

# TWSDAC-1541-D The Well Segmented Digital to Analog Converter - Dual mono TDA1541A without I/V stage



TDA1541A dual mono sign magnitude architecture digital to analog converter without I/V stage.

Features:

**Inputs:** 16 bit custom protocol (provided by the TWSAFB-LT FIFO buffer)

**Format:** up to 16 bit 192kHz

**Architecture:** TDA1541A with sign magnitude architecture (one for each channel)

**Clock mode:** stopped clock

**Master clock:** 5.6448/6.144 MHz up to 176.4/192KHz

**Isolation:** Full optical isolation

**Output:** 0 to -4 mA

**Power supply:** 3 shunt regulators (+5VDC digital, -5VDC analog, -15VDC analog)

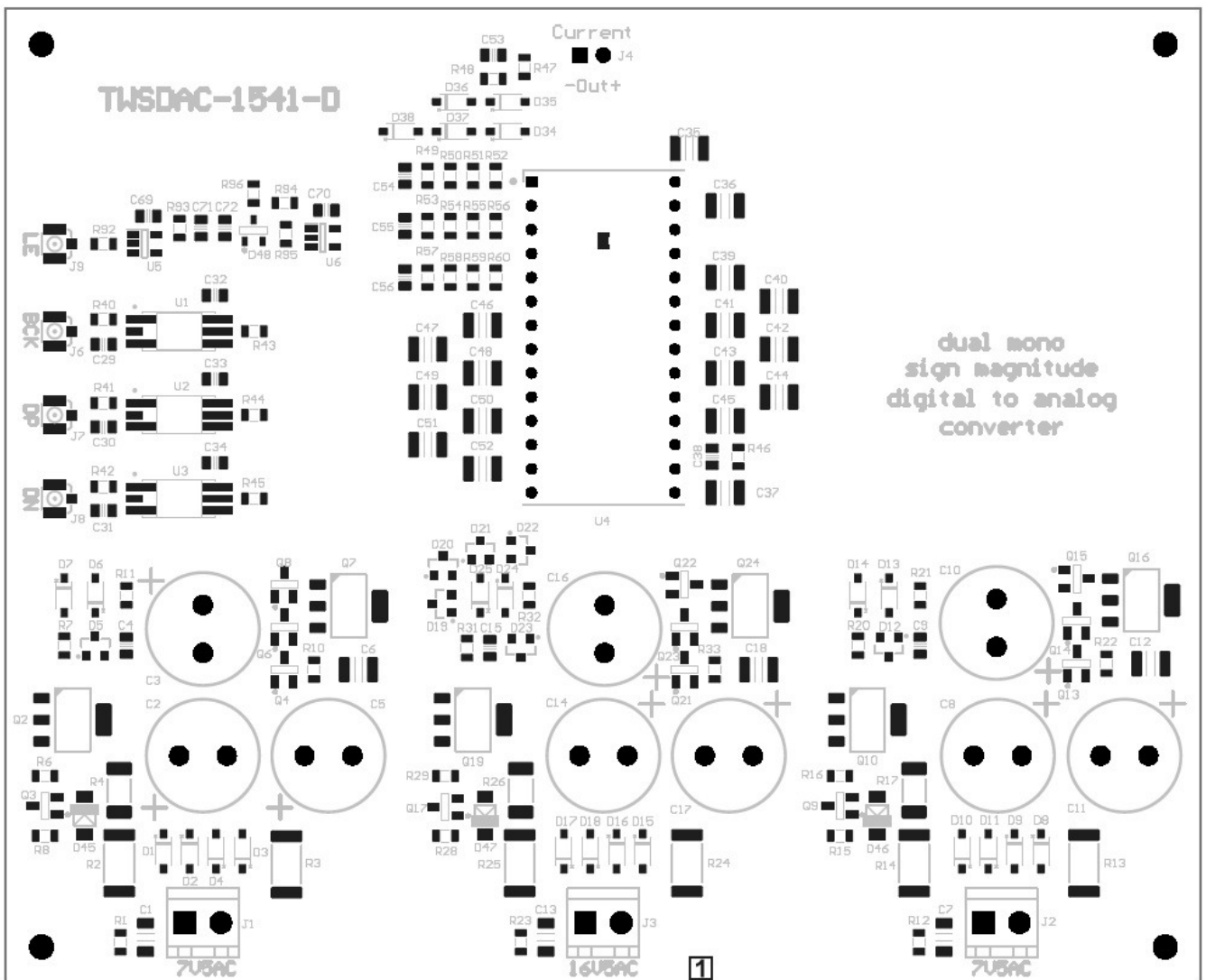
**Suitable transformer:** 20VA, 7.5VAC/700mA x 2, 16.5VAC/550mA

**Board size:** 127 x 103 mm

**Note:** finished board without DAC chips (mono)

**Warning:** TWSAFB-OI interface board is needed in order to work with the TWSAFB-LT FIFO buffer.

## PCB layout



### Connectors

**J1:** AC Digital power supply (7.5VAC/700 mA)

**J2:** AC Analog power supply (7.5VAC/700 mA)

**J3:** AC Analog power supply (16.5VAC/550 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 chip.

### **Installing the missing components**

One DAC chip is needed for each channel.