

ACROSS

- **3** this is what project #164913 is all about
- 5 dressed in stripes of BBROYGBVGW
- 8 I go clack and have an electromagnet
- 11 the brain of the circuit
- **15** I was a rocket fuel mixologist
- **16** a place on Hackaday.IO where anything goes
- 18 you're not a gargoyle without this
- 21 to use a heat gun, vacuum pump, or copper braid
- 22 the act of making sound unlike any other
- 24 a holdfast while soldering
- **26** prove you're not a robot
- 28 male, female, right-angle, or box
- **30** C-type, S-type, or M-type space rocks
- **31** an early electrostatic generator
- **33** sonic _____, a highly versatile tool
- **34** a component that conducts current primarily in one direction
- 35 not a feature
- 36 I was a cryptomaniac before it was cool
- **37** the first component in project #176547
- 40 Estes, NASA, or SpaceX
- 43 for everything else, there's
- 46 better than your teeth or a utilty knife
- 48 the cutest little computers, briefly
- 51 comparable to water pressure
- 55 Project list #3611
- **56** software substitute for hardware in embedded systems
- 57 electromagnetic communication technology
- **58** you can build one of these sixsided orbiters for less than \$1000 these days
- **59** this special diode allows current to flow backward under certain conditions
- 63 formerly Wolfram
- 64 don't let me out
- 67 ... --- ...
- **68** name this miniature Nintendo homage
- **70** 24 caffeine-fueled hours of mayhem and fun
- 71 many circuits begin here, some never leave
- **73** confidentiality, integrity, and availability
- 76 these transforms helped a Billy Bass become Alexa in project #73048
- **78** a keyboard that does your bidding

- 81 only the best logo ever
- 82 sweet, sweet square waves
- **83** this type of resistor needs a place in the sun
- 84 to hide secret messages in plain sight
- 85 refracting, Newtonian, or Schmidt-Cassegrain
- 86 I measure things inside and out
- 87 use these after soldering
- 88 I keep things cool

DOWN

- 1 electrical engineer, mechanical engineer, and futurist best known for his contributions to the design of the modern AC supply system
- 2 spin me around to pump up the volume
- 3 use a blue box for this
- 4 SAOs are a big part of this
- 6 an open-source keyboard firmware
- **7** this lights up project #179361
- 9 sometimes you wanna go where everybody knows your name
- 10 this project won the 2019 HaD Prize
- 12 preferred drink of thirsty, mostly European hackers
- 14 QWERTY, AOEUIDHTNS, split, ergonomic, mechanical
- 17 fruits of the keyboard
- **19** project #176246 uses 26 of them
- 20 Tesla founder or semiaquatic rodent
- 23 tfeed me or you'll have to start over
- 24 there are 10 types of people in the world
- 25 HTTPS, TCP/IP, FTP
- 27 to use something for a purpose not originally intended
- **29** this project won the 2020 HaD Prize
- **32** to understand this, one must first understand this
- **38** this guy had principles
- 39 humanity's home in orbit
- **41** this strange phenomenon happens to strawberries, daisies, and more
- **42** what type of bot featured in project #7792 was written in Energia?
- 44 I know how hot your printer bed is
- 45 absorbent way to desolder
- 47 yes or no, high or low
- **49** some of us use a lighter, some a heat gun
- 50 because they're not all drones
- 52 leaded or unleaded
- **53** Dalibor Farny is the king of these cold cathode displays
- 54 3D creation suite or smoothie tool

- 58 don't PANIC; negative is
- 60 developed in 1969, now standardized as IETF
- 61 this tape can take the heat
- **62** these make blinkenlight
- 65 focus of HackadayU course by Uri Shaked
- 66 I created the polio vaccine
- 69 PLA, PETG, ABS
- 72 the big name in low-power, opensource, single-board computers
- 74 Cura, for example
- 75 I hold a charge
- 77 V=IR
- **79** they have various purposes, like passing the butter
- 80 with solder or capacitor, McFly
- 84 modern gateway to ham radio, briefly