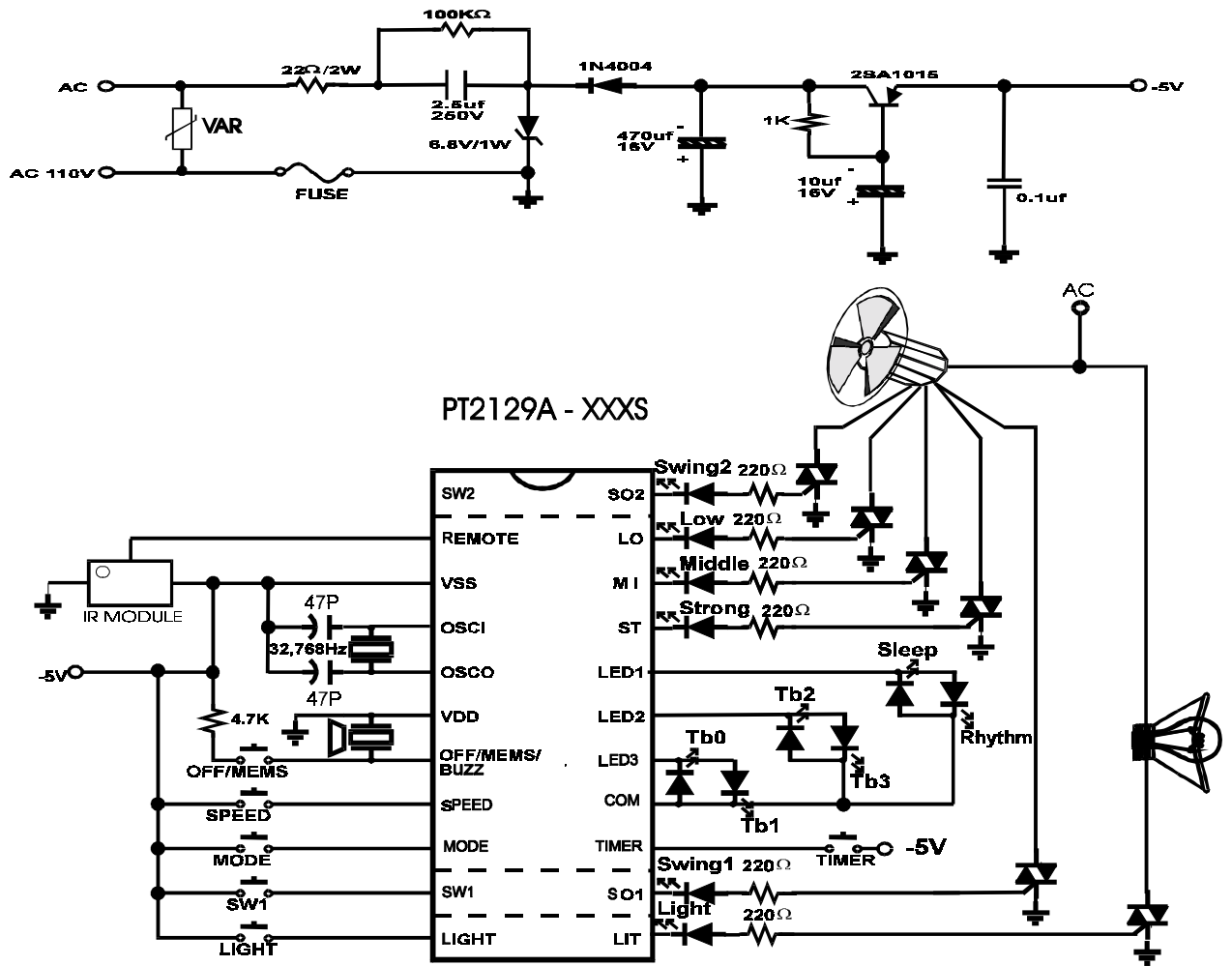


Swing Head 1 : Controlled by SW1  
Swing Head 2 : Controlled by SW2



Remote Fan Controller IC

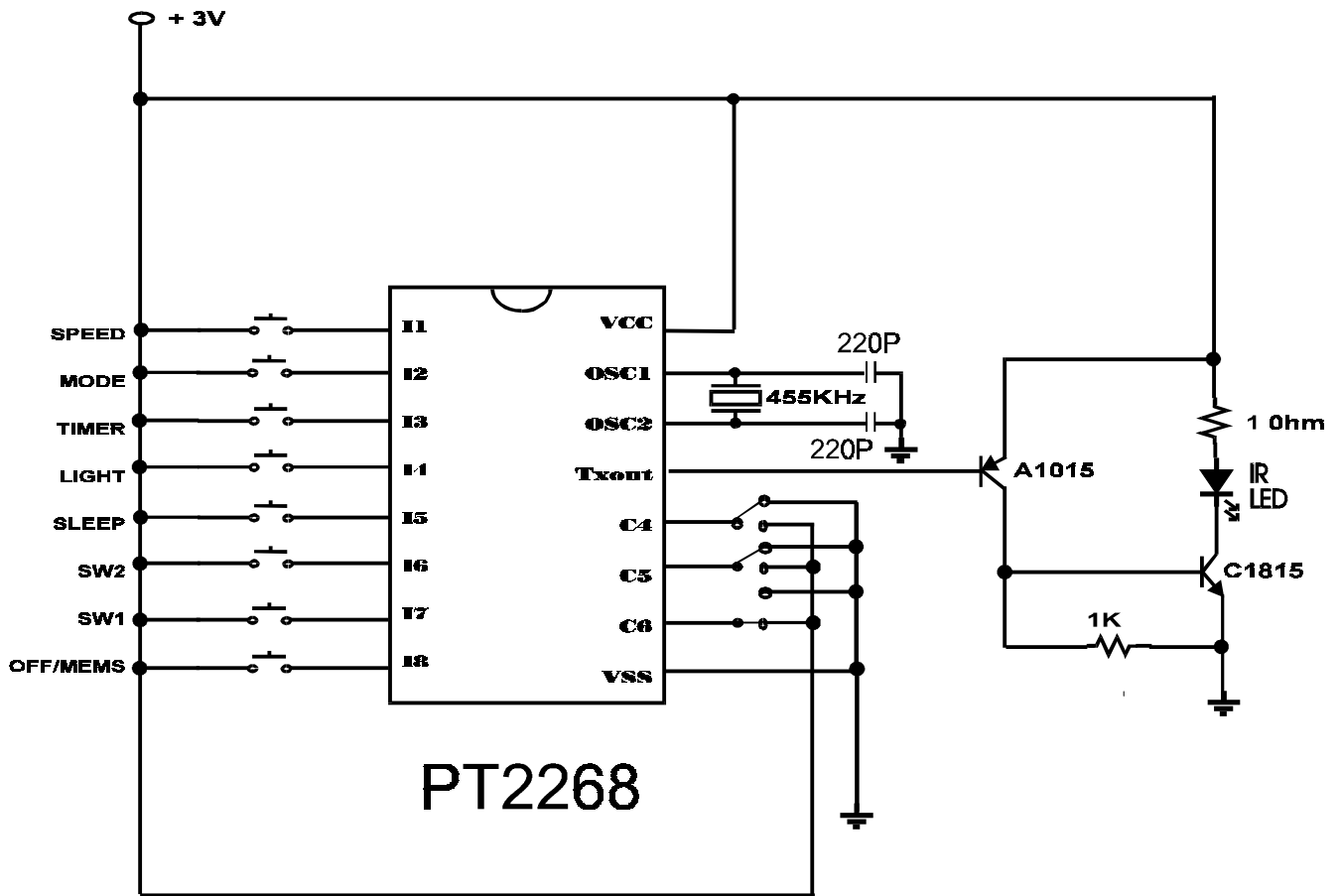
PT2129A



Two Swing Head: Controlled by SW1



## PT2268 IR Transmitter Application Circuit

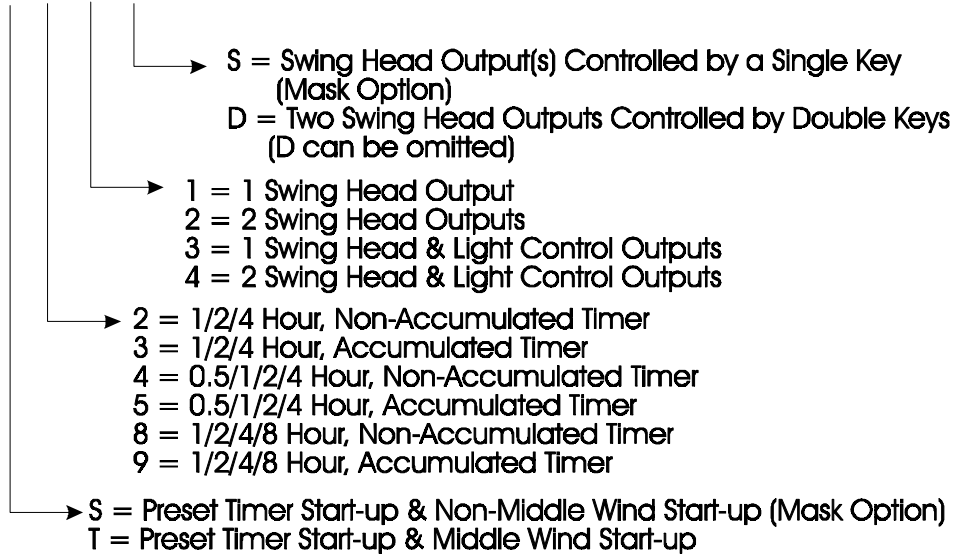


® It is recommended that PT2268 be used with PT2129A.  
For this circuit, the "Start Word" is "00110011".



## Ordering Information

PT2129A-XXXX



**Note: PT2129A Standard IC: PT2129A-T81. Other options are available upon request and require NRE**

**Charge and minimum order quantity. Please contact PTC or your local agent for details.**

## Various Options

PT2129A accommodates many options possibilities. Please contact PTC or its agents for details. The options are summarized below:

**Package Option:**

Either 16, 18, 20, 22 or 24 pin package.

**Bonding Option:**

ACC : Accumulated or non-accumulated timer option.  
T0.5 : Timer scale, 0.5/1/2/4 hour timer or 1/2/4/8 timer option.  
3LT: Timer level option, either 4 levels or 3 levels.

**Metal Option:**

b3 ~ b6 : Replaces default customer codes  
NMS : Disable middle wind startup function



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Remote Fan Controller IC

PT2129A

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- 2SW : Dependent/Independent swing head control option.
- RSL : SLEEP key startup mode option - select RSL or SLP mode for SLEEP key start-up.