

SUMMARY

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I - INTRODUCTION

ONE PCB, THREE APPLICATIONS,
MANY OPTIONS.

To take advantage of the pin to pin compatibility of the 2 heads video amplifier STV5722 with the 4 heads video amplifier STV5726 is the guideline of this demoboard.

With one PCB three main applications can be realized :

- STV5722 in a 2 video heads playback/record solution
- STV5722 in a 2 FM audio playback/record solution
- STV5726 in a 4 video heads playback/record solution.

Additionally the PCB layout of the board offers the user several application options as desired.

II - STV5722 APPLICATION

The demoboard is mounted according to the typical application diagram (Figure 1).

A single 5V supply line is necessary for both playback and record mode.

Application options allowed by the PCB layout

Figure 2 gives an example of an electrical diagram using the PCB options.

- R7, C14 low pass filter can be added on the playback envelop signal (TRIV : TRacking Information Video)
- R6, D2 is an optional circuit that can be used to increase the record circuit when recording on a premagnetized tape (OWR : overwriting)
- R9 is also an optional component which allows to change the recording current from head to head. This may be used when the recording efficiency is a little bit different from one head to the other (low cost scanners).

III - STV5722 FM AUDIO APPLICATION

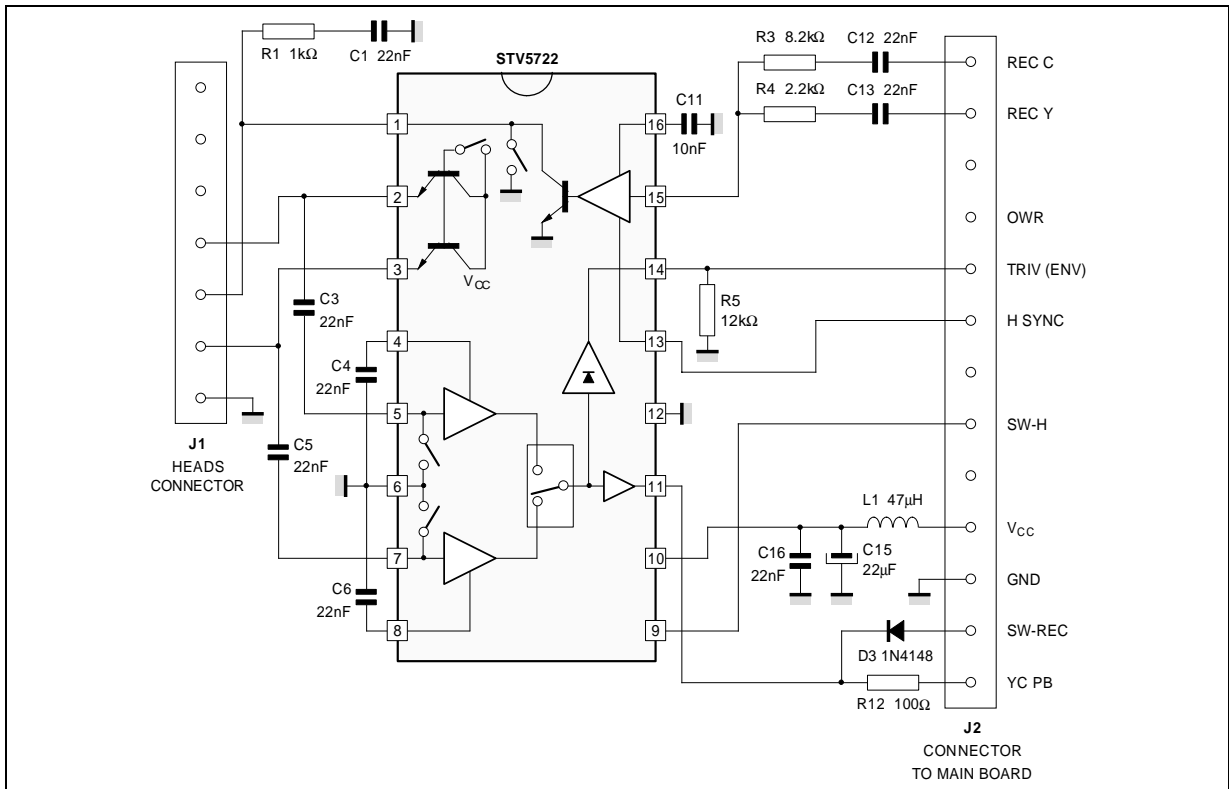
The STV5722 can be used as a FM Audio head amplifier. To do so, a external buffer circuit can be implemented on the board.

