

SDI deserializer

U2A
GS2971A
Semtech

U2B
GS2971A
Semtech

U2C
GS2971A
Semtech

Programming interface

J6
GRP8052VWVN-RC

GS_I2C

J5
GRP8041VWVN-RC

Logotypes

Logo N1
antimicro_logo

Logo N2
osthw_logo

SDI output

U3
GS2988-INE3
Semtech

SDI input

Filtering

Place close to GS2971A

RESET

MIPi connector

I2C to SPI bridge

I2S connector

Pull-up resistors

The first diagram shows the IO_VDD pin connected to the +3.3V supply through a 0R resistor (R21). The supply is also connected to GNDREF through a 10nF capacitor (C19). The IO_VDD pin is connected to GND through a 10nF capacitor (C32). The supply is also connected to GND through a 1uF capacitor (C24). The IO_VDD pin is connected to GND through a 1uF capacitor (C28).

The second diagram shows the IO_VDD pin connected to the +3.3V supply through a 0R resistor (R23). The supply is also connected to GNDREF through a 10nF capacitor (C20). The IO_VDD pin is connected to GND through a 10nF capacitor (C33). The supply is also connected to GND through a 1uF capacitor (C25). The IO_VDD pin is connected to GND through a 1uF capacitor (C29).

The third diagram shows the IO_VDD pin connected to the +3.3V supply through a 0R resistor (R24). The supply is also connected to GNDREF through a 10nF capacitor (C21). The IO_VDD pin is connected to GND through a 10nF capacitor (C34). The supply is also connected to GND through a 1uF capacitor (C26). The IO_VDD pin is connected to GND through a 1uF capacitor (C30).

The schematic shows two 6-pin DIP switches, SW1 and SW2, used for hardware configuration. SW1 (SW_DIP_x06) is connected to the following pins: USER_SW (pin 1), SDO_EN_DIS (pin 2), Audio_EN_DIS (pin 3), IOPROC_EN_DIS (pin 4), 20bit_T0B1r (pin 5), and SMPTE_BYPASS (pin 6). SW2 (SW_DIP_x06) is connected to: DVB_ASI (pin 1), SW_EN (pin 2), TIM_861 (pin 3), RC_RYP (pin 4), STANDBY (pin 5), and ATAG_HOST (pin 6). Each switch pin is pulled down to GND by a 10k resistor (R68-R73).

Pinout diagram for the Antmicro V1000 board, showing connections for U4 (Lattice Semiconductor U1F-MD6000-6JMG80I) and various peripheral components.

U4: Lattice Semiconductor U1F-MD6000-6JMG80I

Bank_0:

- H2: CRESET_B
- J2: CDONE
- D1: USER_SDA
- K2: USER_SCL
- G1: MOSI
- H1: SPL_SS(SCL)
- J1: SPL_SCK(SDA)
- K1: MISO
- F4: VCCIO0

Bank_1:

- F1: PCLK
- F2: LOCKED_CL
- F1: H_HSYNC
- F2: V_VSYNC
- J7: DOUT10
- J6: DOUT11
- J5: DOUT12
- J4: DOUT13
- J3: DOUT14
- K7: DOUT15
- K6: DOUT16
- K5: DOUT17
- K4: DOUT18
- K3: DOUT19
- F5: PCLK
- G4: VCCIO1

Bank_2:

- D9: JTAG_HOST
- D10: RST_TRST
- F9: STANDBY
- F10: DATA_ERRORb
- F9: F_DE
- F10: Y_1ANC
- G9: TIM_861
- G10: RC_BYP
- H9: SW_EN
- H10: IOPROC_EN_DIS
- J8: Audio_EN_DIS
- J9: USER_SW
- J10: USER_LED
- K8: ZOH1_TONE
- K9: SMPTE_BYPASS
- K10: DVB_ASI
- F6: VCCIO2
- F7: VCCIO2

Bank_3:

- F1: PCLK
- F2: LOCKED_CL
- F1: H_HSYNC
- F2: V_VSYNC
- J7: DOUT10
- J6: DOUT11
- J5: DOUT12
- J4: DOUT13
- J3: DOUT14
- K7: DOUT15
- K6: DOUT16
- K5: DOUT17
- K4: DOUT18
- K3: DOUT19
- F5: PCLK
- G4: VCCIO1

Other Connections:

