



## Description

PT2128A is a high performance electronic fan controller LSI. Speed control, off-timer, rhythm wind, sleep mode, head swing and/or light control 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 assignment and application circuit are optimized for easy PCB layout and cost saving for electronic fan application.

## Features

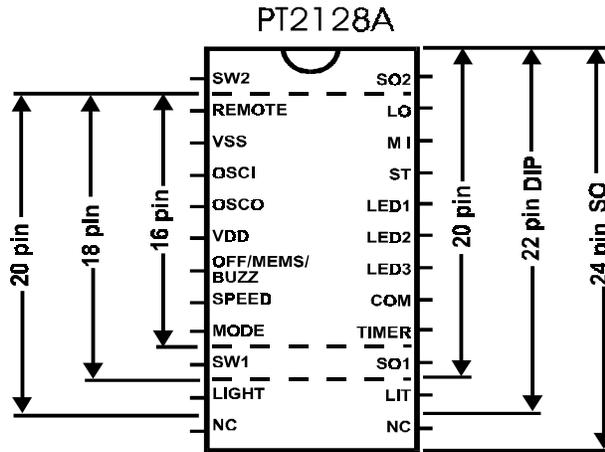
- High performance CMOS technology
- Low power consumption
- DIP or SO package(22 pin SO not available)
- Up to 3 dependent/independent swing-head/light output
  
- Available in 16, 18, 20, 22, 24 pin package for none, one set or two sets of swing head and/or light control
- Built-in remote control decoding 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*
- 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