With this configuration the playback gain is increased from 60dB (typ.) to 68.6dB (typ.) (such a high gain is normally requested for FM audio head amplification).

Figure 3 gives an example in which the board has been configured for FM audio amplification.

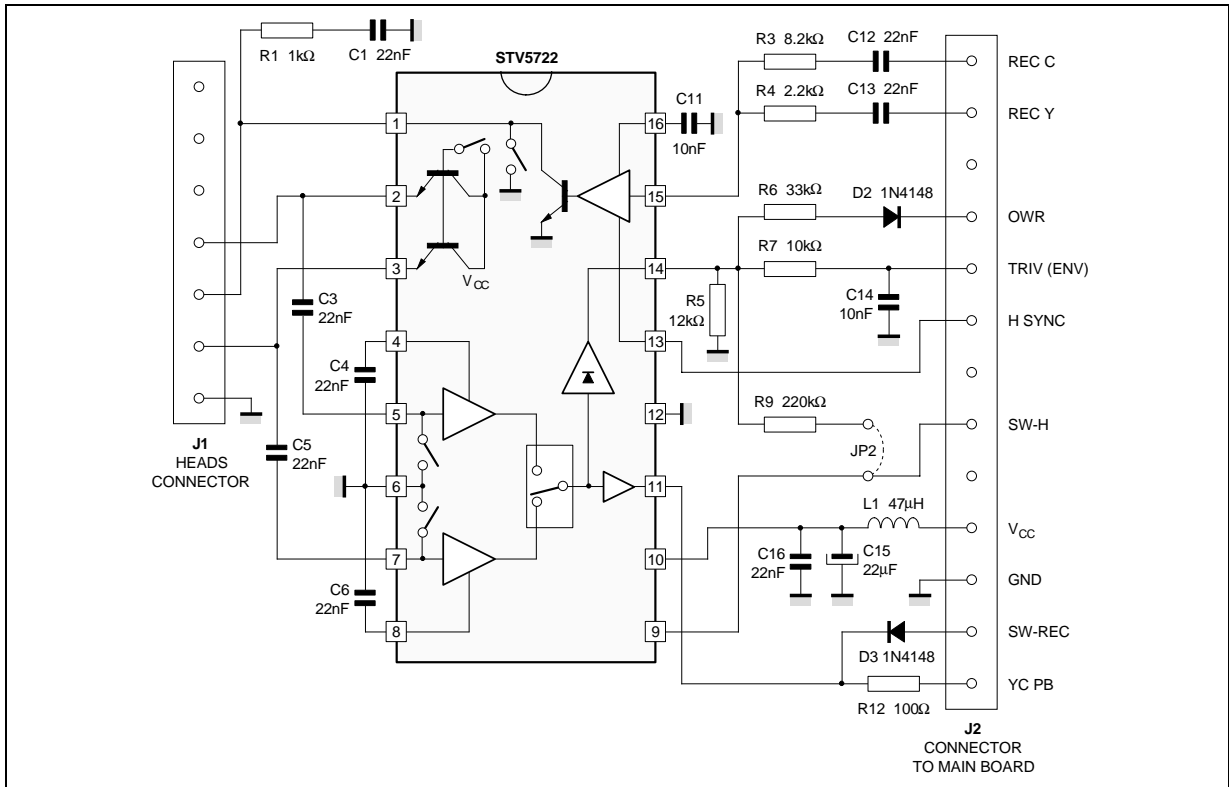
STV5722 - STV5726 DEMOBOARD

Figure 1 : STV5722 Typical Application (2 video heads)



