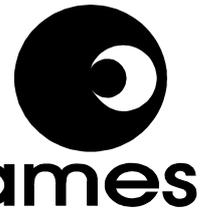


RFID EVALUATION KIT



EK7110DKEY

OVERVIEW

The EK7110DKEY evaluation kit is designed to demonstrate the functionality of the SAMES SA7110 64-bit read only transponder using the SAMES key ring tag and the Intersoft* reader.

The EK7110DKEY evaluation kit performs all the functions necessary for a RFID reading station. The reader continuously powers, reads and decodes transponders that are within its reading range. ARF magnetic field, generated by the reader, powers the transponder tag when it passes within the range of the readers antenna. The data transmitted by the tag is demodulated and decoded by the reader. The data is then sent as a packet using a two-wire serial RS232 interface. While the tag remains within the reading range it will be

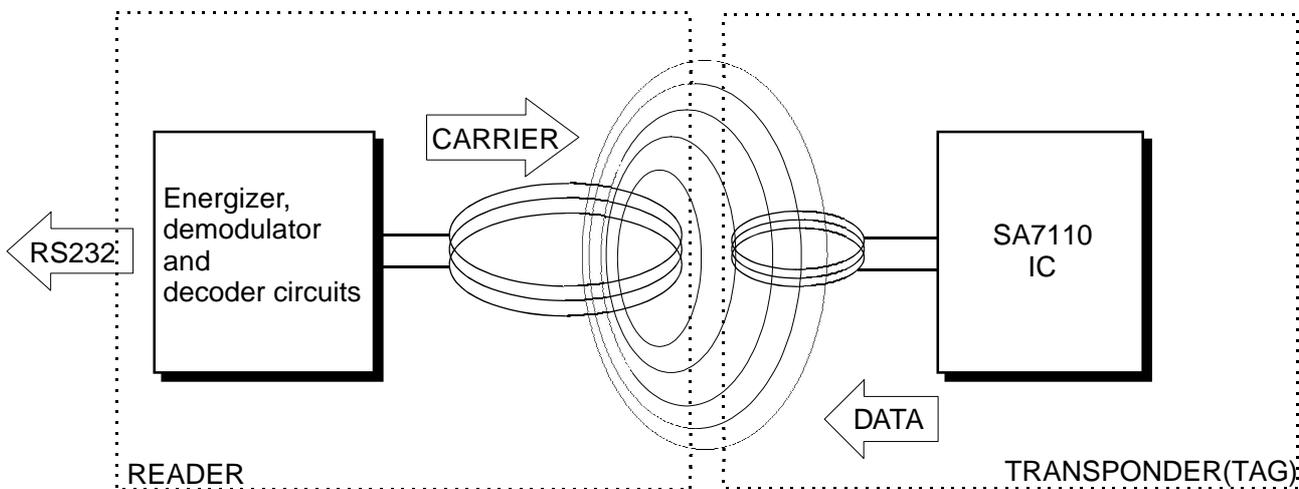
continuously powered and the reader will continuously transmit its data.

The kit includes:

- Passive read-only RFID key-ring tags.
- A fully functional reader with antenna.
- Windows Software to read and display the RFID tag numbers on a PC (SA7110Demo.exe)

REQUIREMENTS

Power source 9-12 VDC regulated, 60mA.
PC computer with an available serial port.
Db9MaletoDb9Femaleserialcable.
MSWindows (98, 2000, XP)





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The data packet is sent every time a tag is detected. If the tag remains in the reading field, its data will be sent continuously.

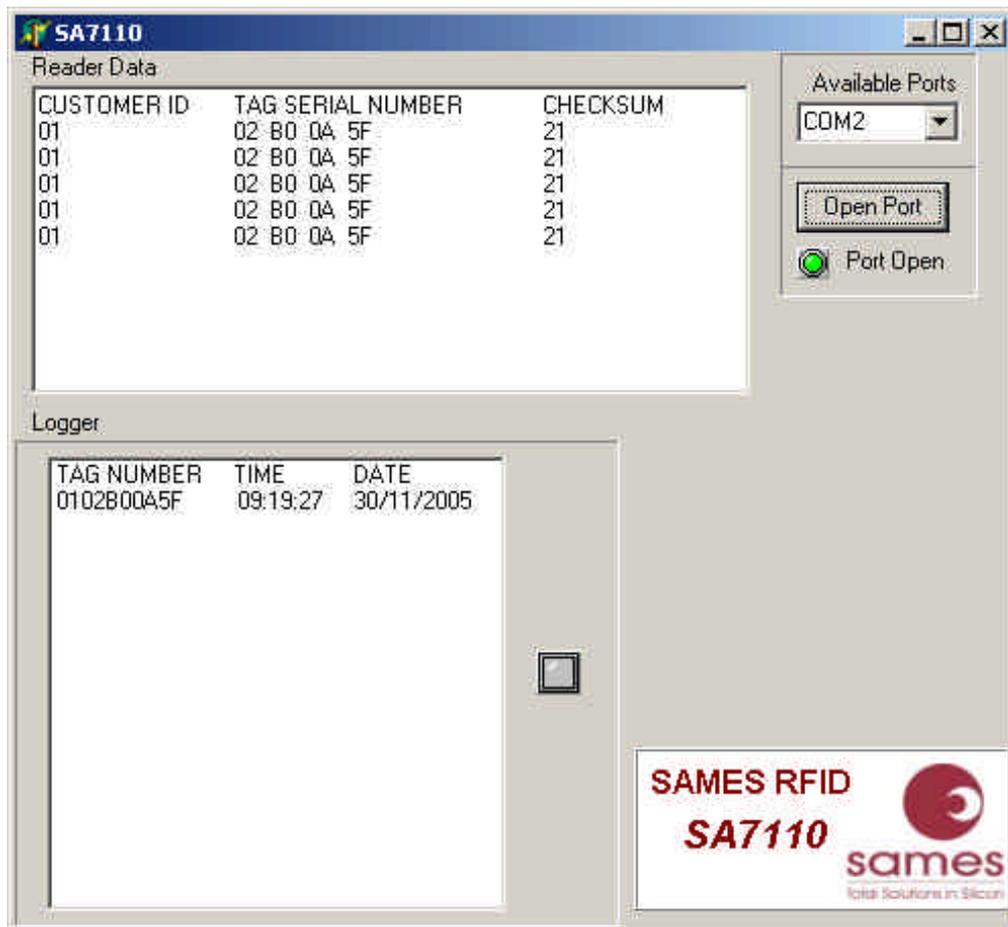
CHECKSUM CALCULATION

The reader does a checksum calculation which is an ASCII representation of the 8 bit sum of the 10 data bytes sent. From the example above the checksum value 34 45 (4E) is a result of 30h+31h+41h+46h+33h+36h+42h+45h+44h+32h

SOFTWARE INSTALLATION

There is no installation program. The software may be started directly from the CD. It should be preferably copied to a directory on your hard drive and executed from there.

After properly connecting the reader (power and serial port) start the SA7110 demonstration program (SA7110Demo.exe). The program will automatically detect the PC's comm ports. Select the port connected to the reader and press the "Open Port" button. When a tag is passed over the top of the reader, the readers green LED should flash and the decoded tag number as well as the checksum will appear in the "Reader data" window. The tag number as well as the time and date will also be logged in the "Logger" window. If the tag remains in the reading field, the data will be continuously displayed in the "Reader data" window but will only be logged once every 3 seconds in the "Logger" window.





EK7110DKEY

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