



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 mm² 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

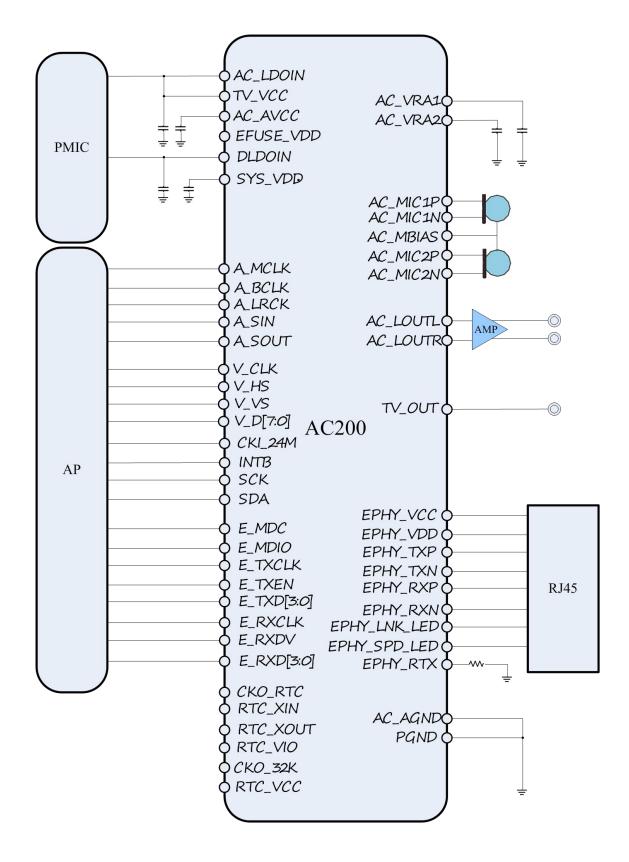


Figure 1. Typical Application Circuit





PIN CONFIGURATION

	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35		
	E_RXDV	E_RXCK	E_RXD1	E_RXD0	E_RXD3	E_RXD2	E_MDC	E_MDIO	E_COL	E_TXEN	E_TXCK	aav_sys	IO_VCC	INTB	CKI_24M	CK0_32K	CK0_RTC		<i>a</i>
52 E_TXD3	Г																Ĩ	V_CLK	34
53 E_TXD2																		V_HS	33
54 E_TXD1																		V_VS	32
55 E_TXD0																		V_D0	31
56 E_CRS																		V_D1	30
57 SDA							_											V_D2	29
58 SCK							-											V_D3	28
59 EPHY_SPD																		V_D4	27
60 EPHY_LNK								Р	GN	D								V_D5	26
61 EPHY_VDD																		V_D6	25
62 EPHY_RXN																		V_D7	24
63 EPHY_RXP																		A_SOUT	23
64 EPHY_TXN																		A_SIN	22
65 EPHY_TXP																		A_BCLK	21
66 EPHY_VCC																		A_LRCK	20
67 EPHY_RTX																		A_MCLK	19
68 TV_OUT			_	_	_	_	_		_									EFUSE_VDD	18
	1 TV_VCC	2 AC_LDOIN	3 AC_AVCC	4 NC	5 AC_VRA1	6 AC_VRA2	7 AC_MBIAS	8 AC_MICIN	9 AC_MICIP	10 AC_MIC2P	11 AC_MIC2N	12 AC_LOUTL	13 AC_LOUTR	14 RTC_XOUT	15 RTC_XIN	16 RTC_VIO	17 RTC_VCC	8	

Figure 2. AC200 Pin Configuration

DECLARATION

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