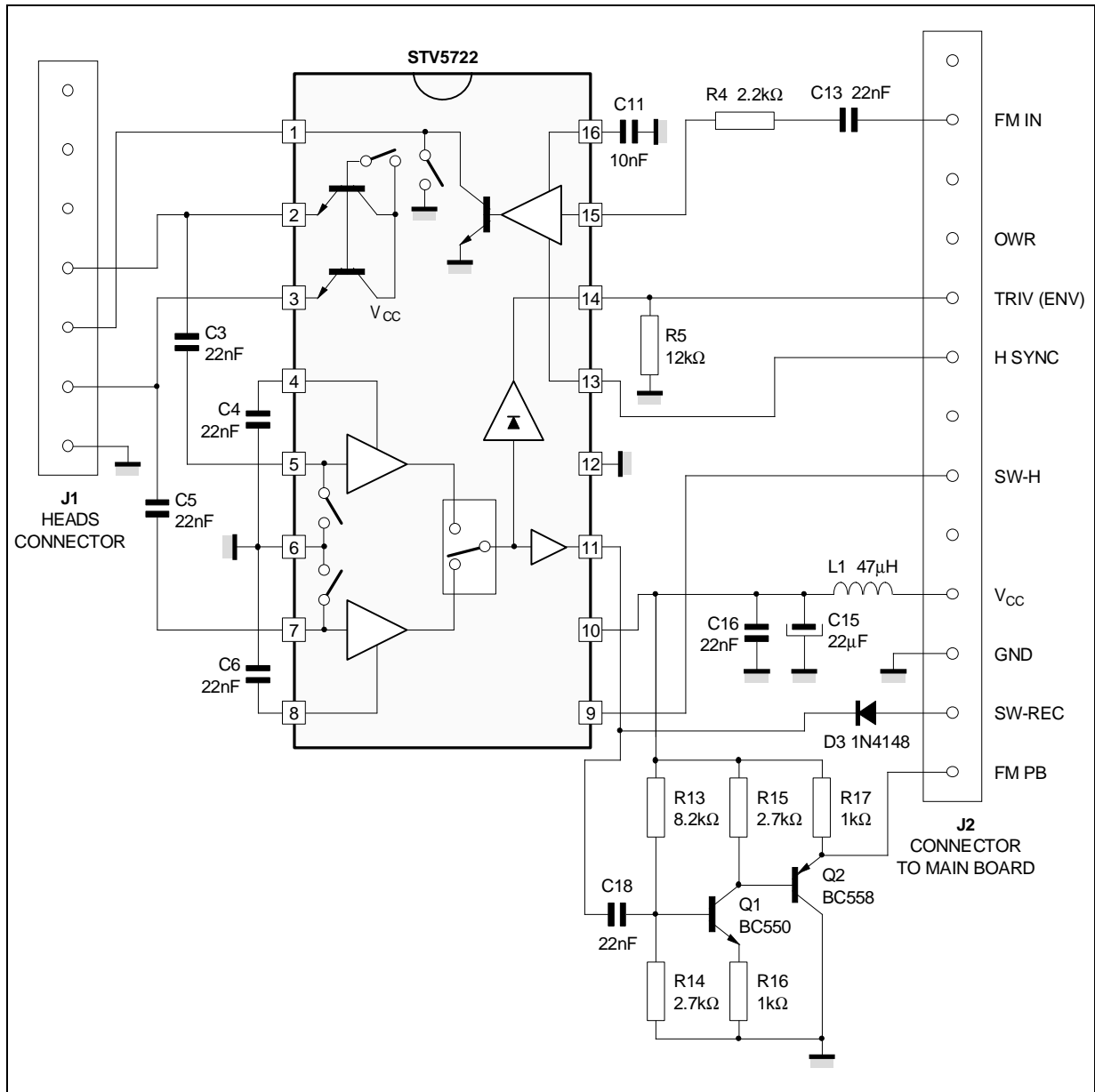
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Figure 2 : STV5722 Application Example using the PCB Layout Options



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Figure 3 : STV5722 FM Audio Application