- R89: 1.8V regulator
- R95: 1.8V regulator
- R96: 1.8V regulator
- R97: 1.8V regulator
- R98: 1.8V regulator
- R99: 1.8V regulator
- R100: 1.8V regulator
- R101: 1.8V regulator
- R102: 1.8V regulator
- R103: 1.8V regulator
- R104: 1.8V regulator
- R105: 1.8V regulator
- R106: 1.8V regulator
- R107: 1.8V regulator
- R108: 1.8V regulator
- R109: 1.8V regulator
- R110: 1.8V regulator
- R111: 1.8V regulator
- R112: 1.8V regulator
- R113: 1.8V regulator
- R114: 1.8V regulator
- R115: 1.8V regulator
- R116: 1.8V regulator
- R117: 1.8V regulator
- R118: 1.8V regulator
- R119: 1.8V regulator
- R120: 1.8V regulator
- R121: 1.8V regulator
- R122: 1.8V regulator
- R123: 1.8V regulator
- R124: 1.8V regulator
- R125: 1.8V regulator
- R126: 1.8V regulator
- R127: 1.8V regulator
- R128: 1.8V regulator
- R129: 1.8V regulator
- R130: 1.8V regulator
- R131: 1.8V regulator
- R132: 1.8V regulator
- R133: 1.8V regulator
- R134: 1.8V regulator
- R135: 1.8V regulator
- R136: 1.8V regulator
- R137: 1.8V regulator
- R138: 1.8V regulator
- R139: 1.8V regulator
- R140: 1.8V regulator
- R141: 1.8V regulator
- R142: 1.8V regulator
- R143: 1.8V regulator
- R144: 1.8V regulator
- R145: 1.8V regulator
- R146: 1.8V regulator
- R147: 1.8V regulator
- R148: 1.8V regulator
- R149: 1.8V regulator
- R150: 1.8V regulator
- R151: 1.8V regulator
- R152: 1.8V regulator
- R153: 1.8V regulator
- R154: 1.8V regulator
- R155: 1.8V regulator
- R156: 1.8V regulator
- R157: 1.8V regulator
- R158: 1.8V regulator
- R159: 1.8V regulator
- R160: 1.8V regulator
- R161: 1.8V regulator
- R162: 1.8V regulator
- R163: 1.8V regulator
- R164: 1.8V regulator
- R165: 1.8V regulator
- R166: 1.8V regulator
- R167: 1.8V regulator
- R168: 1.8V regulator
- R169: 1.8V regulator
- R170: 1.8V regulator
- R171: 1.8V regulator
- R172: 1.8V regulator
- R173: 1.8V regulator
- R174: 1.8V regulator
- R175: 1.8V regulator
- R176: 1.8V regulator
- R177: 1.8V regulator
- R178: 1.8V regulator
- R179: 1.8V regulator
- R180: 1.8V regulator
- R181: 1.8V regulator
- R182: 1.8V regulator
- R183: 1.8V regulator
- R184: 1.8V regulator
- R185: 1.8V regulator
- R186: 1.8V regulator
- R187: 1.8V regulator
- R188: 1.8V regulator
- R189: 1.8V regulator
- R190: 1.8V regulator
- R191: 1.8V regulator
- R192: 1.8V regulator
- R193: 1.8V regulator
- R194: 1.8V regulator
- R195: 1.8V regulator
- R196: 1.8V regulator
- R197: 1.8V regulator
- R198: 1.8V regulator
- R199: 1.8V regulator
- R200: 1.8V regulator
- R201: 1.8V regulator
- R202: 1.8V regulator
- R203: 1.8V regulator
- R204: 1.8V regulator
- R205: 1.8V regulator
- R206: 1.8V regulator
- R207: 1.8V regulator
- R208: 1.8V regulator
- R209: 1.8V regulator
- R210: 1.8V regulator
- R211: 1.8V regulator
- R212: 1.8V regulator
- R213: 1.8V regulator
- R214: 1.8V regulator
- R215: 1.8V regulator
- R216: 1.8V regulator
- R217: 1.8V regulator
- R218: 1.8V regulator
- R219: 1.8V regulator
- R220: 1.8V regulator
- R221: 1.8V regulator
- R222: 1.8V regulator
- R223: 1.8V regulator
- R224: 1.8V regulator
- R225: 1.8V regulator
- R226: 1.8V regulator
- R227: 1.8V regulator
- R228: 1.8V regulator
- R229: 1.8V regulator
- R230: 1.8V regulator
- R231: 1.8V regulator
- R232: 1.8V regulator
- R233: 1.8V regulator
- R234: 1.8V regulator
- R235: 1.8V regulator
- R236: 1.8V regulator
- R237: 1.8V regulator
- R238: 1.8V regulator
- R239: 1.8V regulator
- R240: 1.8V regulator
- R241: 1.8V regulator
- R242: 1.8V regulator
- R243: 1.8V regulator
- R244: 1.8V regulator
- R245: 1.8V regulator
- R246: 1.8V regulator
- R247: 1.8V regulator
- R248: 1.8V regulator
- R249: 1.8V regulator
- R250: 1.8V regulator
- R251: 1.8V regulator
- R252: 1.8V regulator
- R253: 1.8V regulator
- R254: 1.8V regulator
- R255: 1.8V regulator
- R256: 1.8V regulator
- R257: 1.8V regulator
- R258: 1.8V regulator
- R259: 1.8V regulator
- R260: 1.8V regulator
- R261: 1.8V regulator
- R262: 1.8V regulator
- R263: 1.8V regulator
- R264: 1.8V regulator
- R265: 1.8V regulator
- R266: 1.8V regulator
- R267: 1.8V regulator
- R268: 1.8V regulator
- R269: 1.8V regulator
- R270: 1.8V regulator
- R271: 1.8V regulator
- R272: 1.8V regulator
- R273: 1.8V regulator
- R274: 1.8V regulator
- R275: 1.8V regulator
- R276: 1.8V regulator
- R277: 1.8V regulator
- R278: 1.8V regulator
- R279: 1.8V regulator
- R280: 1.8V regulator
- R281: 1.8V regulator
- R282: 1.8V regulator
- R283: 1.8V regulator
- R284: 1.8V regulator
- R285: 1.8V regulator
- R286: 1.8V regulator