

Drawn by: Your mother

Sheet: /
File: vga_lite.sch

Title: VGA Lite

Size: A4 | Date: 2020-07-30

KiCad E.D.A. | kicad 5.0.2+dfsg1-1

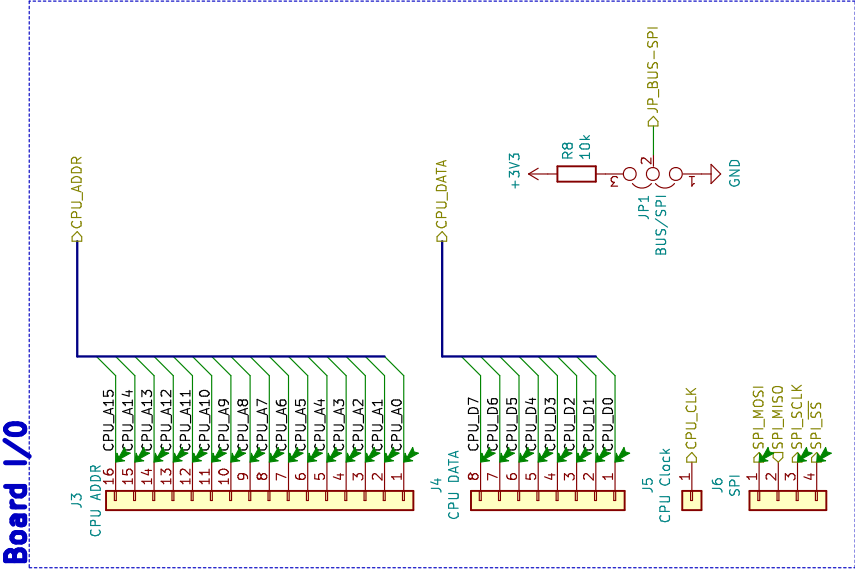
Rev: 1

Id: 1/5

Board I/O

The diagram illustrates the Board I/O connections for the Raspberry Pi 4. It shows the following connections:

- CPU_ADDR:** Connected to J3 pins 16 (CPU A15), 15 (CPU A14), 14 (CPU A13), 13 (CPU A12), 12 (CPU A11), 11 (CPU A10), 10 (CPU A9), 9 (CPU A8), 8 (CPU A7), 7 (CPU A6), 6 (CPU A5), 5 (CPU A4), 4 (CPU A3), 3 (CPU A2), 2 (CPU A1), and 1 (CPU A0).
- CPU_DATA:** Connected to J4 pins 8 (CPU D7), 7 (CPU D6), 6 (CPU D5), 5 (CPU D4), 4 (CPU D3), 3 (CPU D2), 2 (CPU D1), and 1 (CPU D0).
- CPU Clock:** Connected to J5 pin 1 (CPU_CLK).
- SPI:** Connected to J6 pins 1 (SPL MOSI), 2 (SPL MISO), 3 (SPL SCLK), and 4 (SPL SS).
- Power and Ground:** A pull-up resistor (R8, 10k) is connected to the SPI bus and the +3V3 supply. The SPI bus is also connected to the JP1 BUS/SPI header and the JP_BUS-SPI header.



