

## **A Bidirectional Semi-Passive RFID Transponder Platform for the UHF Band**

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### *Summary*

This paper presents a first realization of a semi-passive UHF RFID transponder platform featuring a direct sequence code division multiple access channel access method for the RFID uplink. In addition, the transponder platform has some limited downlink abilities, including carrier frequency and field strength measurements. The paper shows experimental results of the proposed transponder, including some basic range evaluations. The transponder platform is included within an UHF RFID system, containing an RFID reader being able to read out the transponders' data.