1 ArcJoy project Bill of Materials

1.1 ArcJoy

1.1.1 Mechanical parts

| Nr. | Part name | Manufacturer | Description | Number of components |
|-----|--------------------------|----------------------------------|---------------------------------------|----------------------|
| 1 | Z20 | KRADEX | Electronic case | 1 |
| 2 | FIX-LEM-98 | FIX&FASTEN | LED Light guide | 1 |
| 3 | SBH-431-1A | COMFORTABLE ELECTRONIC CO., LTD. | Battery case 3xAAA with wires | 1 |
| 4 | M4x12 Screw | | Screw, Head: cylinder, Phillips | 4 |
| 5 | TFF-M4X35/DR127 | DREMEC | Female threaded hex standoff M4x35 mm | 2 |
| 6 | PS33BRD | NINIGI | Red button | 1 |
| 7 | Mr. JOYSTICK HK-T-8YT | Hua kang INTERNATIONAL CO;LTD | Arcade joystick | 1 |

1.1.2 PCB parts

| Nr. | Schem. symbol | Description | Part name | Manufacturer | Parameters | Case |
|-----|-----------------------------------------------|---------------------------------------|-----------------|-------------------------|-----------------------|--------------|
| 1 | C1, C2 | Multi-layer ceramic capacitor | | | 1 uF, 25 V, 10% | 1206 |
| 2 | C3 | Multi-layer ceramic capacitor | | | 10 nF, 50 V, 10% | 1206 |
| 3 | C4 | Multi-layer ceramic capacitor | | | 100 nF, 100 V, 10% | 1206 |
| 4 | C5 | Tantalum capacitor | | | 10 uF, 16V, 10% | SMD C |
| 5 | D1 | BiColor LED: Red/Blue, common cathode | OSRB5131A | OptoSupply | | THT 5 mm |
| 6 | F1 | SMD Fuse | 158000.0,375 | SIBA | 375 mA | 2.6 x 6.1 mm |
| 7 | J1 | Male pin header 6x1 | | | Pitch: 2,54 mm | |
| 8 | Q1 | P-Channel MOSFET | LGE2301 | LUGUANG ELECTRONIC | | SOT-23-3 |
| 9 | R1, R2, R3, R4, R5, R6, R7, R8, R9, R10 | Thick film resistor | | | 10 kΩ, 1% | 1206 |
| 10 | R11 | Thick film resistor | | | 5.1 kΩ, 1% | 1206 |
| 11 | R12 | Thick film resistor | | | 330 Ω, 1% | 1206 |
| 12 | SW1 | Dip switch, SMD, 6 poles | A6S-6101-H | OMRON | | SMD |
| 13 | U1 | NRF52810 microcontroller module | BM832A | Fanstel | | BGA |
| 14 | U2 | Voltage regulator | MCP1711T-25I/OT | MICROCHIP TECHNOLOGY | 2.5 V | SOT23-5 |

1.2 ArcBase – all parts

| Nr. | Part name | Manufacturer | Description | Number of components |
|-----|-----------------|----------------------|-----------------------|----------------------|
| 1 | NRF52840-DONGLE | Nordic Semiconductor | Usb dongle | 1 |
| 2 | ZL322-2X5P | CONNFLY | Programming connector | 1 |