Digital Analog Mix IC with Audio, Video and EPHY Modules for TV-BOX Application

FEATURES

- Support One I2S/PCM interface
- Two audio digital-to-analog(DAC) channels
  - 100dBSNR@A-weigh
  - Supports DAC Sample Rates from 8KHz to 192KHz
- Support analog/ digital volume control
- Two differential microphone inputs
- One lineout output with voltage ramp
- Two audio analog-to-digital(ADC) channels
  - 92dBSNR@A-weight
  - Supports ADC Sample Rates from 8KHz to 48KHz
- Support Automatic Gain Control(AGC) adjusting the ADC recording output
- Support CCIR656 and Serial YUV interface
- 1 CVBS out, Support NTSC and PAL
- CVBS Out Plug status auto detecting
- Support MII and RMII interface
- Fully IEEE 802.3 10/100 Base-TX compliant and supports EEE
- Auto negotiation and parallel detection capability for automatic speed and duplex selection
- Programmable loopback mode for diagnostic
- Supports WOL (Wake-On-LAN) functionality
- Design for testability with extensive testability feature and 95% fault coverage
- Power consumption(100Base-TX) less than 140mW
- TWI/RSB control interface,TWI up to 400Kbps, RSB up to 10Mbps
- Integrate Codec LDO,Core LDO,single3.3V supply for chip
- Internal OSC,32K clock output
- Internal RTC function
- 68 pin , 8×8 mm^2 QFN Package

APPLICATIONS

- TV-Box

DESCRIPTION

The AC200 is a digital analog mix IC, which use in TV-BOX. It is composed of Audio,Video and EPHY modules.

Audio communicate with SoC in I2S interface，transform I2S to 2 MIC and 1 Line out.

Video communicate with SoC in CCIR656 interface, transform CCIR656 to Composite Video Broadcast Signal.

EPHY communicate with SoC in MII/RMII interface, transform to 100M Ethernet.

AC200 is available in 8mm x 8mm 68-pin QFN package, and the package is Pb free.
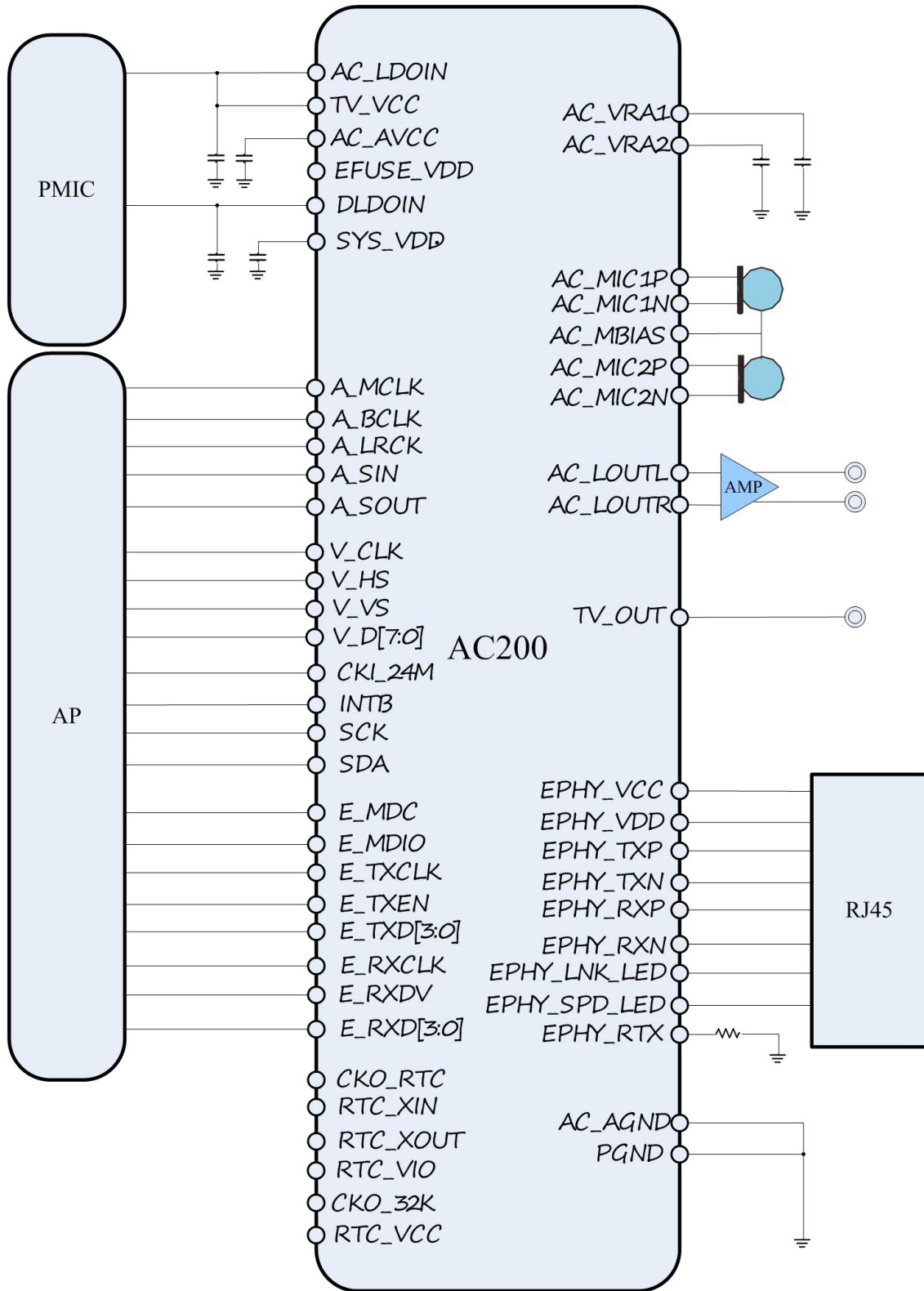
TYPICAL APPLICATION DIAGRAM

