H1
MountingHole

LED — POWER — D7 — R13 470
LED — VP — D5 — R6 470
LED — INT — D3 — R5 470
6502 — 65816 EN — D4 — R8 470Ω
BI COLOR LED — EMU — D1 — R14 100
LED — NMI — D2 — R4 470
LED — CS — D9 — R12 470
LED — WAIT — D8 — R11 470

J3
J2 — 65816 ONLY
JP4 — 65816 RESET — GENERATE RESET

FRONT PANEL
GND RTS VCC RX TX CTS
J11 — FPANEL

SW1 — RESET — R7 10
H2
MountingHole

C35 0.1u
U14 — TL16C550CFN

C31 0.1u — U33 — 74LS374 — C36 0.1u
U31 — 74LS244 — RN5 4700
C29 22u

U21 — 74LS74 — C34 0.1u — R10 1KΩ
U26 — 74LS32 — C33 0.1u — C46 47uF

UART CLOCK
JP13 — SER INT — U2

C11 0.1u — U16 — 74LS08

CPU CLOCK — C3 0.1u — U13 — 74LS374

BOARD GUIDES EXCLUSION ZONE

R1 470 — U15 0.1u — U10 — ONL16U05
C18 0.1u — U7 — 74LS04 — R9 3K
1N4148 — D6

C17 0.1u — U19 — 27C64
C1 0.1u — U17 — 74LS00

C14 0.1u — U25 — 74LS374
C24 0.1u — U9 — GAL22V10

C6 0.1u — U4 — 74LS07 — C26 10u — IC1 0.1u — C12
65816CPU-DIP — C23 0.1u
U20 — C4 0.1u — GAL22V10 — C13 0.1u — U18 — 74HC245

C10 0.1u — U5 — 74LS14

GENERATE CLOCK — JP5

RN2 1KΩ

I/O PORT ADDR $50–$5F
JP10 — A7 A6 A5 A4 — RN8
R2 10K
C30 0.1u

C21 0.1u

U15 — DS3253 — JP2 — JP1 — RES SEL
I2C INT — C19 0.1u

C38 0.1u — U23 — 74LS244
C22 0.1u — U22
I/O Address Select
R3 10K — U12 — C9 0.1u — 74LS688 — C32 — U28

RN4 4700

C5 0.1u — U6 — 74LS244 — RN1 4700
C20 0.1u — U3 — 74LS244 — $95 J1 — 74LS688
PCF CLOCK

BUS CPU — JP7
C16 0.1u — U11 — 74LS244
C2 0.1u — U1 — 74LS244
C8 0.1u — U8 — 74LS245 — C37 — U24 — 74HC573 — C40 — U27 — PCF8584

C25 10u — CONN_02X25 — P1
C28 10u — CONN_02X25 — P2 — PROCESSOR.65816, VERSION 1.20, AS OF 21 APRIL 2024
C28 10u — CONN_02X25 — P3 — PATCH LEVEL 0_1_2_3_4_5_6_7_8_9_