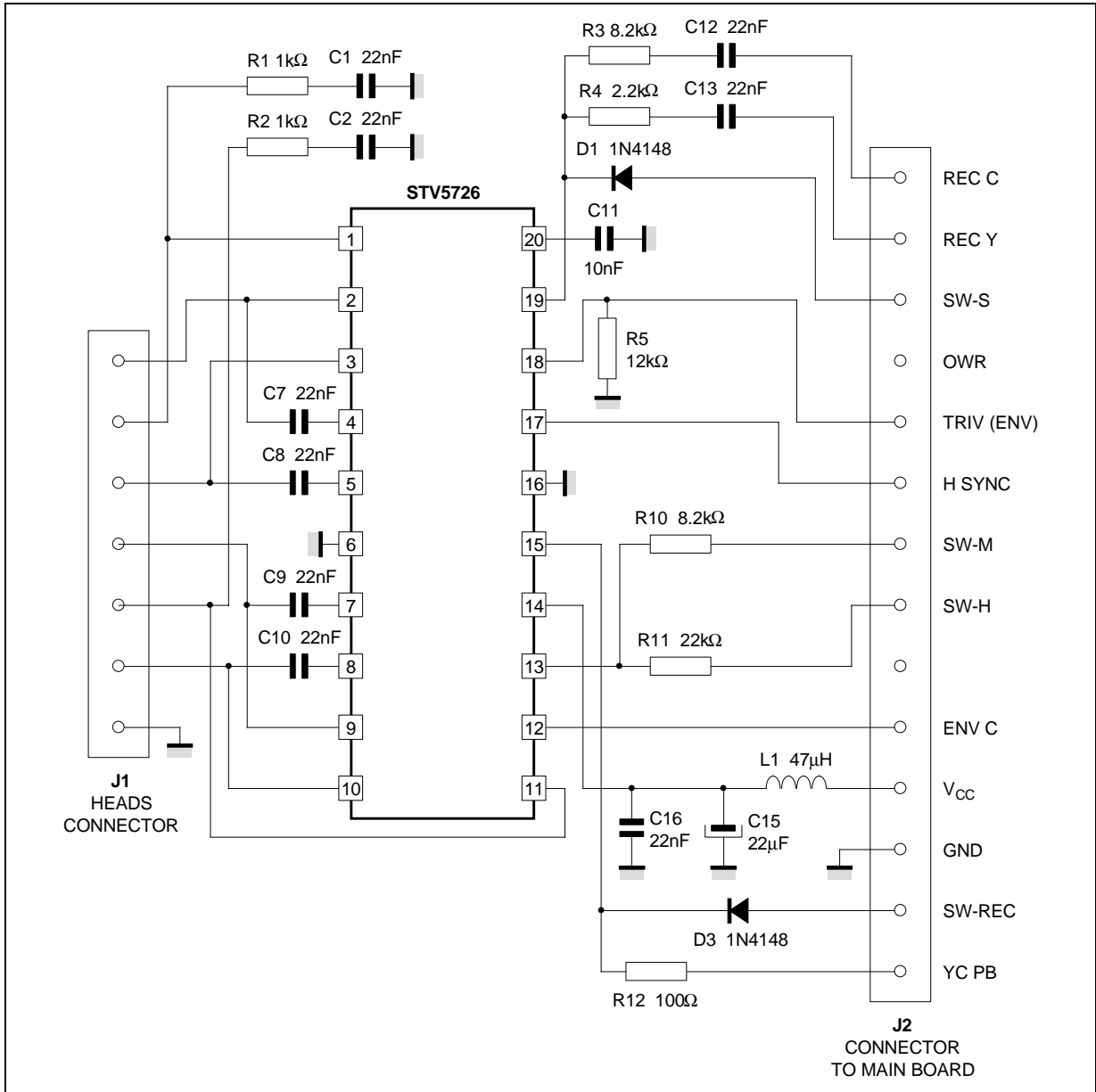
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STV5722 - STV5726 DEMOBOARD