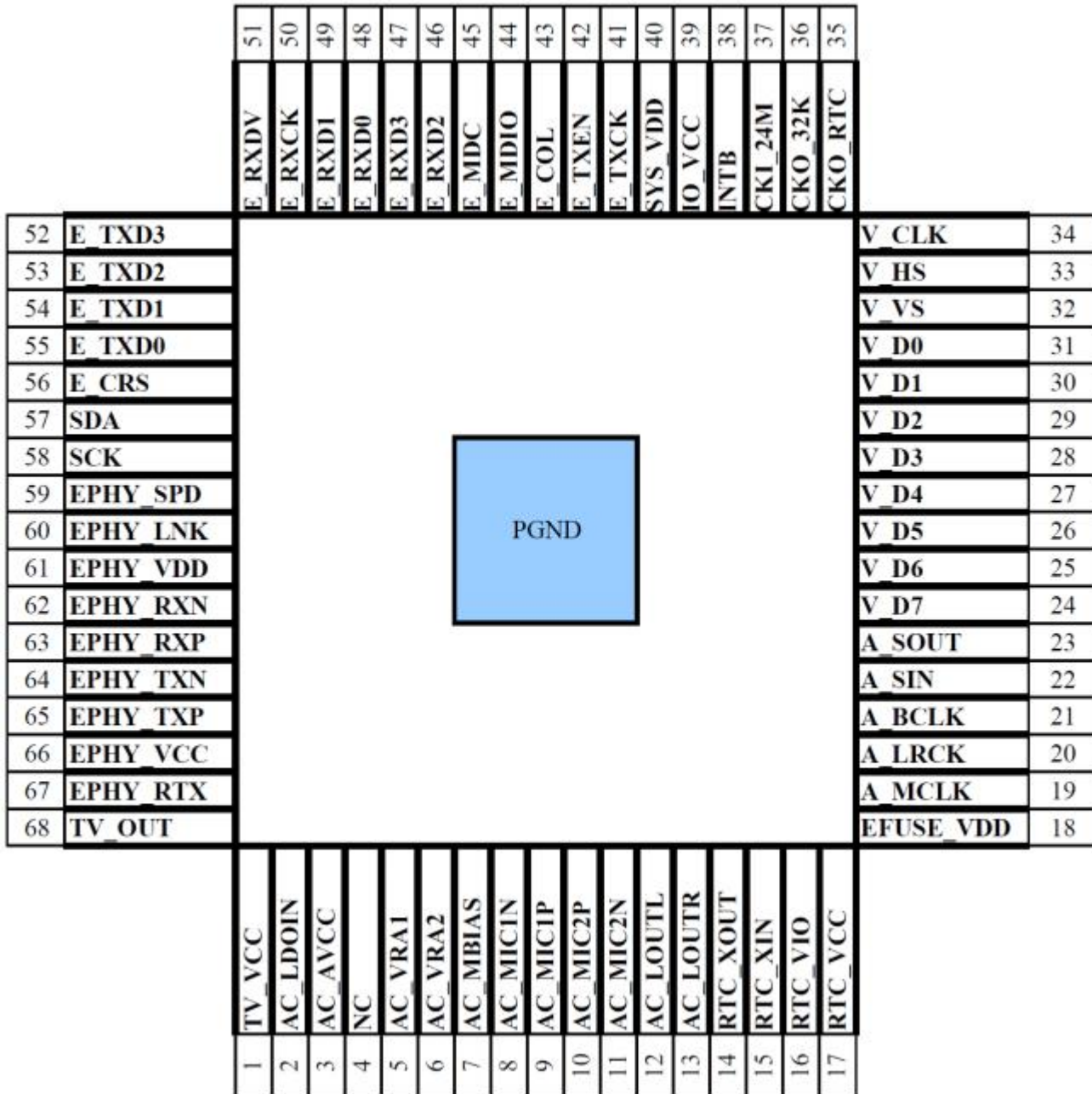**Figure 1. Typical Application Circuit**

PIN CONFIGURATION

Figure 2. AC200 Pin Configuration

DECLARATION

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