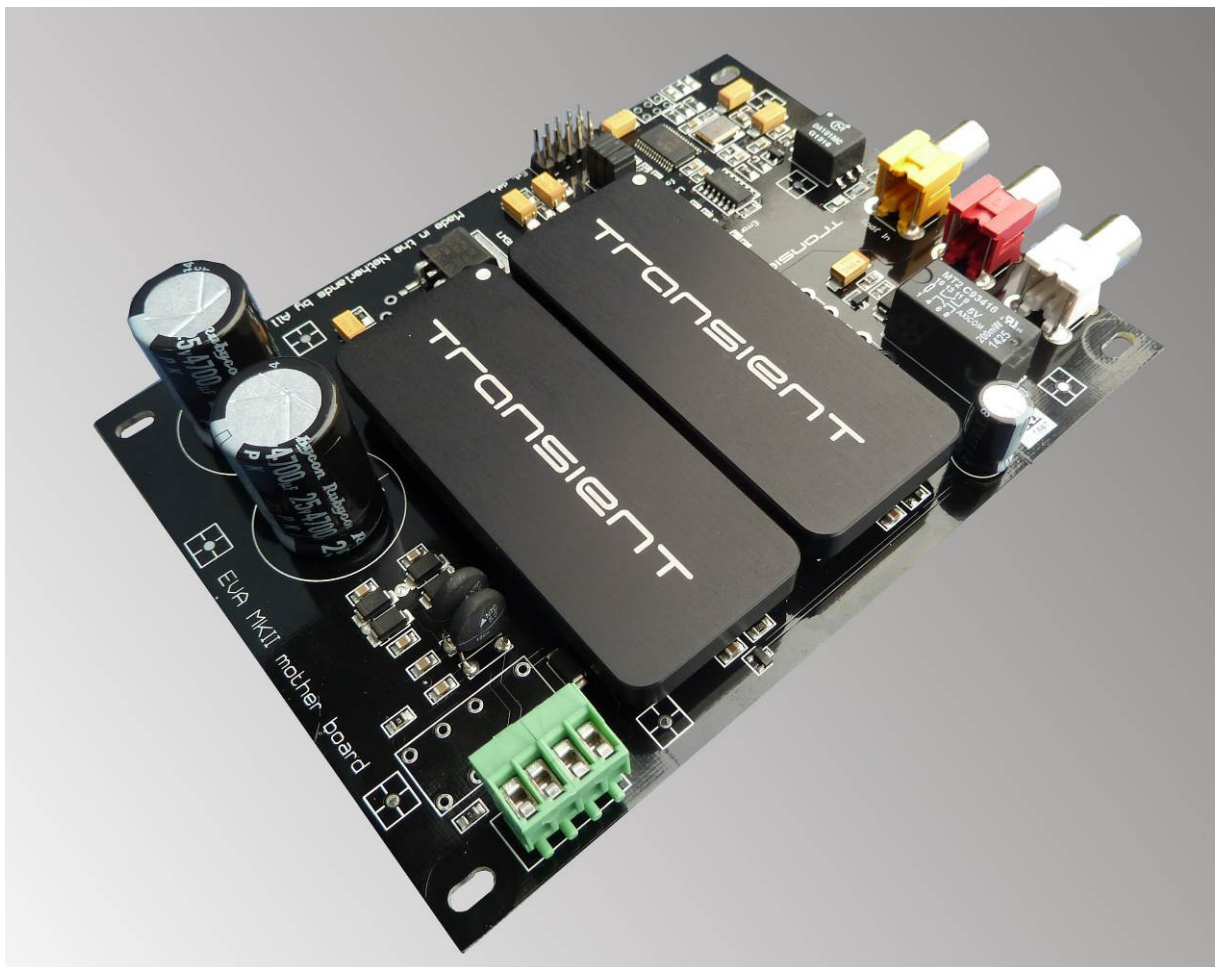


TRANSIENT

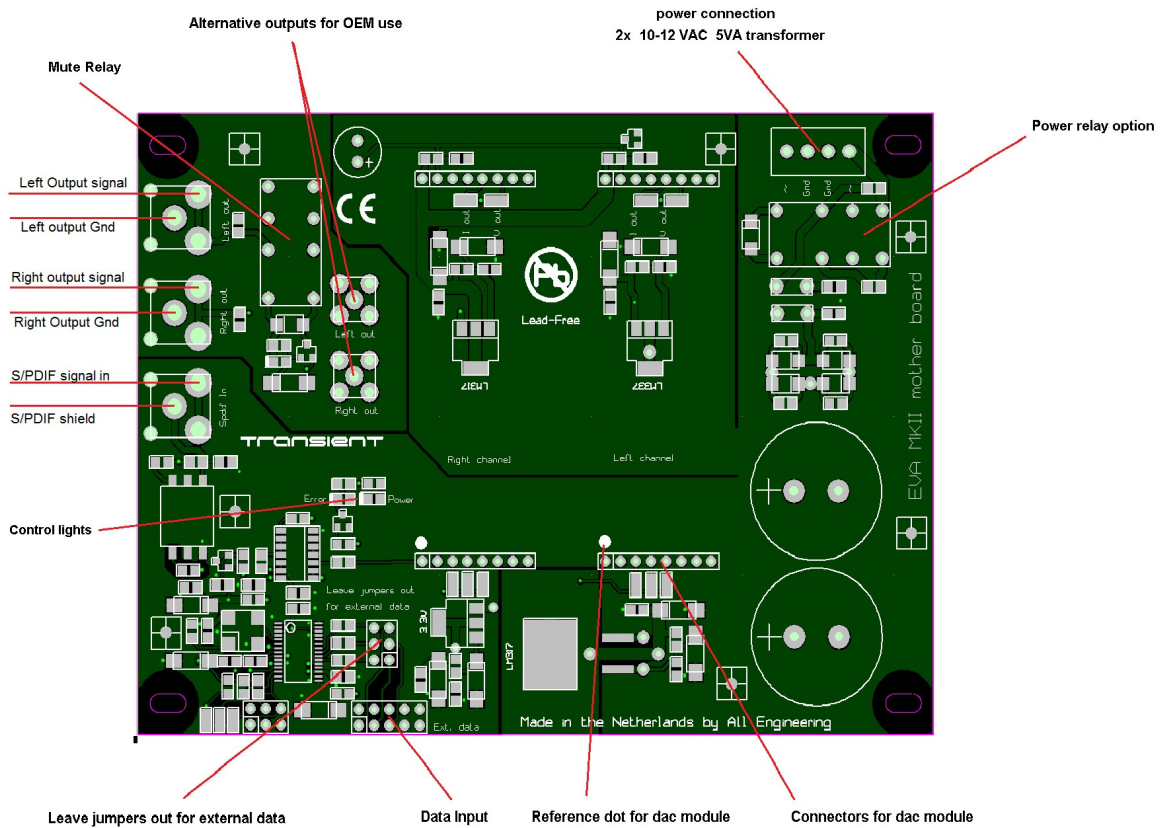
EVA evaluation board application information



Introduction

The EVA evaluation board is made to evaluate the DAC ONE module . Just connecting the board to a transformer having two 10 – 12 VAC output windings makes it ready for use. The board has a standard S/PDIF coaxial input of 75 Ohms which can handle sampling rates up to 192kHz. By removing three jumpers the board can be used for external sources using I2S coming from CD players or USB interfaces. The total power consumption is less than 2.5 Watts.

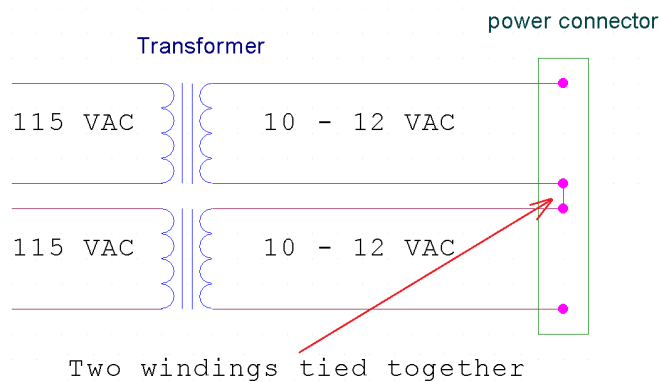
Possible connections and settings



Power connection.

