

Proposal 1

Scope of Project

1. Program a friendly name to a single RFID tag
2. Read and display the tags programed name
3. Show the distance of the tag

Pros

1. Readily available hardware
2. Small form factor
3. Expandable platform
4. Extensive Arduino compatible peripherals
5. Library of available functions for hardware
6. Company that offers tech support
7. Designed to be used for developers
8. Built in antenna provides 1-2ft of range

Cons

1. Initial investment is high
2. Size of antenna for long range is large
3. Possible heat buildup is a concern

Hardware:

Arduino Uno (~\$24.00)

<https://www.sparkfun.com/products/11021>



RFID Reader - M6E Nano (~\$224.00)

https://www.sparkfun.com/products/14066?_ga=2.237672064.1859094098.1601568143-558284381.1599749972



Software / Hardware Support:

<p><u>Device Library</u></p> <p>https://github.com/sparkfun/SparkFun_Simultaneous_RFID_Tag_Reader_Library</p>	<p><u>Documentation</u></p> <table><tr><th>DESCRIPTION</th><th>FEATURES</th><th>DOCUMENTS</th></tr><tr><td colspan="3"><ul style="list-style-type: none">• Schematic• Eagle File• RFID basics• Hookup Guide• Product Brief• Datasheet• Design Guide• Thermal Gap Filler• Firmware Update (v1.9.0)• Firmware release notes• Product Page• OEM Documentation page• Universal Reader Assistant (Windows only)• GitHub (Design Files)• GitHub (Arduino Library)</td></tr></table>	DESCRIPTION	FEATURES	DOCUMENTS	<ul style="list-style-type: none">• Schematic• Eagle File• RFID basics• Hookup Guide• Product Brief• Datasheet• Design Guide• Thermal Gap Filler• Firmware Update (v1.9.0)• Firmware release notes• Product Page• OEM Documentation page• Universal Reader Assistant (Windows only)• GitHub (Design Files)• GitHub (Arduino Library)		
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