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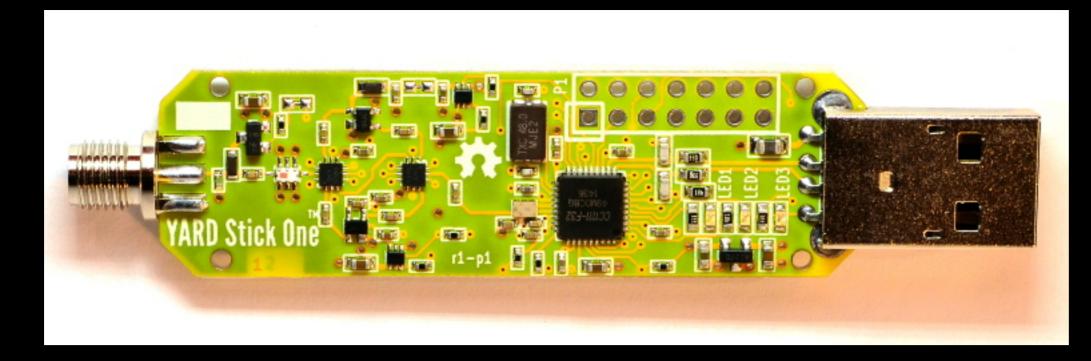
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YARD Stick One

YARD Stick One is a sub-1 GHz wireless test tool controlled by your computer.



YARD Stick One is available from:

- Adafruit (US)
- BuyaPi.ca (CA)
- Hacker Warehouse (US)
- Hak5 (US)
- iSource Asia (CN)
- Maes Electronics (BE)
- ML&S Martin Lynch & Sons (UK)
- NooElec (US/CA)
- Store4Geeks (SE)
- OFC / Ouverture Fine (FR)
- Oz Hack (AU)
- Passion Radio Shop (FR/UK)
- Rysc Corp. (US)
- Seeed Studio (CN)
- VCTEC (KR)
- Wall of Sheep (US)

YARD Stick One (Yet Another Radio Dongle) can transmit or receive digital wireless signals at frequencies below 1 GHz. It uses the same radio circuit as the popular IM-Me. The radio functions that are possible by customizing IM-Me firmware are now at your fingertips when you attach YARD Stick One to a computer via USB.

Capabilities:

- half-duplex transmit and receive
- official operating frequencies: 300-348 MHz, 391-464 MHz, and 782-928 MHz
- unofficial operating frequencies: 281-361 MHz, 378-481 MHz, and 749-962 MHz
- modulations: ASK, OOK, GFSK, 2-FSK, 4-FSK, MSK
- data rates up to 500 kbps
- Full-Speed USB 2.0

(Official operating frequencies are guaranteed to work. Unofficial operating frequencies work in our experience.)

YARD Stick One comes with RfCat firmware installed, courtesy of atlas. RfCat allows you to control the wireless transceiver from an interactive Python shell or your own program running on your computer. YARD Stick One also has CC Bootloader installed, so you can upgrade RFCat or install your own firmware without any additional programming hardware. An antenna is not included. ANT500 is recommended as a starter antenna for YARD Stick One.

Originally based on the ToorCon 14 Badge design, YARD Stick One has several featured not previously seen in CC1111 platforms:

- SMA connector for external antennas such as ANT500
- receive amplifier for improved sensitivity
- transmit amplifier for higher output power
- strong RF performance across the entire operating frequency range
- low pass filter for elimination of harmonics when operating in the 800 and 900 MHz bands
- antenna port power control for compatibility with antenna port accessories designed for HackRF One
- GoodFET-compatible expansion and programming header
- GIMME-compatible programming test points

technical information

Documentation is in the YARD Stick wiki, or the rfcat git repository.

Hardware design files are available in the git repository.

getting help

Before asking for help with YARD Stick One, check to see if your question is listed in the FAQ or has already been answered in the mailing list archives.

For assistance with YARD Stick hardware, please look at the issues on the GitHub project. Software issues should be logged on the rfcat GitHub issue tracker. This is the preferred place to ask questions so that others may locate the answer to your question in the future.

If you prefer email then you may use the yardstick mailing list instead. You can view the list archives for past discussions.

A group of users spend time in the #rfcat IRC channel on freenode. The IRC channel is a great place for us all to learn together, but it is not a good place to request support.