**PIN functions**

EVAL-AD5764/64R/65EBZ

(DAC)

DGND

D0

SDIN

DGND

DGND

D1

SDO

SCLK

EVAL-AD7732/34EBZ

(DAC)

DGND

SCLK

DIN

DOUT

DVDD

Arduino DUE

ICSP/SPI

MISO

SCLK

Vcc

RESET

GND

MOSI

**Arduino-DAC-ADC Connectivity scheme**

Power sup DAC ADC

+20 V - VDD

COMM - AGND - AGND

- 20 V - VSS

+ 6 V - - AVDD

Arduino DAC ADC

+ 3.3 V - + 5 V - DVDD

GND - DGND - DGND

MISO - SDO - DOUT

SCLK - SCLK - SCLK

MOSI - SDIN - DIN

4 - SYNC

6 - CLR

8 - LDAC

42 - - RESET

48 - - DRDY

52 - - CS

GND - DGND - DGND

External connections:

* Arduino pin 13 & GND are connected to external LED.
* The DAC’s four outputs (VOUT A, VOUT B, VOUT C, VOUT D) are connected to female BNC connectors via PCBs (fabricated by OSH Park).
* The ADC’s two inputs are connected to:
  + LK12 – BNC 1 inner pin
  + LK13 – BNC 2 inner pin
  + LK16 – BNC 2 shield
  + LK17 – BNC 1 shield