

# Snagging list

## Söemtron ETR 220 Logic

The following list is for connections and signals for the - **logic diagrams** - that need checking during the reverse engineering of our Söemtron ETR 220 Calculator. It is provide solely as an information source as to the current problems that need investigating.

This list changes continually without notice.

Note - nets with a backslash ( \ ) are negative logic.

**Board #1** - none

**Board #2** - none

**Board #3** - none

**Board #4** - none

**Board #5** - none

**Board #6** - none

**Board #7** - none

**Board #8** - none

**Board #9** - none

**Board #10** - none

**Board #11** - none

Drawing to be finished

**Board #12** - none

**Display** - none

**Keyboard** - none

**Backplane** - none

## Söemtron ETR 220 Circuits - Snagging list

The following list is for connections and signals for the - **circuit diagrams** - that need checking during the reverse engineering of our Söemtron ETR 220 Calculator. It is provide solely as an information source as to the current problems that need investigating.

This list changes continually without notice.

Note - nets with a backslash ( \ ) are negative logic.

**Board #1** - none

**Board #2** - none

**Board #3** - finished

1. Backplane net \B1 pin B26 connects to this board but is not used.
2. Backplane net \F6 pin B22 connects to this board but is not used.
3. Backplane net MZ pin A28 connects to this board but is not used.
5. Logic diagram net SYM pin A22 connects to PL6/A22 but is net AUSGN39. See note #6.1

**Board #4** - finished

1. Gate K62 logic shows 10k to pin 48 (\DGDRV0), board & circuit has GR60.

**Board #5** - finished

4. Backplane Net B33 pin B27 connects to this board but is not used.

**Board #6** - finished

1. Net AUSGN39 pin A22 connects to PL3/A22 but is net SYM on the logic diagrams. See note #3.5

**Board #7 - pending**

1. F/f R, gate K141, net S16 i/p not from pin A2. S16 is pin A29, confirmed by K133 S16 i/p. Pin A2 is net KF11B4F.
2. Master Clear gate net REL1 has no gate #. Gate is split between boards 7, 8 & 9. Also Lõ from power supply pin 16.

**Board #8 - pending**

1. Backplane net \S1 pin A2 connects to this board but is not used.
2. K152 o/p pin B17 (48) is net K(\R1,\VOR1,MZ), connected to pin 48 is net K(\R,S16) from board 3 pin 46. Net K(\R1,\VOR1,\F11,\VER1,S16,MZ). Renamed as K\R\S16.
3. W78 is net KYCLER pin B25 (56), on logic diagram it is net CO connecting to pin B26 (57) on board 12.
4. Net CO pin B26 (57) connects to –  
Pin 57 (B26) on board 8 – net K(\VOR1,S16,VLS,\A81,\R1,\RU?) – gate K160.  
Pin 57 (B26) on board 9 – net K(\A81,\RU1,R,S16,VLS,\VOR1,AUSG) – gate K161.  
Pin 57 (B26) on board 10 – net K(\A81,\RU1,\VOR1,VLS,\R1,\AUSG1) – gate K160.
5. Pin A10 net \KEYPRESS not connected on board.
6. Backplane net G1 pin A10 connects to this board but is not used.
7. Backplane net B33 pin B28 connects to this board but is not used.
8. Master Clear gate net REL1 has no gate #. Gate is split between boards 7, 8 & 9.

**Board #9 - pending**

See note #8.4.

1. K161 o/p pin B26 (57) is net CO from board 8 pin 57 and board 10 pin 57, but is net K(\A81,\RU1,R,S16,VLS,\VOR1,AUSG) on logic diagram.
2. K162 pull down W113 ? not connected to net M pin A9.
3. Net NUMKEYS was net Z/0 is connected to pin B17 (48) but logic diagram is pin B9 (40).
4. Master Clear gate net REL1 has no gate #. Gate is split between boards 7, 8 & 9.

**Board #10** - finished

See note #8.4

1. Gate K155 o/p is net K(\F1F\MUL,\F,S1), on logic diagram it is K(F1F,MUL,\F,S1), F1F part is inverted
3. Gate K194 o/p is net K(R,S). on logic diagram it is K(R,S1), pin number is correct.

**Board #11** - none

**Board #12** - none

**Display - none**

**Keyboard - pending**

1. Check net KBC(CL1) via P17/31 to backplane SK17/31, does not connect to anything else on circuits.

**Backplane - pending**

1. Net \MCLK changed to S as per logic diagram ?????, check backplane connections, Eg board 5 pin A20 ????????
2. Net A44 SK6/A22 to SK3/A22 is net SYM on board 3 and AUSGN39 on board 6.
3. PL8/A29 connects to PL3/A28 ??????????
4. SK3/A6 joined to SK6/A6 as net A41 but not used on board 3 or board 6.

**Power supply - none**

- 1.