The power connection accepts 2x 10VAC as a minimum voltage. This voltage is based on optimal regulation of the voltage regulators. If necessary a dedicated transformer can be delivered having both 115 Volts and 230 Volts primary windings and both 10 Volts secondary windings. The use of an alternative 2x 12 Volt creates more heat but has no further advantages. Total power consumption is 2.5 Watts so the use of a 5VA transformer will be

convenient.  **The EVA module will connect both secondary windings together so watch the polarity of both windings to avoid damage to the transformer!!**



Power relay option

The power relay option is available on custom made models. In conjunction with our “DAI” digital interface boards the board can be switched on and off via the data input connector.

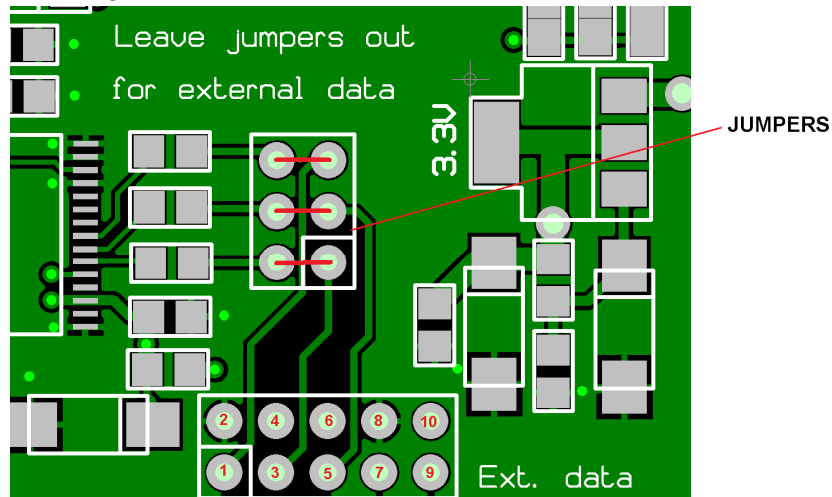
Connectors for the dac module

The Evaluation model will be delivered with two DAC ONE modules preinstalled and tested. If there is a reason for removing them please watch the reference dot on both EVA board and dac module.



By placing the dac in 180 degrees position you will create a permanent damage to both devices!!

Data input



By removing the three jumpers external I2S data can be used. The data input has the following connections:

- pin 1 I2S clock input
- pin 2 Ground
- pin 3 Frame Sync
- pin 4 Ground
- pin 5 Data
- pin 6 Ground
- pin 7 Not used
- pin 8 Ground
- pin 9 Dedicated for optional power relay
- pin 10 Dedicated for optional power relay



Never use the data connector with jumpers installed!!

S/PDIF input

The spdif input is the yellow RCA connector on the board and can handle a max sampling rate of 192 kHz. When wrong or no data is supplied, a red led will indicate that the data is not valid or available. This error detection is only available on the S/PDIF input.

Using the EVA board in conjunction with other modules

The EVA board can be used in conjunction with other digital input modules. By removing the jumpers and by using a ribbon cable the EVA board can be connected to the “DAI” digital interface boards. Depending the type of digital interface inputs are available like Coax, Toslink, AES/EBU and USB.

Special OEM versions of the EVA board

When ordered in higher quantities the board can be delivered without connectors and a power relay can be fitted. Especially in conjunction with our DAI modules a power down or standby option is available.

In case of quantities of 50+ the board can have your own logo and pcb color.

Specifications

Description.	Evaluation board for the DAC ONE module
Power requirements.	2x 10 -12 VAC
Power consumption.	2.5 Watts
Recommended transformer.	5VA or more.
Coaxial Input.	S/PDIF 75 Ohms max. sampling rate 192kHz
Data input.	I2S
Analog output	2 Volts RMS (refers to dac module)
Muting circuit	Analog outputs available after two seconds.
Size.	134 x 100 mm

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