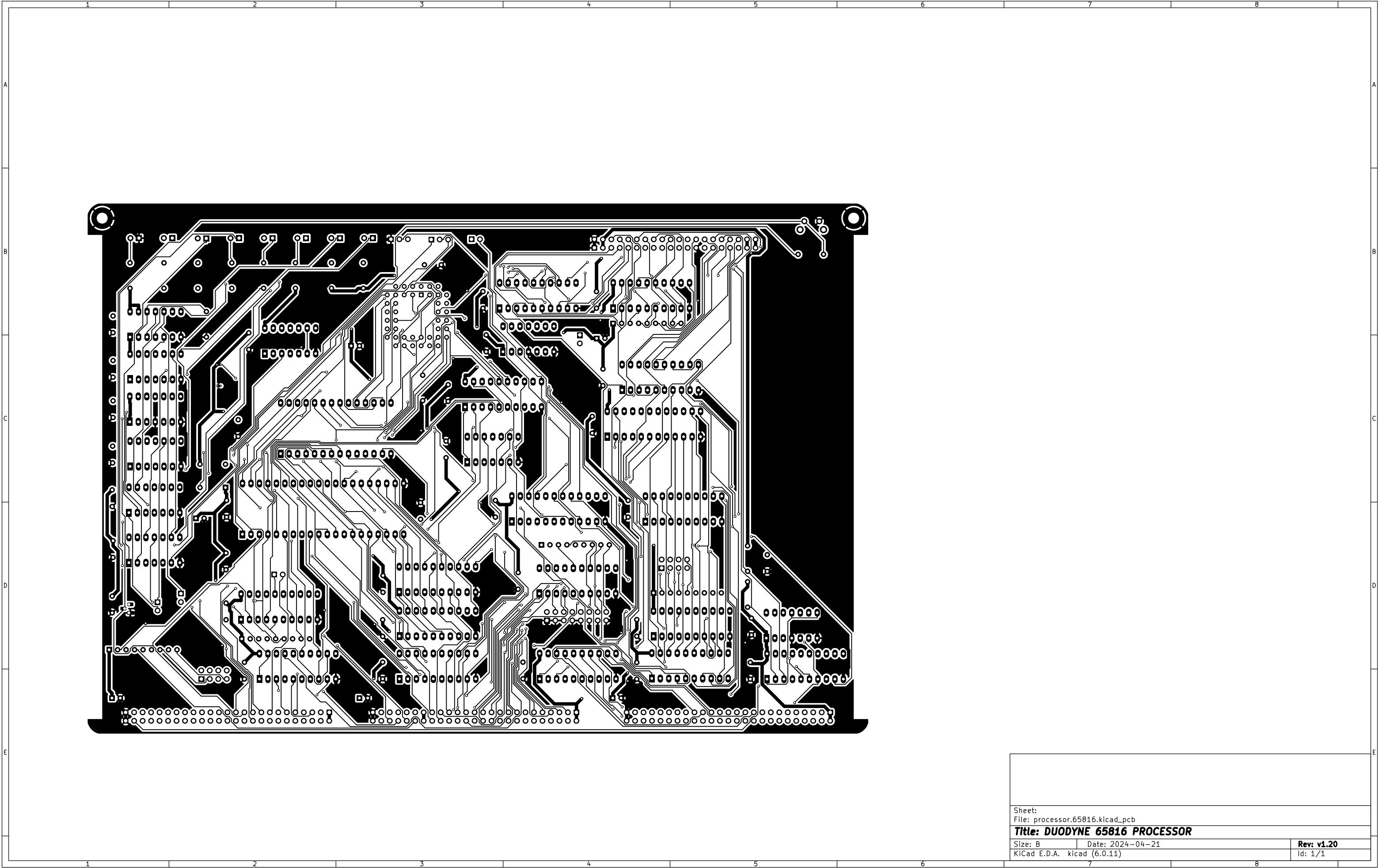