IV - STV5726 : 4 VIDEO HEADS AMPLIFICATION

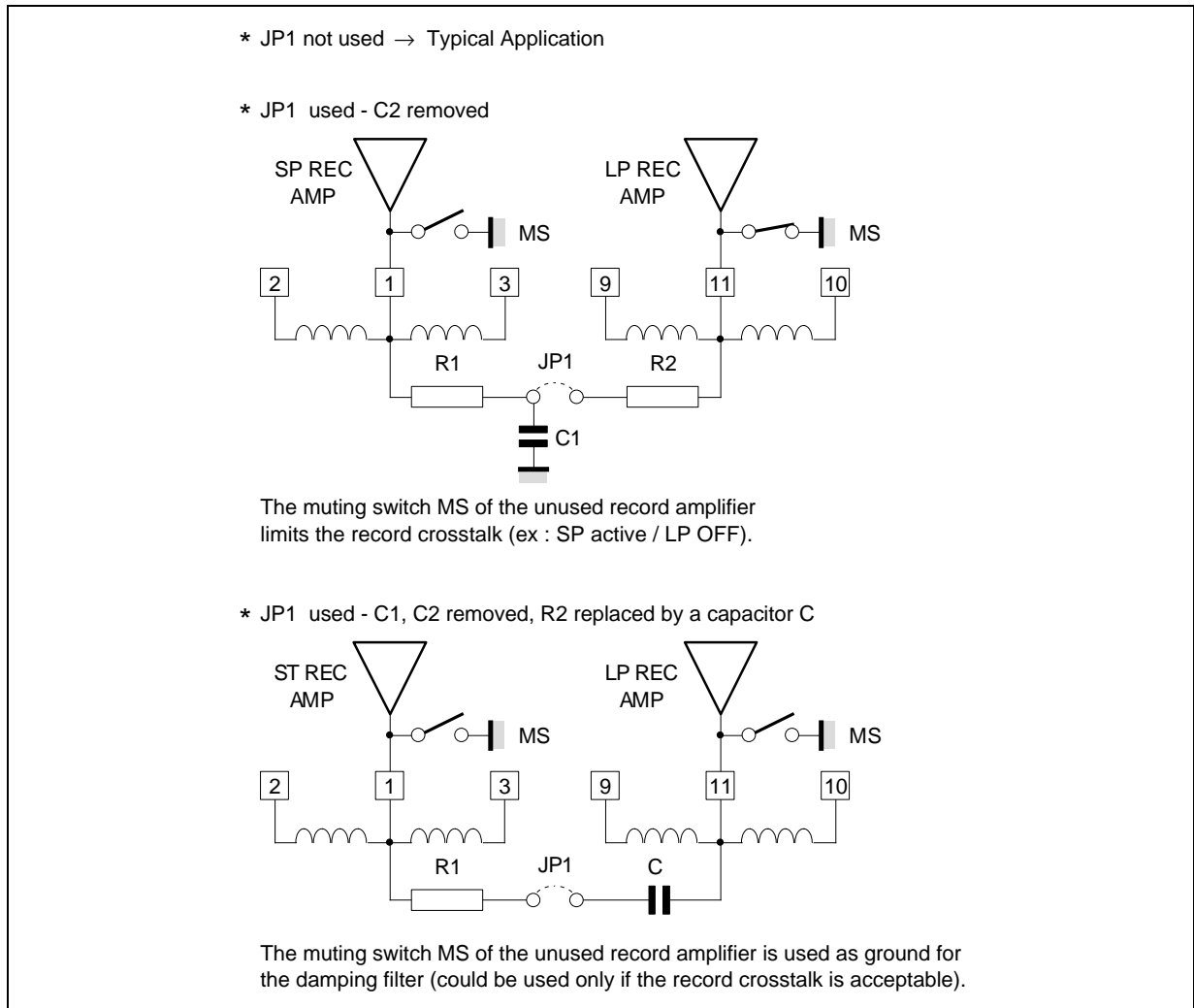
The demoboard is mounted according to the typical application diagram (Figure 4).
A single 5V supply line is necessary for both playback and record mode.

Figure 4 : STV5726 Typical Application



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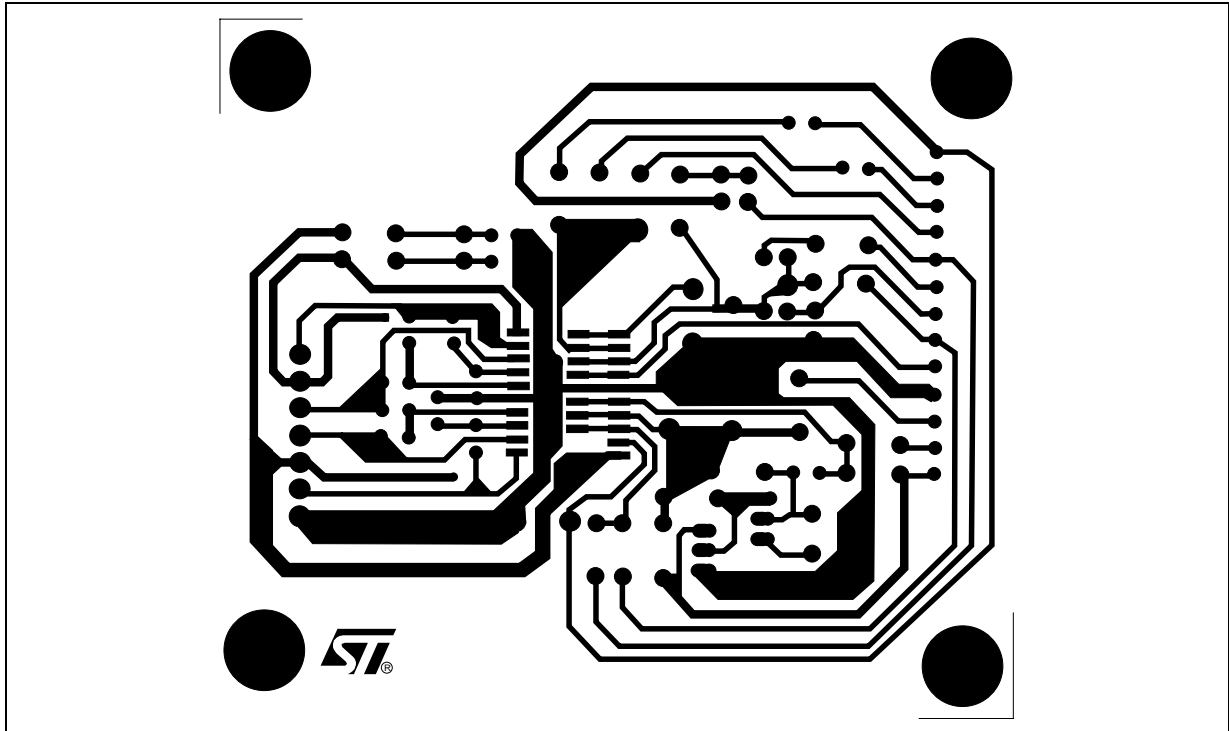
Figure 6 : How to use JP1 to simplify the record damping filter



