

One Handed Fightstick Bill of Materials:

KeeYees Pro Micro Arduino Board (KYES8-196-3):

We chose this small Arduino board due to its compact size and the simplicity of it. Since we only have eight buttons and one analog stick, we don't need a complicated oversized board.

The board fits perfectly in our 3D printed case without any issue and all the buttons and the analog stick will be wired to it.

Cost: \$12.80 (Bought from student who bought in bulk)

Gikfun 12mm Push Buttons (LYSB01E38OS7K-ELECTRNCS):

We chose to use standard SMD tactile push buttons because many controller users are already used to the tactile feeling of them. If we use different switches that are not commonly used, it might cause the user to have an adjustment time when switching to the controller, which we do not want.

Cost: \$13.88 (Pack of 25 buttons/caps)

AIHJCNELE Analog Stick (1866345M):

We decided to use an analog stick over a D-pad because we felt that an analog stick is more commonly used in fighting games rather than a D-pad. While D-pad offers a more precise control, an analog stick would offer the user more comfort and ease of use under one handed operation.

The user can keep their thumb on the analog stick at all times while a D-pad requires the user to reposition their thumb.

Cost: \$11.99 for 5 thumbsticks

Resistors (Part Number Not Applicable):

We had a multi pack of resistors of various resistance values available to use without purchase.

Cost: \$0.00

CBAZY™ Hook up Wire Kit (B075M2YS12):

This is just a multi pack of 28 gauge PVC stranded wire in six different colors. There is 32.8 feet of each color. (Black, Red, White, Blue, Yellow, and Green)

Cost: \$19.88

Double Sided PCB Board (PB1882CA):

We found a mini solderable breadboard that would fit in our case, allowing us to be more lenient with our circuit design.

Cost: Free (Received from student for free)

Hot Glue (Part Number Not Applicable):

Hot glue in the lab was used to secure last-minute supports in the shell, as well as extra support for the analog stick and buttons.

Cost: N/A (Lab Material)

Electrical Tape (Part Number Not Applicable):

Electrical tape was used to provide extra security in holding everything together externally, add a nice design pattern to the shell, and improve grip ability in the palm area.

Cost: N/A (Lab Material)

Estimated Total of All Parts: \$58.55