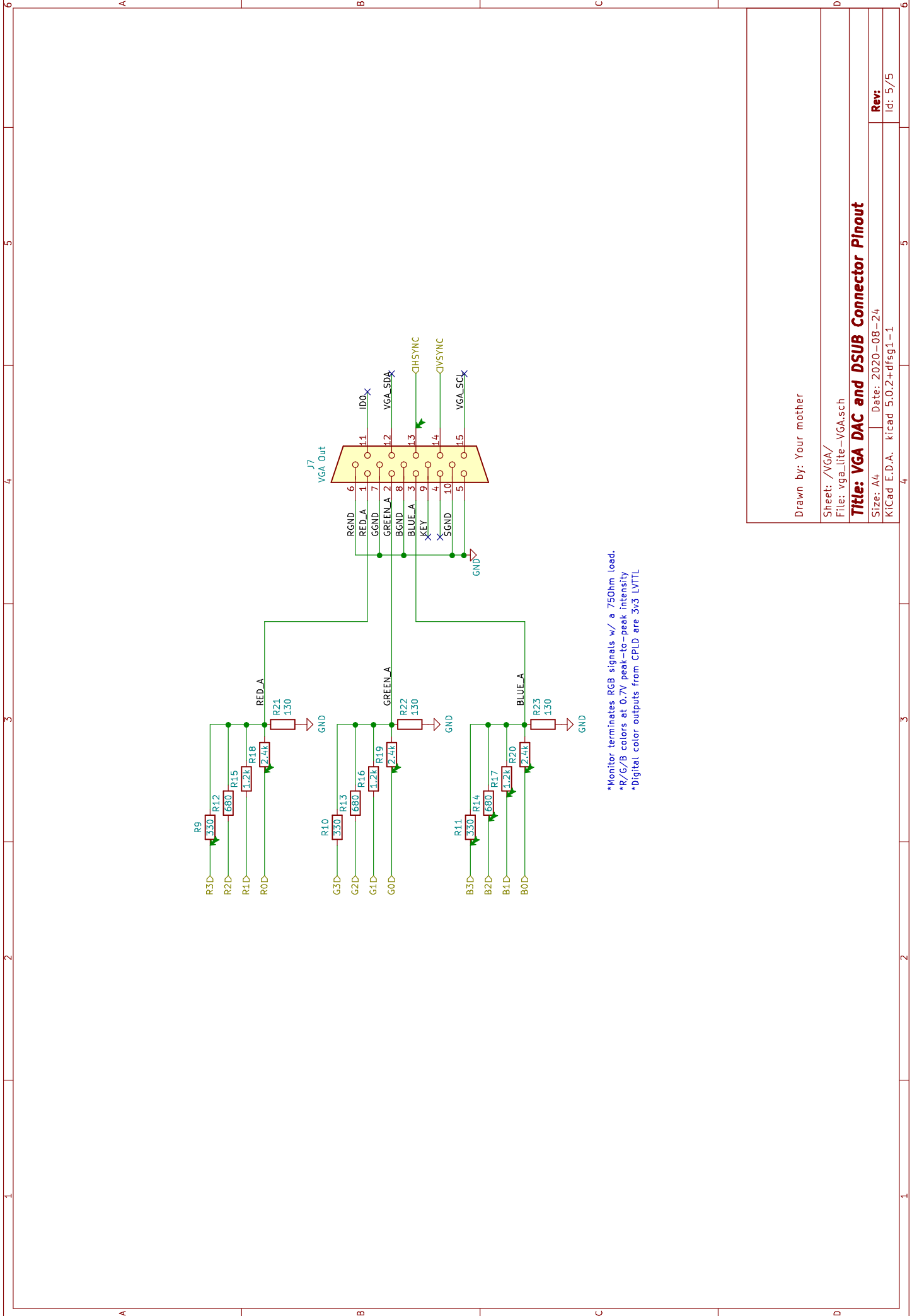
Drawn by: Your mother

Sheet: /Power and board I/O/
File: vga_lite-power.sch

Title: VGA-Lite: Power, Clock, and Board I/O

Size: A4	Date: 2020-08-25	Rev:
V10-04-01-A	10-04-01-A	1.0

5	4	5
10: 3/3 11: 3/3 12: 3/3 13: 3/3 14: 3/3 15: 3/3 16: 3/3 17: 3/3 18: 3/3 19: 3/3 20: 3/3 21: 3/3 22: 3/3 23: 3/3 24: 3/3 25: 3/3 26: 3/3 27: 3/3 28: 3/3 29: 3/3 30: 3/3 31: 3/3 32: 3/3 33: 3/3 34: 3/3 35: 3/3 36: 3/3 37: 3/3 38: 3/3 39: 3/3 40: 3/3 41: 3/3 42: 3/3 43: 3/3 44: 3/3 45: 3/3 46: 3/3 47: 3/3 48: 3/3 49: 3/3 50: 3/3 51: 3/3 52: 3/3 53: 3/3 54: 3/3 55: 3/3 56: 3/3 57: 3/3 58: 3/3 59: 3/3 60: 3/3 61: 3/3 62: 3/3 63: 3/3 64: 3/3 65: 3/3 66: 3/3 67: 3/3 68: 3/3 69: 3/3 70: 3/3 71: 3/3 72: 3/3 73: 3/3 74: 3/3 75: 3/3 76: 3/3 77: 3/3 78: 3/3 79: 3/3 80: 3/3 81: 3/3 82: 3/3 83: 3/3 84: 3/3 85: 3/3 86: 3/3 87: 3/3 88: 3/3 89: 3/3 90: 3/3 91: 3/3 92: 3/3 93: 3/3 94: 3/3 95: 3/3 96: 3/3 97: 3/3 98: 3/3 99: 3/3 100: 3/3 101: 3/3 102: 3/3 103: 3/3 104: 3/3 105: 3/3 106: 3/3 107: 3/3 108: 3/3 109: 3/3 110: 3/3 111: 3/3 112: 3/3 113: 3/3 114: 3/3 115: 3/3 116: 3/3 117: 3/3 118: 3/3 119: 3/3 120: 3/3 121: 3/3 122: 3/3 123: 3/3 124: 3/3 125: 3/3 126: 3/3 127: 3/3 128: 3/3 129: 3/3 130: 3/3 131: 3/3 132: 3/3 133: 3/3 134: 3/3 135: 3/3 136: 3/3 137: 3/3 138: 3/3 139: 3/3 140: 3/3 141: 3/3 142: 3/3 143: 3/3 144: 3/3 145: 3/3 146: 3/3 147: 3/3 148: 3/3 149: 3/3 150: 3/3 151: 3/3 152: 3/3 153: 3/3 154: 3/3 155: 3/3 156: 3/3 157: 3/3 158: 3/3 159: 3/3 160: 3/3 161: 3/3 162: 3/3 163: 3/3 164: 3/3 165: 3/3 166: 3/3 167: 3/3 168: 3/3 169: 3/3 170: 3/3 171: 