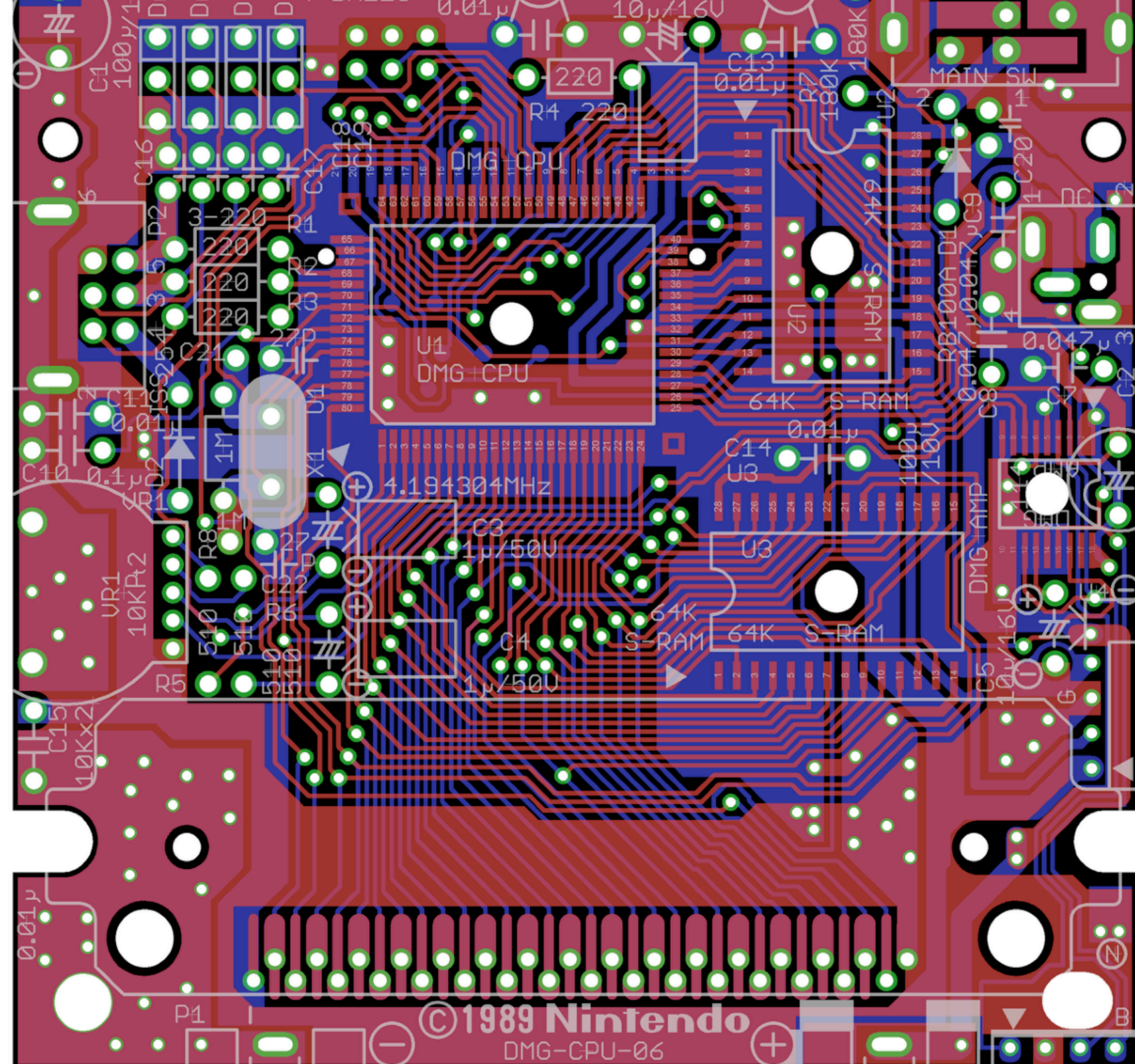


The Game Boy

A scan of the main logic board for the DMG* 01 (Game Boy):
chipmusic.org/forums/topic/13608/dmg-main-board-schematic-circuit-arduino-boy/

DMG stands for “Dot Matrix Game”



Game Boy technical data

| | |
|--------------|--|
| CPU | - 8-bit (Similar to the Z80 processor) |
| Clock Speed | - 4.194304MHz (4.295454MHz for SGB, max. 8.4MHz for CGB) |
| Work RAM | - 8K Byte (32K Byte for CGB) |
| Video RAM | - 8K Byte (16K Byte for CGB) |
| Screen Size | - 2.6" |
| Resolution | - 160x144 (20x18 tiles) |
| Max sprites | - Max 40 per screen, 10 per line |
| Sprite sizes | - 8x8 or 8x16 |
| Palettes | - 1x4 BG, 2x3 OBJ (for CGB: 8x4 BG, 8x3 OBJ) |
| Colors | - 4 grayshades (32768 colors for CGB) |
| Horiz Sync | - 9198 KHz (9420 KHz for SGB) |
| Vert Sync | - 59.73 Hz (61.17 Hz for SGB) |
| Sound | - 4 channels with stereo sound |
| Power | - DC6V 0.7W (DC3V 0.7W for GB Pocket, DC3V 0.6W for CGB) |