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V - PCB LAYOUT PATTERN (copper side)

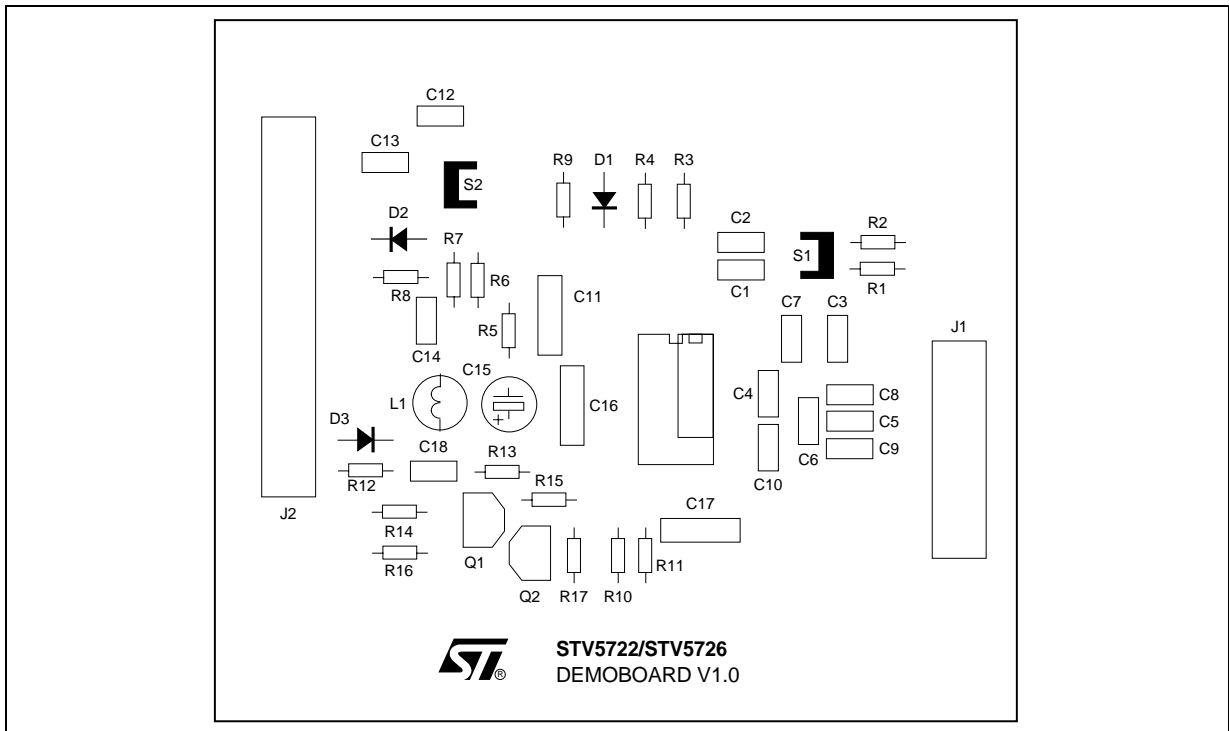
Figure 7



AN630-07.EPS

VI - SILKSCREEN PRINTING PATTERN (components side)

Figure 8



AN630-08.EPS

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