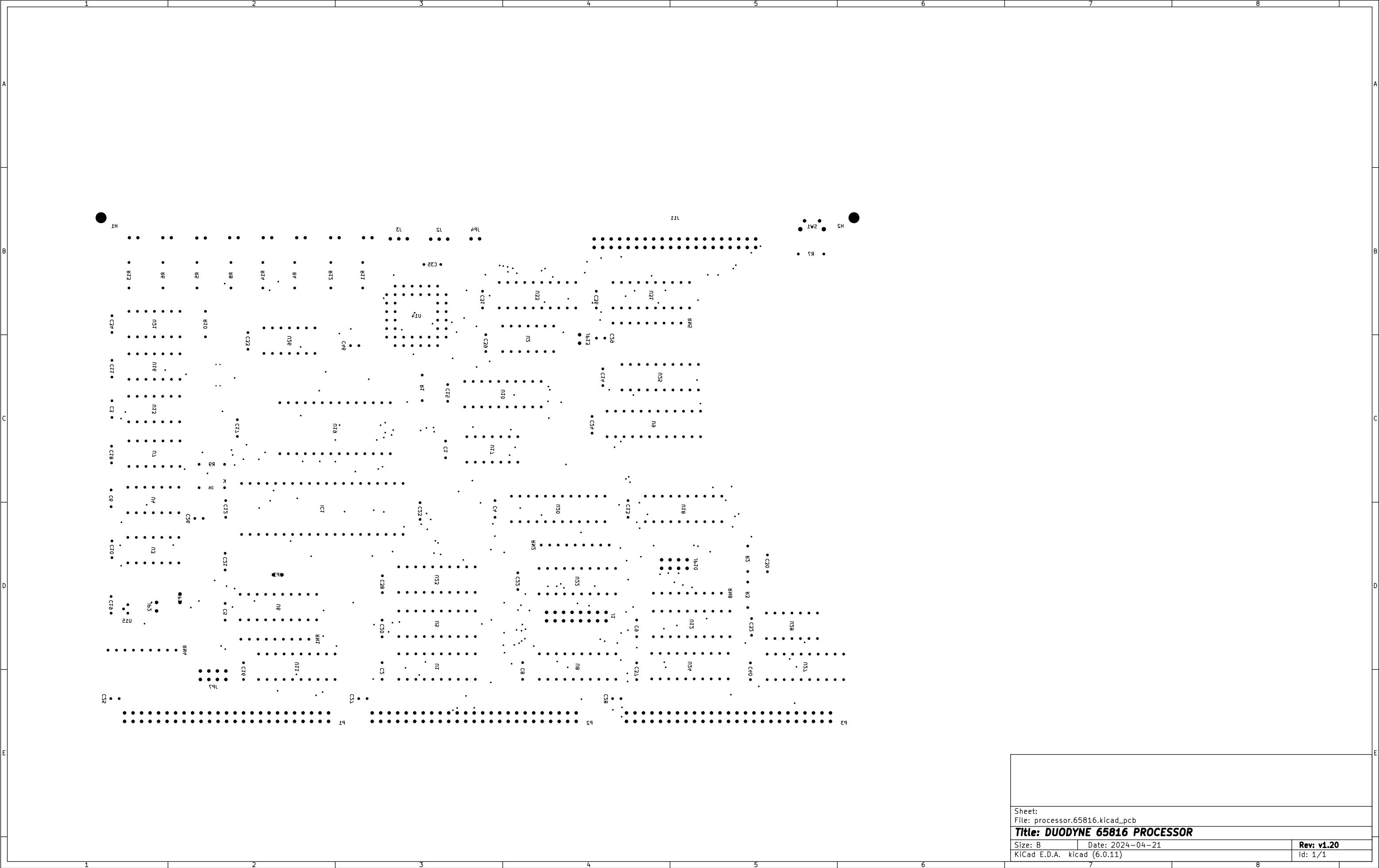BOARD GUIDES EXCLUSION ZONE

