

# Power Management Control IC for TV Platform

## 1. General Description

FA6601 is a high-efficiency power management control IC which is specified for TV platform. FA6601 is used with a 12V power supply and a 5V standby power supply; besides, it integrates two synchronous PWM controllers, one regulator, monitoring, and control functions into a 32 pin QFN package.

A brief analog block description of FA6601 describes here. LDO1 provides output current 350mA with output voltage  $3.3V \pm 2\%$ . PWM1 and PWM2 are the synchronous buck PWM DC /DC controllers with internal 600kHz fixed frequency oscillator which cover 0 to 100% duty ratio.

The high performance digital block consists of internal soft-start, monitoring and protection functions, LED function which controlled by host and I<sup>2</sup>C interface and provides adjustable linear controllers mechanism for dynamic over-current/ under-voltage use.

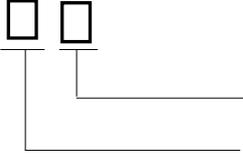
FA6601 provides two working modes. At the normal mode, it works with a system supplies 12V power and a 5V standby power. At the suspend mode, it works with supplying 5V standby power or a 12V power supply only system; besides, it can wake up the TV system from the suspend mode by KEYPAD/IR/CEC function calls.

### Features

- ◆ Provide One LDO
  - LDO1 output current is 350mA and output voltage is  $3.3V \pm 2\%$
  - Power up soft-start and under-voltage monitoring for the linear regulator
- ◆ Provide Two PWM Controllers
  - PWM1 and PWM2 synchronous buck PWM DC/DC controllers
  - 600 kHz fixed frequency oscillator
  - Full 0 to 100% duty ratio
  - Internal Soft-start
  - Operating by 12V supply voltage
  - Over current protection(OCP)
  - [Under voltage protection \(UVP\)](#)
- ◆ Digital Control Functions
  - Programmable KEYPAD/IR/CEC for FA6601 wake up
  - Provide reset signal (RESET OUT) and interrupt signal to host
  - Programmable power LED control
  - Integrate I<sup>2</sup>C interface
- ◆ 32 pin QFN package, 12V and standby 5V operation

## Ordering Information

FA6601



Packing Code

Package Type

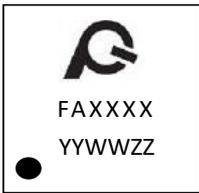
Package Type

N: QFN 4x4mm<sup>2</sup>-32L

Packing Code

R: Tape & Reel

## Marking Information



FA: Company Name

XXXX :Product Code

YY: Year 2014→14

WW: Week 01~53

ZZ: Series Code