### Ordering Information

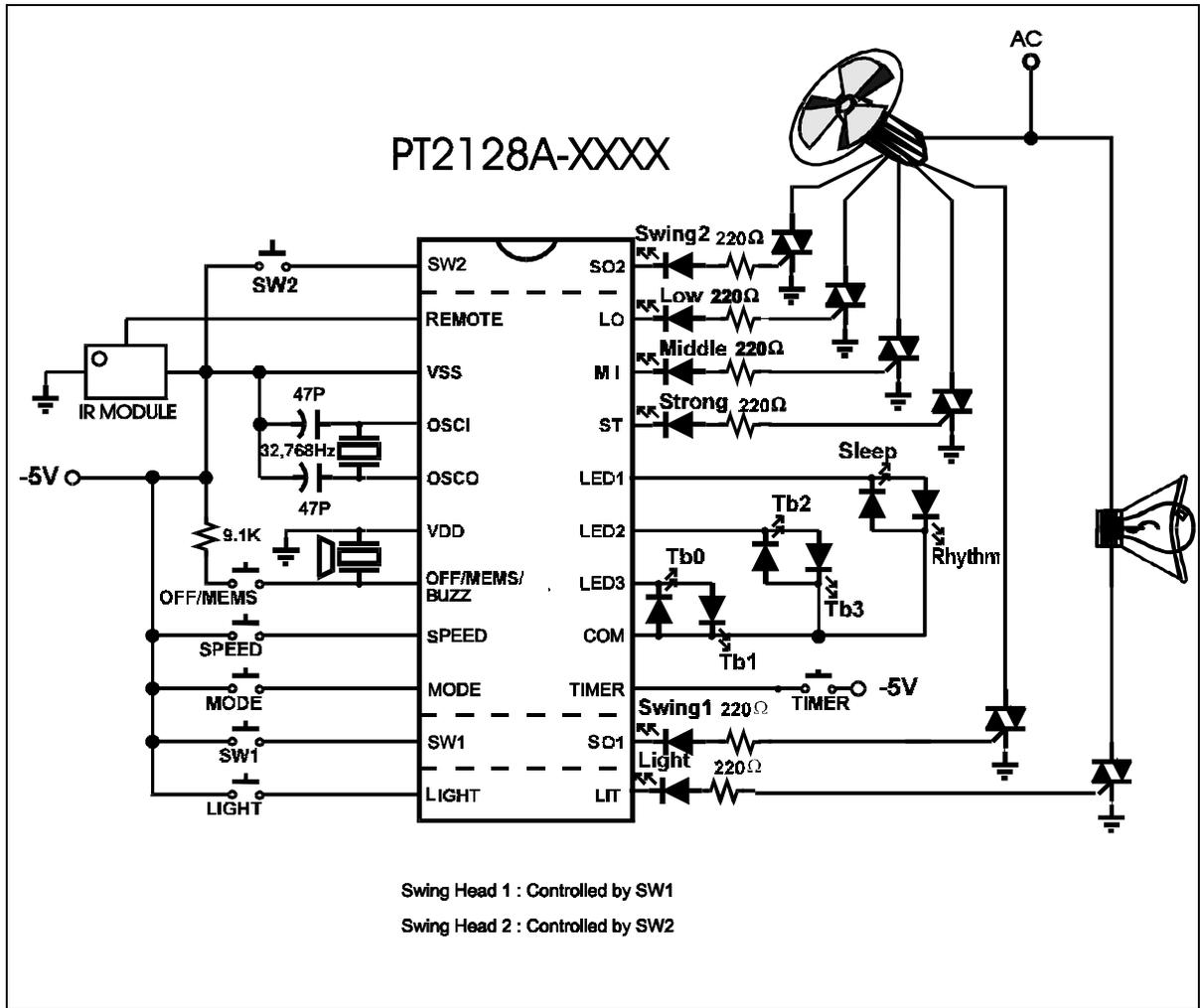
PT2128A - X X X X

- S = Swing Head Output(s) Controlled by a Single Key (Mask Option)
- D = Two Swing Head Outputs Controlled by Double Keys (D can be omitted)
- 0 = No Swing Head Output
- 1 = 1 Swing Head Output
- 2 = 2 Swing Head Outputs
- 3 = 1 Swing Head & Light Control Outputs
- 4 = 2 Swing Head & Light Control Outputs
- 2 = 1/2/4 Hour, Non-Accumulated Timer
- 3 = 1/2/4 Hour, Accumulated Timer
- 4 = 0.5/1/2/4 Hour, Non-Accumulated Timer
- 5 = 0.5/1/2/4 Hour, Accumulated Timer
- 8 = 1/2/4/8 Hour, Non-Accumulated Timer
- 9 = 1/2/4/8 Hour, Accumulated Timer
- B = Non-Memory Start-up & Non-Middle Wind Start-up (Mask Option)
- C = Non-Memory Start-up & Middle Wind Start-up
- L = Memory Start-up & Non-Middle Wind Start-up (Mask Option)
- M = Memory Start-up & Middle Wind Start-up

Note: PT2128A Standard ICs: PT2128A-C31, PT2128A-C51, PT2128A-C80, PT2128A-C81, PT2128A-C82, PT2128A-C83, PT2128A-C92. Other options are available upon request and require a minimum order quantity. Please contact PTC or your local agent for details.



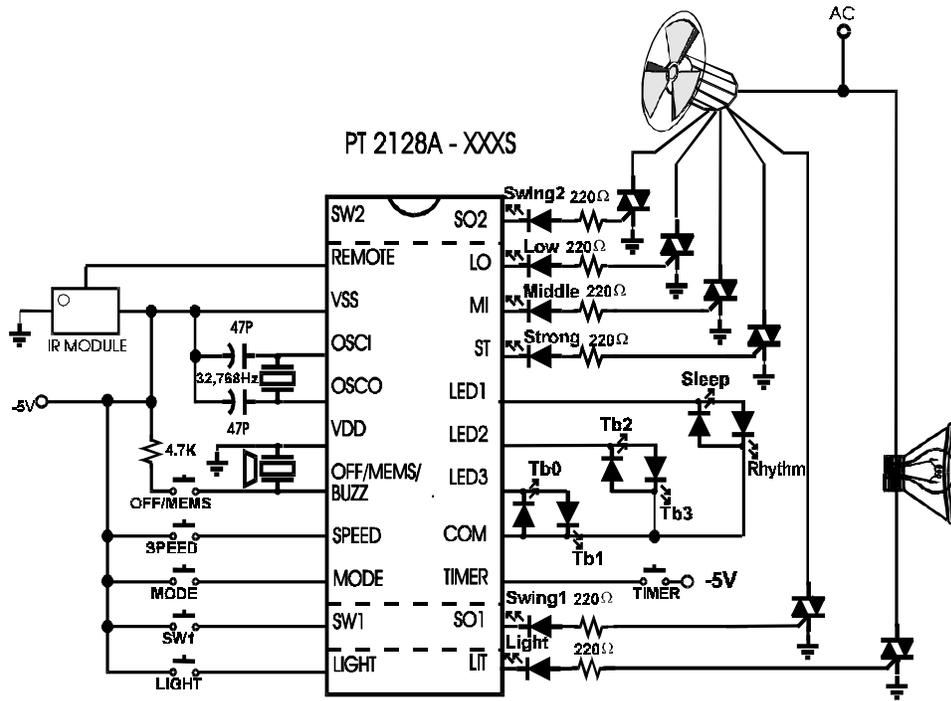
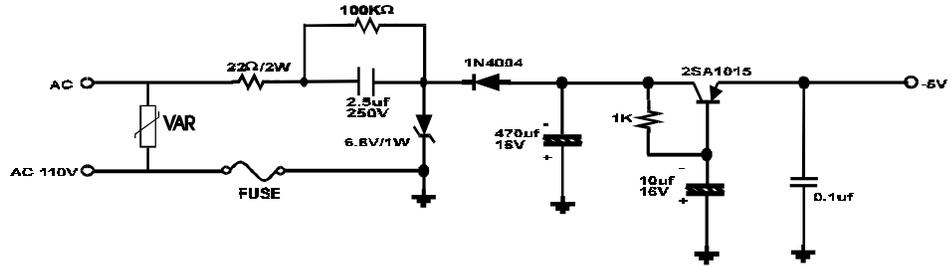
### Application Circuits