Sheet:
File: processor.65816.kicad_pcb

Title: DUODYNE 65816 PROCESSOR

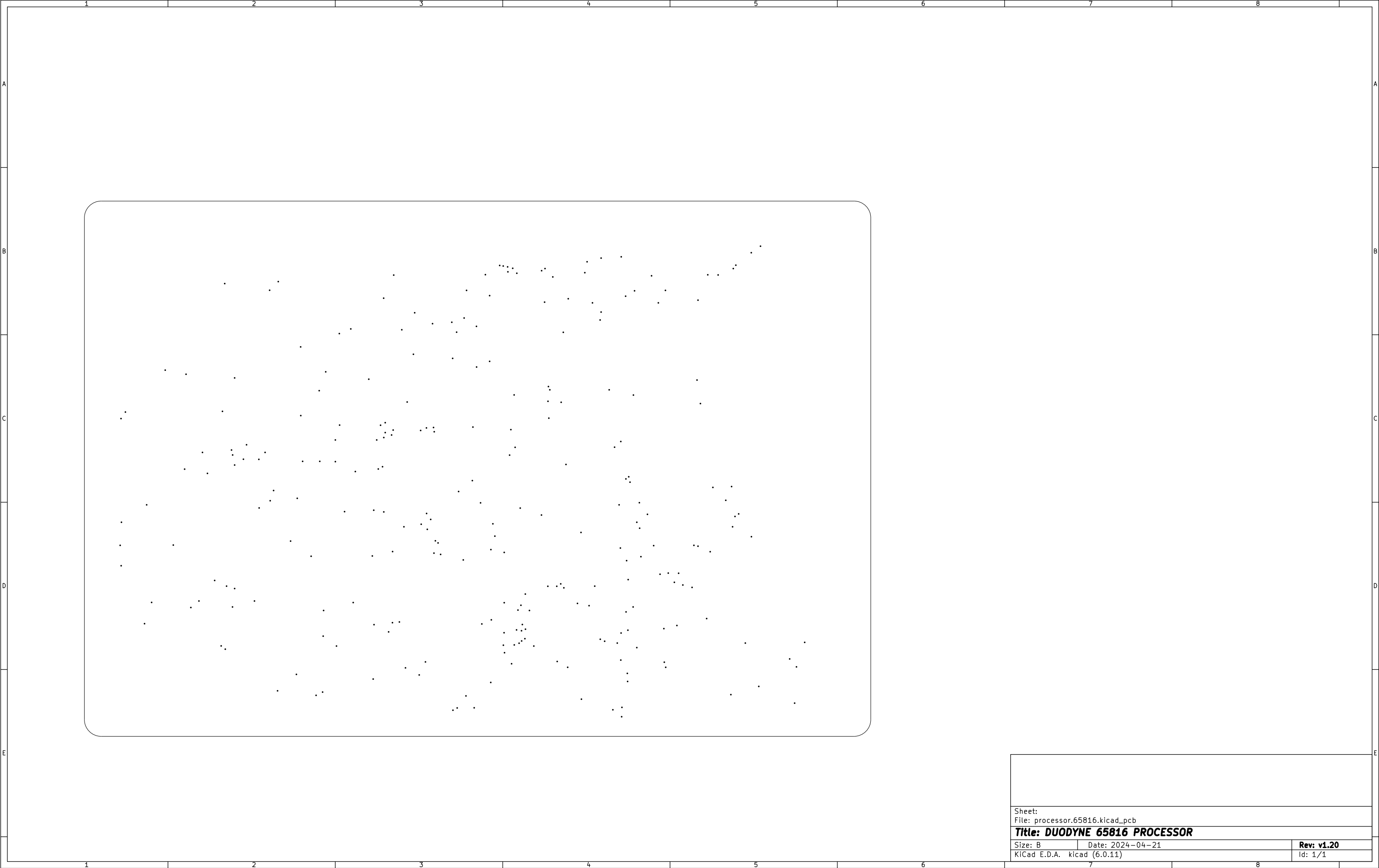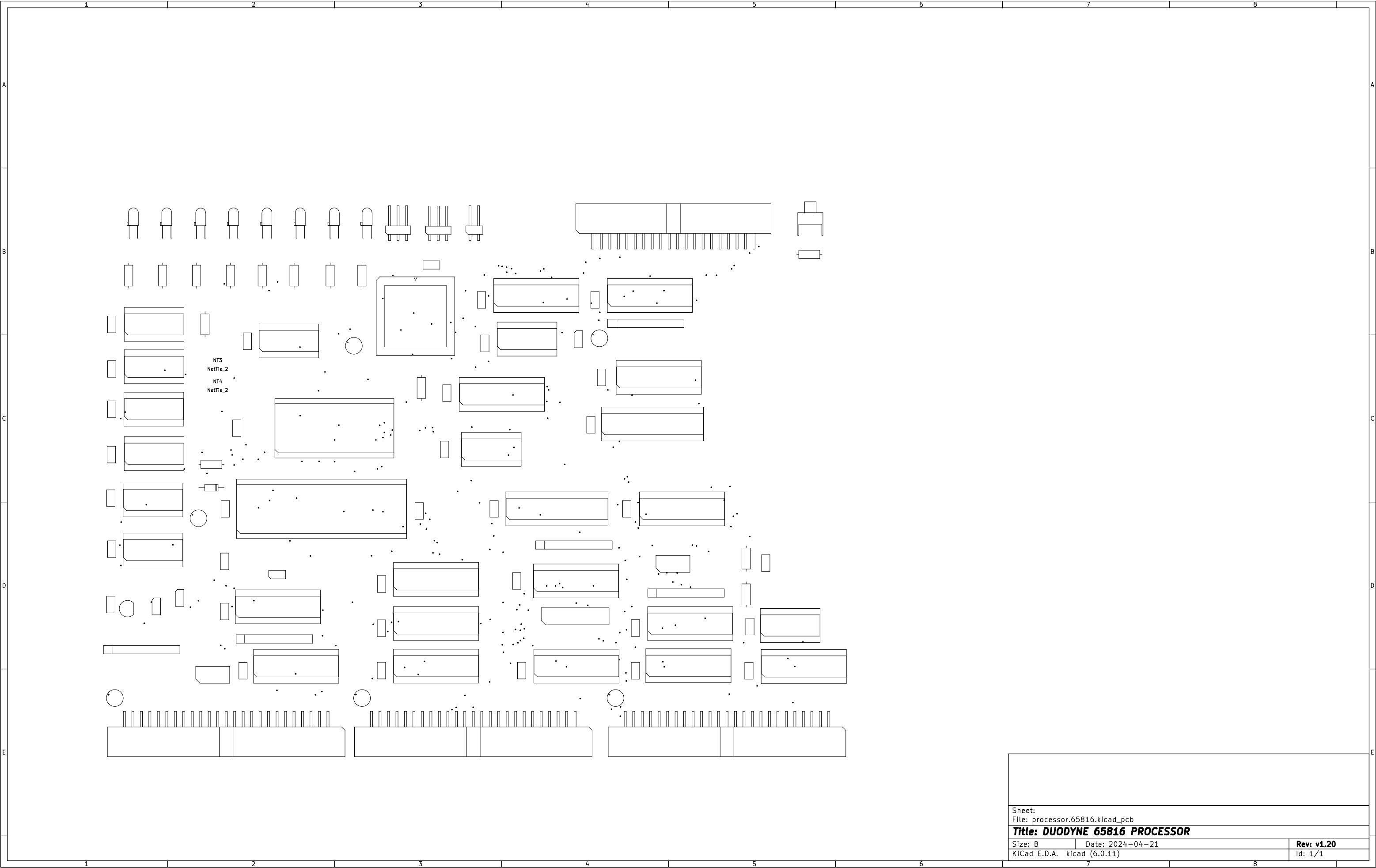