TWSDAC-1862-D The Well Segmented Digital to Analog Converter - Dual mono AD1862 without I/V stage



AD1862 dual mono sign magnitude architecture digital to analog converter without I/V converter.

Features:

Inputs: 20 bit custom protocol (provided by the TWSAFB-LT FIFO buffer) Format: up to 20 bit 384kHz Architecture: dual AD1862 with sign magnitude architecture Clock mode: stopped clock Master clock: 5.6448/6.144 MHz up to 176.4/192KHz, 11.2896/12.288 MHz up to 352.8/384 KHz Isolation: Full optical isolation Output: +/- 1 mA Power supply: 4 shunt regulators (+/- 5VDC digital, +/-12VDC analog) Suitable transformer: 20VA, 7.5VAC/400mA x 2, 13.5VAC/500mA x 2 Board size: 127 x 109 mm

Note: finished board without DAC chips (mono)

PCB layout



Connectors

- **J1:** AC Digital power supply (7.5VAC/300 mA)
- J2: AC Digital power supply (7.5VAC/300 mA)
- **J3:** AC Analog power supply (13.5VAC/350 mA)
- J11: AC Analog power supply (13.5VAC/350 mA)
- **J4:** Current output to I/V stage (+/- 1 mA)
- J6: bit clock input (connect to TWSAFB-LT FIFO buffer)
- **J7:** data positive input (connect to TWSAFB-LT FIFO buffer)
- **J8:** data negative input (connect to TWSAFB-LT FIFO buffer)

J9: latch enable input (connect to TWSAFB-LT FIFO buffer)

There is 1 available option for this board:

- finished mono board without DAC chips.

Installing the missing components

Two DAC chip are needed for each channel.