Remote Fan Controller IC

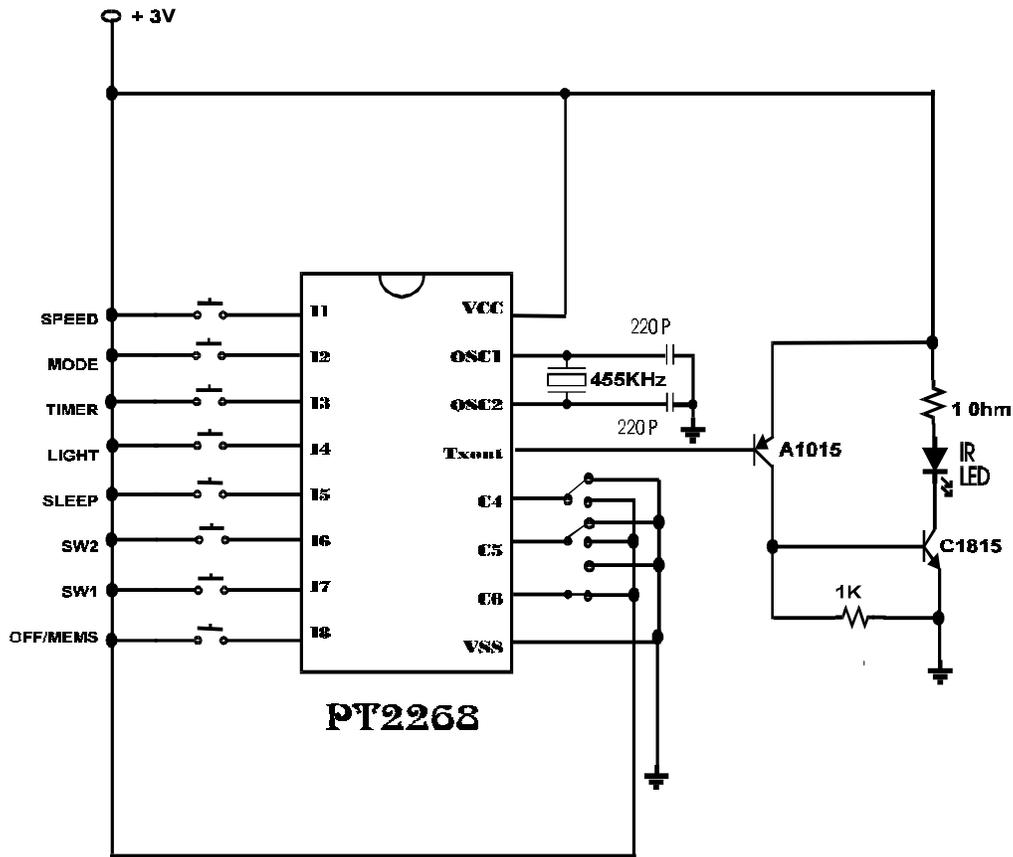
PT2128A



Two Swing Head : Controlled by SW1



### PT2268 IR Transmitter Application Circuit



® PT2268 is recommended to be used with PT2128A  
For this circuit, the "Start Word" is "00110011"