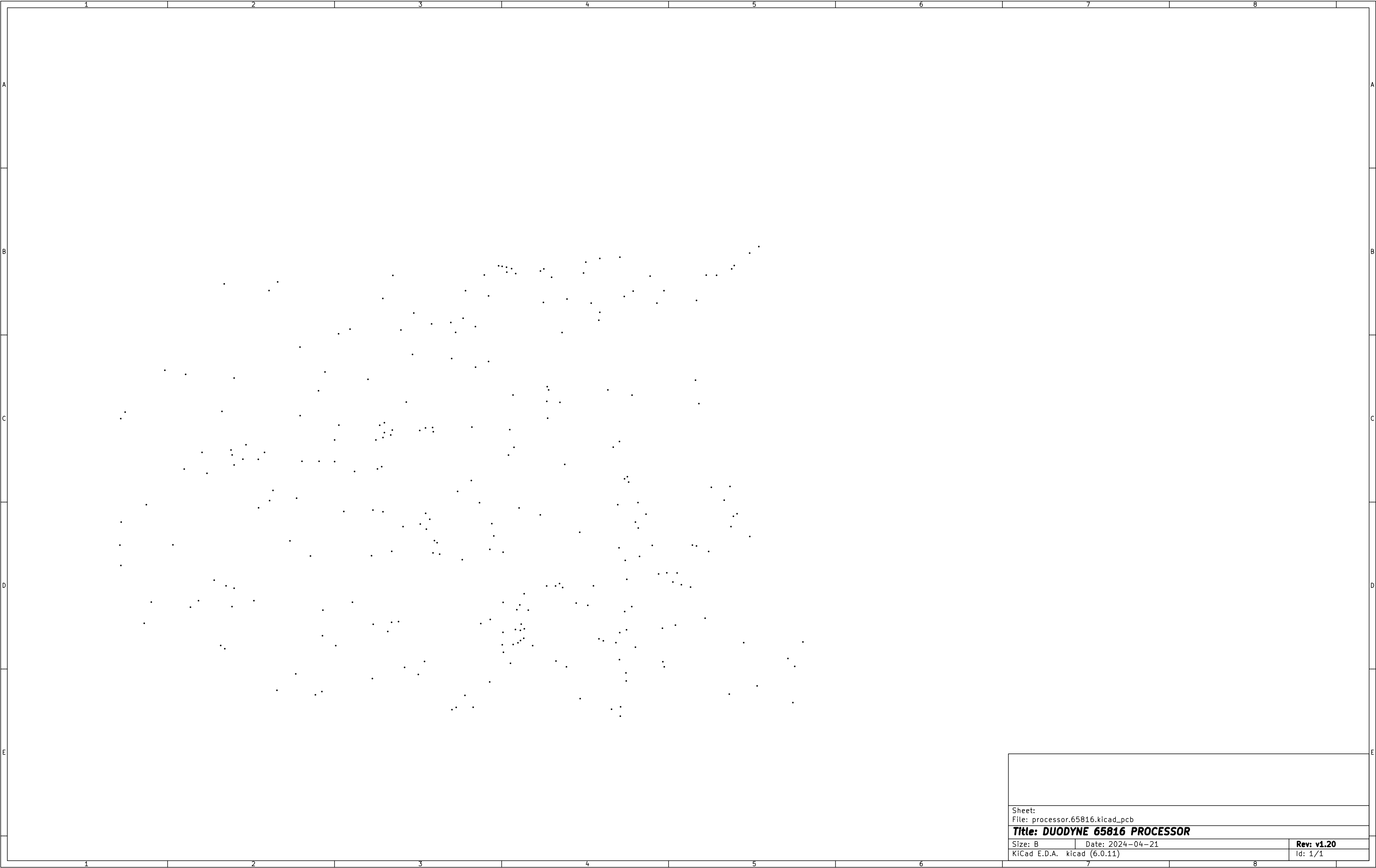| Size: B | Date: 2024-04-21 | Rev: v1.20 |
| KiCad E.D.A. kicad (6.0.11) | | Id: 1/1 |

NT3
NetTie_2

NT4
NetTie_2