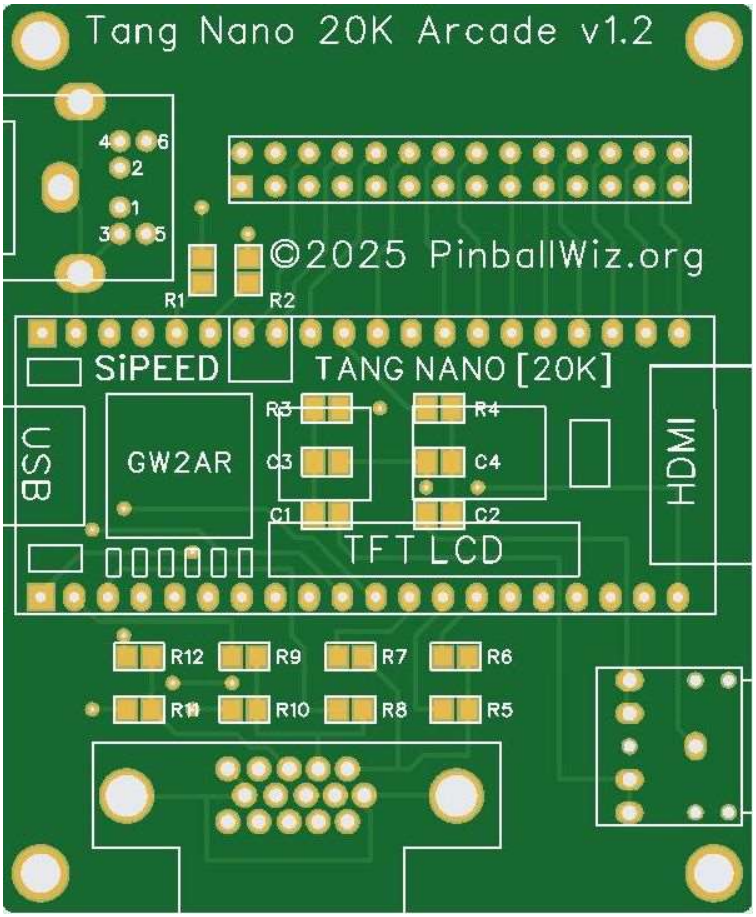
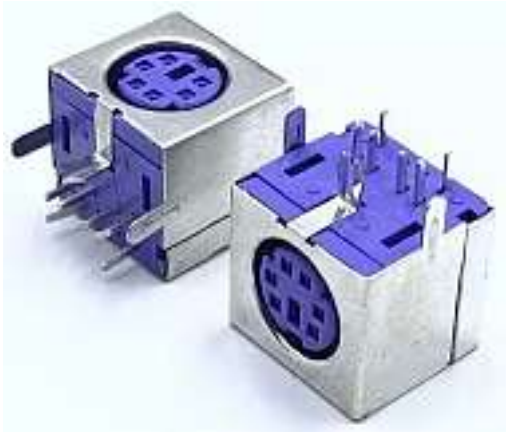
| Tang Nano 20K Arcade Board |
| --- |
| • 8 Bit VGA<br>• PS2 Keyboard<br>• 2 Channel Audio |

| Parts List | |
|---|---|
| Tang Nano 20K Arcade PCB<br><br>1 ea |  |

| Resistors | |
|---|---|
| R1, R2, R6, R8, R12 | 510 ohm – 0805 smd resistor |
| R5, R9, R11 | 1K ohm – 0805 smd resistor |
| R3, R4, R7, R10 | 2K ohm – 0805 smd resistor |

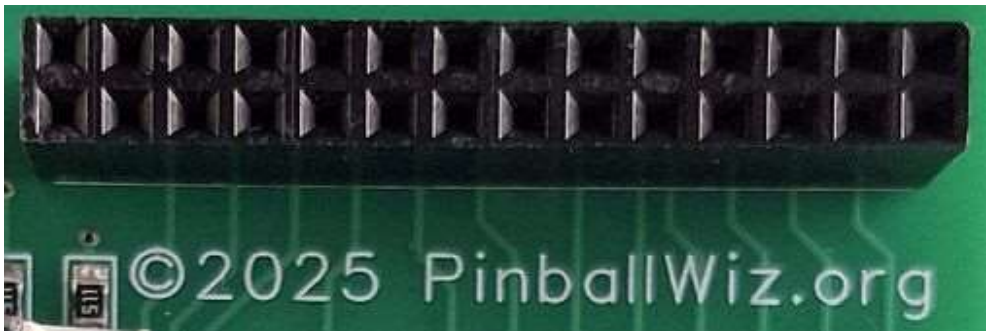
| Capacitors | |
|---|---|
| C1, C2 | 4.7 uF – 0805 smd capacitor |
| C3, C4 | 10 nF – 0805 smd capacitor |

| Assorted Parts | |
|---|---|
| 2 x 14 (28 Pin)<br>Female Pin Header<br>2.54mm pitch<br><br>1 ea | |
| 1 x 40 Pin<br>Female Pin Header<br>2.54mm pitch<br><br>2 ea | |
| PS2 Key Board Socket<br>6 Pin<br><br>1 ea |  |

| Assorted Parts | |
|---|---|
| VGA DB15 Female<br>90 Degree<br>PCB Mount<br><br>1 ea | |
| 3.5mm Stereo Jack<br>Audio<br><br>1 ea | |

| Suppliers | |
|---|---|
| PCB Manufacturing | jlcpcb.com |
| All Other Parts | aliexpress.com |

## 28 pin Header – Tang Nano 20K Pinout Details




| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5v | Gnd | 56 | 54 | 51 | 55 | 86 | 79 | Gnd | 3v | 72 | 71 | 53 | 52 |
| 5v | Gnd | 76 | 80 | 85 | 77 | 15 | 16 | Gnd | 3v | 17 | 20 | 19 | 18 |

## Tang Nano 20K Arcade Pinout Map

| VGA | Pin |
|---|---|
| R2 | 31 |
| R1 | 30 |
| R0 | 29 |
| G2 | 75 |
| G1 | 74 |
| G0 | 73 |
| B1 | 26 |
| B0 | 25 |
| HS | 28 |
| VS | 27 |

| Audio | Pin |
|---|---|
| L | 49 |
| R | 48 |

| Keyboard | Pin |
|---|---|
| PS2 Clock | 41 |
| PS2 Data | 42 |