Sheet: /
File: z80_iff.sch
Title:
Size: A3   Date:
KiCad E.D.A. kicad 5.1.9-73d0e3b20d88ubuntu18.04.1
Rev:
Id: 1/1

this signal causes bit 3 of the IR to
be loaded into both IFF1 and IFF2

clk

1283   1269   t3182   clk   t3239
t?

207

t7347
t1

1887

pla97 decodes the
EI/DI instructions
pla97   t7237

2885

m1   t3138

IFF2 latch feedback
broken every cycle
1239

clk   t7819

1278   t3246   281

Output of IFF2 latch

206   t3187

When NMI concides with EI, the highlighted path
is enabled which includes both VCC and GND.

This simulation currently resolves this as low.

This causes IFF2 to be incorrectly set to zero, thus
loosing the effect of the EI instruction.

188   t3248   reset   t3260

388   t2221   t2206

t5511

_instr3   instr3   t7895

1379

1380   t5448

t5510   t5452

t7373

Complementary Super-buffer for
bit 3 of the instruction register

248

t7012   t2800   clk   t2784

1227

183   t7232

This path allows IFF2 to be copied
back to IFF1 during a RETI/RETN

IFF1 latch feedback
broken every cycle
1210

clk   t8664

191   t2714   231

Output of IFF1 latch

181   t2712

135   t2699

this signal is asserted for 10 cycles during NMI
acknowledge and forces IFF1 to zero.

188   t2799   reset   t6592   t2950