

Raspberry Pi

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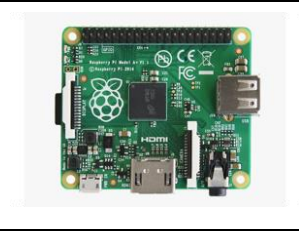
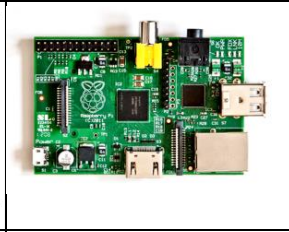

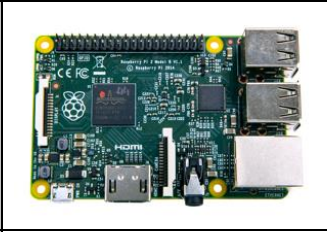

Raspberry Pi 3 Board



What is a Raspberry Pi

- A small inexpensive Linux computer
- Created as an educational tool for teaching programming in schools (Python)
- Low cost computing platform (\$30)
- Excellent platform for portable or remote locations
- Can work with Arduino for device controls

Model Comparison

					
Raspberry Pi:	Model A+	Model B	Model B+	2, Model B	Pi 3 Model B
Price:	19.99	39.99	29.99	39.99	35.00
Quick summary:	Cheapest, smallest single board computer.	The original Raspberry Pi.	More USB and GPIO than the B. Ideal choice for schools	Improved Raspberry Pi.	Newest Raspberry Pi
Chip:	Broadcom BCM2835			Broadcom BCM2836	Broadcom BCM2837
Processor:	ARMv6 single core			ARMv7 quad core	4X ARM Cortex-A53
Processor Speed:	700 MHz			900 MHz	1.2 GHz
Voltage and Power Draw:	600mA @ 5V			650mA @ 5V	1.2A @ 5V
GPU:	Dual Core VideoCore IV Multimedia Co-Processor				Broadcom VideoCore IV
Size:	65x56mm	85x56mm			
Memory:	256 MB SDRAM @ 400 MHz	512 MB SDRAM @ 400 MHz		1 GB SDRAM @ 400 MHz	1GB LPDDR2 (900 MHz)
Storage:	Micro SD Card (not included)	SD Card (not included)	Micro SD Card (included)	Micro SD Card (not included)	Micro SD Card
GPIO:	40	26	40		
USB 2.0:	1	2	4		
Ethernet:	None	10/100mb Ethernet RJ45 Jack			
WiFi	None				2.4 GHz 802.11n
	None				4.1 Classic, Low Energy
Audio:	Multi-Channel HD Audio over HDMI, Analog Stereo from 3.5mm Headphone Jack				

Operating Systems

- Supports multiple operating systems
 - Raspbian (most common)
 - Linux (Ubuntu Mate)
 - Risc OS
 - Plan 9
 - Android
 - Arch
 - XBMC (Video server)
- Inexpensive home server (Apache, FTP, DNS)

Ham Applications

- APRS Tracker
- Chirp
- Cutesdr
- Cqrlog
- Dstar Access Point
- Fldigi
- Freedv
- Gpsk31
- Klog
- Nec2
- Remote QTH Server
- Soundmodem
- SDR Radio
- WSJT-X
- Xlog
- Xnec2

FLDIGI on Raspberry PI 3 "K10KK"

fldigi - K10KK

File Op Mode Configure View Logbook Help

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Shack security: mini black dachshund
This QSO will be logged automaticly via eQSL.cc or via the qrz.com

CQ 3.0 Clear

CQ ANS QSO SK Me/Qth Brag T/R Tx Rx TX 1

WF -20 70 x1 NORM 1068 QSY Store Lk Rv T/R

BPSK31 s/n 12 dB imd -28 dB -3.0 AFC SQL KPSQL

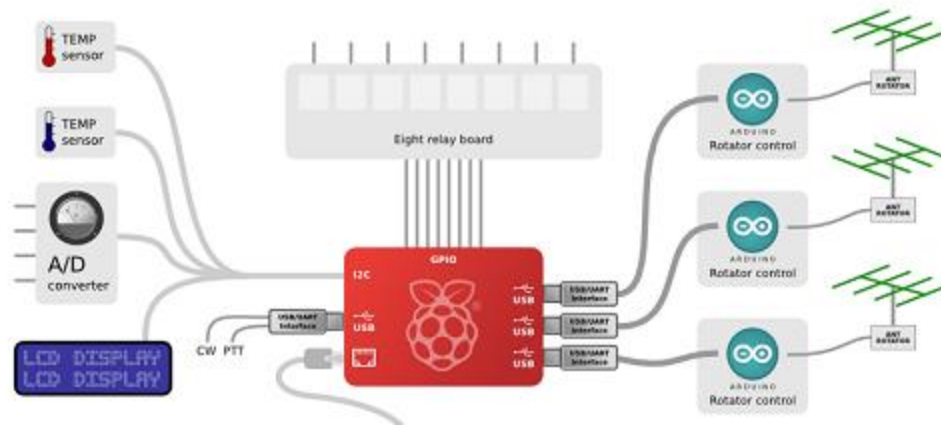
APRS Tracker



TNC-Pi is a special version of TNC-X designed to interface directly with the Raspberry Pi computer. It can connect to the Pi either via the Pi's serial port, or via the I2C protocol. In the latter case, a single Pi can support multiple TNC-Pi's at the same time, since each TNC-Pi can be given a unique I2C address.

<http://tnc-x.com/TNCPi.htm>

Remote QTH Server



Software running on the Raspberry Pi and configuring Linux programs through a web interface for use with your remote station. All software is the Open-source. Control up to 8 arduino (K3NG code) rotators modules, Azimuth maps, Cluster support, Band decoder, contest Web Log, Webcam with RaspiCam support

<http://www.remoteqth.com/remoteqth-server.php>

Links

- <http://www.raspberrypi.org/help/quick-start-guide/>
- <http://www.raspberrypi.org/downloads/>
- <https://ubuntu-mate.org/raspberry-pi/>
- <http://www.raspberryconnect.com/raspbian-packages-list/item/71-raspbian-hamradio>
- <http://www.raspberrypi.org/forums/viewtopic.php?f=29&t=21384>
- <http://ag1le.blogspot.com/p/raspberry-pi.html>
- <http://www.g0hwc.com/raspberry-pi-ham-radio.html>
- <http://www.instructables.com/id/Raspberry-Pi-for-Amateur-Radio-VOIP-Echolink/>
- <http://www.vr2xkp.org/2015/09/20/echolink-2015-svxlink-14-08-1-as-echolink-node/>
- <http://irlp.net/pi>
- <http://www.crompton.com/hamradio/irlp/PiIRLP.html>
- <http://kb9mwr.blogspot.com/2013/08/hsmm-mesh-on-raspberry-pi.html>
- <http://www.remotegth.com/remotegth-server.php>
- <https://www.raspberrypi.org/forums/viewtopic.php?f=29&t=21384>