

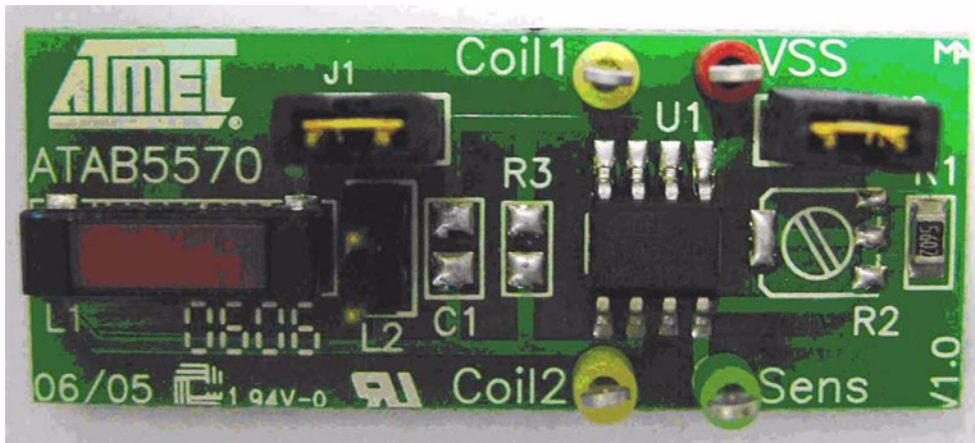
# RFID Transponder Evaluation Board ATAB5570

Equipped with Sensor Tag ATA5570  
(Suitable for other SO8 package tag versions)

## 1. Description

The evaluation board is intended to promote the specific ATA5570 sensor feature in addition to general RFID tag functionality. Depending on sensor state data are transmitted in inverse or non-inverse mode. In addition, the board can also be helpful in development for evaluation purposes or to adapt any other antenna coil to the tag IC.

Figure 1-1. Evaluation Board



**ATAB5570**

**Application Note**



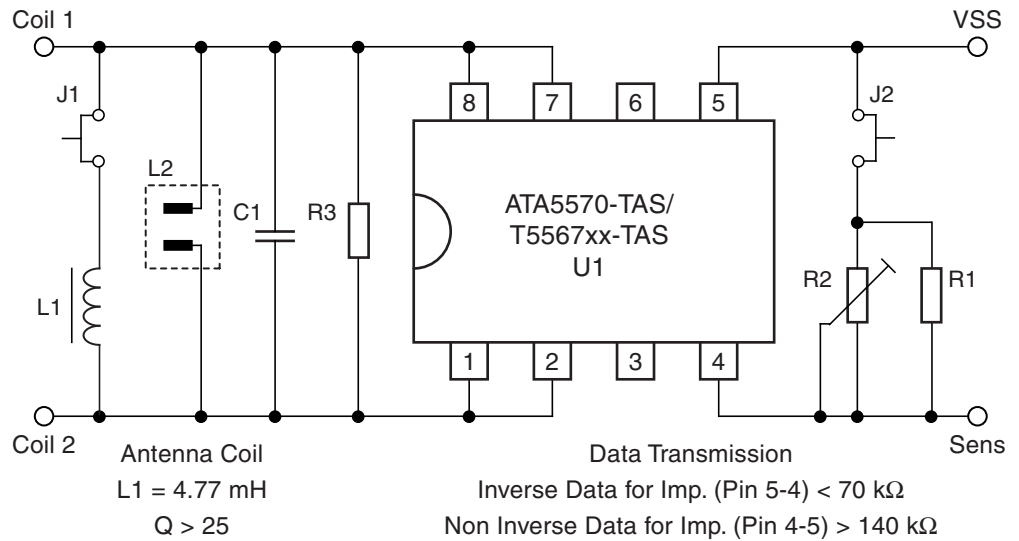
The sensor input pin 5-4 operates in a two state modes for controlling data transmission:

- Inverse data transmission for sensor impedance  $< 70\text{ k}\Omega$
- Non inverse data transmission for sensor impedance  $> 140\text{ k}\Omega$

This state condition can be achieved by opening and closing jumper J2 (high impedance/56 k $\Omega$ ).

Note: For tag programming, sensor path needs to be opened via jumper J2 for current saving

**Figure 1-2.** Development Board



**Table 1-1.** Part List of the Development Board ATAB5570

Part	Designation	Value	Type	Manufacturer
U1	RFID tag		ATA5570-TAS	Atmel
L1	Antenna coil	L = 4.77 mH/ Q > 25	SDTR1103/ P-564-007	Predan
C1	Not needed for ATA5570 330 pF internal the chip			
Rs1	Sensor resistance	56 k $\Omega$		
Rs2	Trimm poti (option)	200 k $\Omega$		
R3	Option for Q-factor reduction			
J1, J2	Jumper			



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