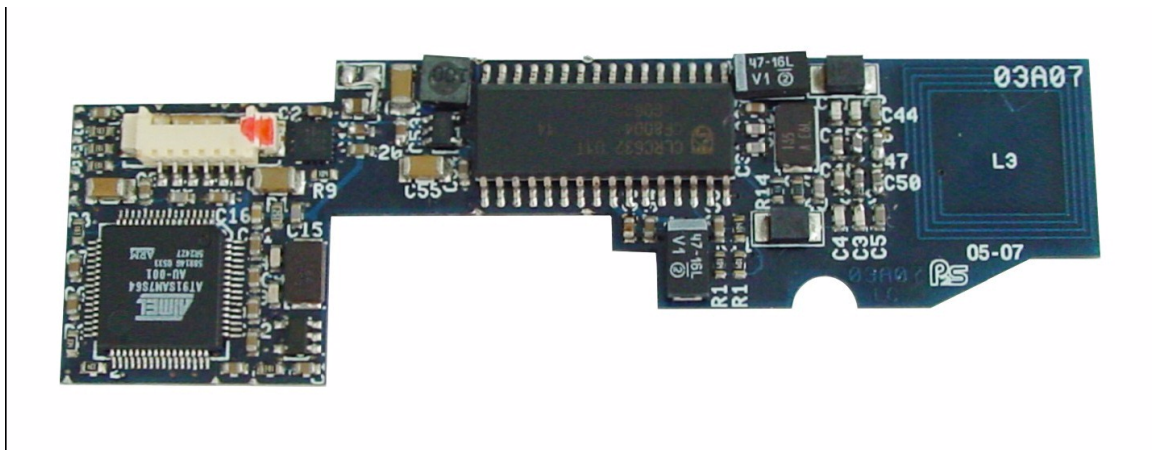


UKMRFID13 - OPERATIONAL DESCRIPTION

Application

13.56 MHz Multistandard RFID transceiver module for Zypad WL1x1x.



General Description

The module is a multistandard RFID transceiver for use with the Zypad WL1x1x wearable computer family. It works at 13.56 MHz and supports the following standards: ISO 14443A, ISO 14443B and ISO 15693.

The interface with the Zypad main unit is made through the serial port COM2.

Functional Description

The device reads and writes transponders at a frequency of 13.56 MHz and supports the ISO 14443A, ISO14443B and ISO 15693 standards.

The microprocessor is an ARM ATMEL AT91SAM7S64. The RF interface is based on the PHILIPS CLRC632 'Multiple contactless reader IC' controller. The SAM interface is formed by the ON NCN4555 'SIM card power supply / level translator' circuit.

The power voltage is 3.3 Vdc and is used to supply the digital devices (such as: microprocessor and I/O). An internal MAX1724 DC/DC step-up converter allows you to obtain a +5V voltage to supply RF devices. A 1.8 Vdc voltage regulator is integrated inside the microprocessor and supplies the ARM core.

The RF antenna is integrated on the PCB (Printed Circuit Board) of the module.