

This diagram illustrates the hardware design for a system, featuring three main ICs: U2A (GS2971A), U2B (GS2971A), and U2C (GS2971A).

SDI deserializer

U2A (GS2971A) is configured as an SDI deserializer. It receives PCLK, TP1, TP2, TP19, TP20, TP21, and TP22 signals. It outputs DOUT12, DOUT13, DOUT14, DOUT15, DOUT16, DOUT17, DOUT18, and DOUT19. It also outputs SDO_P, SDO_N, and SDO.

U2B (GS2971A) is configured as an SDI deserializer. It receives LB_CONT, LF, VBG, XTAL1, XTAL2, TP17, AGCN, AGCP, SDLP, and SDLN signals. It outputs DVB_ASI, SMPTE_BYPASS, 20bit/10bit, AUDIO_EN/DIS, CS_TMS, IOPROC_EN/DIS, JTAG_HOST, RC_BYP, RESET_TRST, SCLK_TCK, SDIN_TDI, SDO_EN/DIS, STANDBY, SW_EN, TIM_R61, SDOOUT_TDO, and SDOOUT_TDO.

U2C (GS2971A) is configured as an SDI deserializer. It receives VCO_VDD, PLL_VDD, PLL_GND, PLL_GND, A_VDD, A_GND, A_GND, A_GND, A_GND, A_GND, EQ_VDD, BUFF_VDD, EQ_GND, BUFF_GND, CORE_VDD, CORE_GND, CORE_GND, CORE_GND, CORE_GND, IO_VDD, IO_GND, IO_GND, IO_GND, IO_GND, and IO_GND signals. It outputs VCO_GND, PLL_GND, PLL_GND, A_GND, A_GND, A_GND, A_GND, A_GND, EQ_GND, BUFF_GND, CORE_GND, CORE_GND, CORE_GND, CORE_GND, CORE_GND, and IO_GND.

Programming Interace

The programming interface is connected to the system via a J6 connector. It includes signals for USER_SDA, USER_SCL, CRESSET_B, and GNDREF.

GS_I2C

The GS_I2C interface is connected to the system via a J5 connector. It includes signals for SDA_GS, SCL_GS, and GNDREF.

Logotypes

The logotypes for the system are provided, including the N1 and N2 logos.

SDI output

The SDI output is connected to the system via a J1 connector. It includes signals for SDO_P, SDO_N, SDO, and GNDREF.

SDI input

The SDI input is connected to the system via a J2 connector. It includes signals for SDO_P, SDO_N, SDO, and GNDREF.

Filtering

The filtering section shows the connection of the SDI input to the system via a J2 connector. It includes signals for SDO_P, SDO_N, SDO, and GNDREF.

RESET

The reset section shows the connection of the SDI input to the system via a J2 connector. It includes signals for SDO_P, SDO_N, SDO, and GNDREF.

Place close to GS2971A

The place close to GS2971A section shows the connection of the SDI input to the system via a J2 connector. It includes signals for SDO_P, SDO_N, SDO, and GNDREF.

MIPI connector

The MIPI connector section shows the connection of the SDI input to the system via a J2 connector. It includes signals for SDO_P, SDO_N, SDO, and GNDREF.

I2C to SPI bridge

The I2C to SPI bridge section shows the connection of the SDI input to the system via a J2 connector. It includes signals for SDO_P, SDO_N, SDO, and GNDREF.

I2S connector

The I2S connector section shows the connection of the SDI input to the system via a J2 connector. It includes signals for SDO_P, SDO_N, SDO, and GNDREF.

Pull-up resistors

The pull-up resistors section shows the connection of the SDI input to the system via a J2 connector. It includes signals for SDO_P, SDO_N, SDO, and GNDREF.

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