3/3 172: 3/3 173: 3/3 174: 3/3 175: 3/3 176: 3/3 177: 3/3 178: 3/3 179: 3/3 180: 3/3 181: 3/3 182: 3/3 183: 3/3 184: 3/3 185: 3/3 186: 3/3 187: 3/3 188: 3/3 189: 3/3 190: 3/3 191: 3/3 192: 3/3 193: 3/3 194: 3/3 195: 3/3 196: 3/3 197: 3/3 198: 3/3 199: 3/3 200: 3/3 201: 3/3 202: 3/3 203: 3/3 204: 3/3 205: 3/3 206: 3/3 207: 3/3 208: 3/3 209: 3/3 210: 3/3 211: 3/3 212: 3/3 213: 3/3 214: 3/3 215: 3/3 216: 3/3 217: 3/3 218: 3/3 219: 3/3 220: 3/3 221: 3/3 222: 3/3 223: 3/3 224: 3/3 225: 3/3 226: 3/3 227: 3/3 228: 3/3 229: 3/3 230: 3/3 231: 3/3 232: 3/3 233: 3/3 234: 3/3 235: 3/3 236: 3/3 237: 3/3 238: 3/3 239: 3/3 240: 3/3 241: 3/3 242: 3/3 243: 3/3 244: 3/3 245: 3/3 246: 3/3 247: 3/3 248: 3/3 249: 3/3 250: 3/3 251: 3/3 252: 3/3 253: 3/3 254: 3/3 255: 3/3 256: 3/3 257: 3/3 258: 3/3 259: 3/3 260: 3/3 261: 3/3 262: 3/3 263: 3/3 264: 3/3 265: 3/3 266: 3/3 267: 3/3 268: 3/3 269: 3/3 270: 3/3 271: 3/3 272: 3/3 273: 3/3 274: 3/3 275: 3/3 276: 3/3 277: 3/3 278: 3/3 279: 3/3 280: 3/3 281: 3/3 282: 3/3 283: 3/3 284: 3/3 285: 3/3 286: 3/3 287: 3/3 288: 3/3 289: 3/3 290: 3/3 291: 3/3 292: 3/3 293: 3/3 294: 3/3 295: 3/3 296: 3/3 297: 3/3 298: 3/3 299: 3/3 300: 3/3 301: 3/3 302: 3/3 303: 3/3 304: 3/3 305: 3/3 306: 3/3 307: 3/3 308: 3/3 309: 3/3 310: 3/3 311: 3/3 312: 3/3 313: 3/3 314: 3/3 315: 3/3 316: 3/3 317: 3/3 318: 3/3 319: 3/3 320: 3/3 321: 3/3 322: 3/3 323: 3/3 324: 3/3 325: 3/3 326: 3/3 327: 3/3 328: 3/		



Drawn by: Your mother

Sheet: /VGA/
File: vga_lite-VGA.sch

Title: VGA DAC and DSUB Connector Pinout

Size:	A4	Date:	2020-08-24	Rev:	
KiCad	E.D.A.	kiCad	5.0.2+dfsg1-1	Id:	5/5