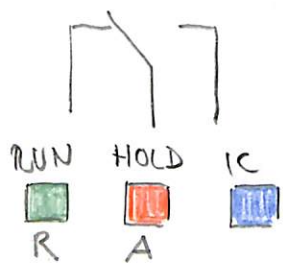
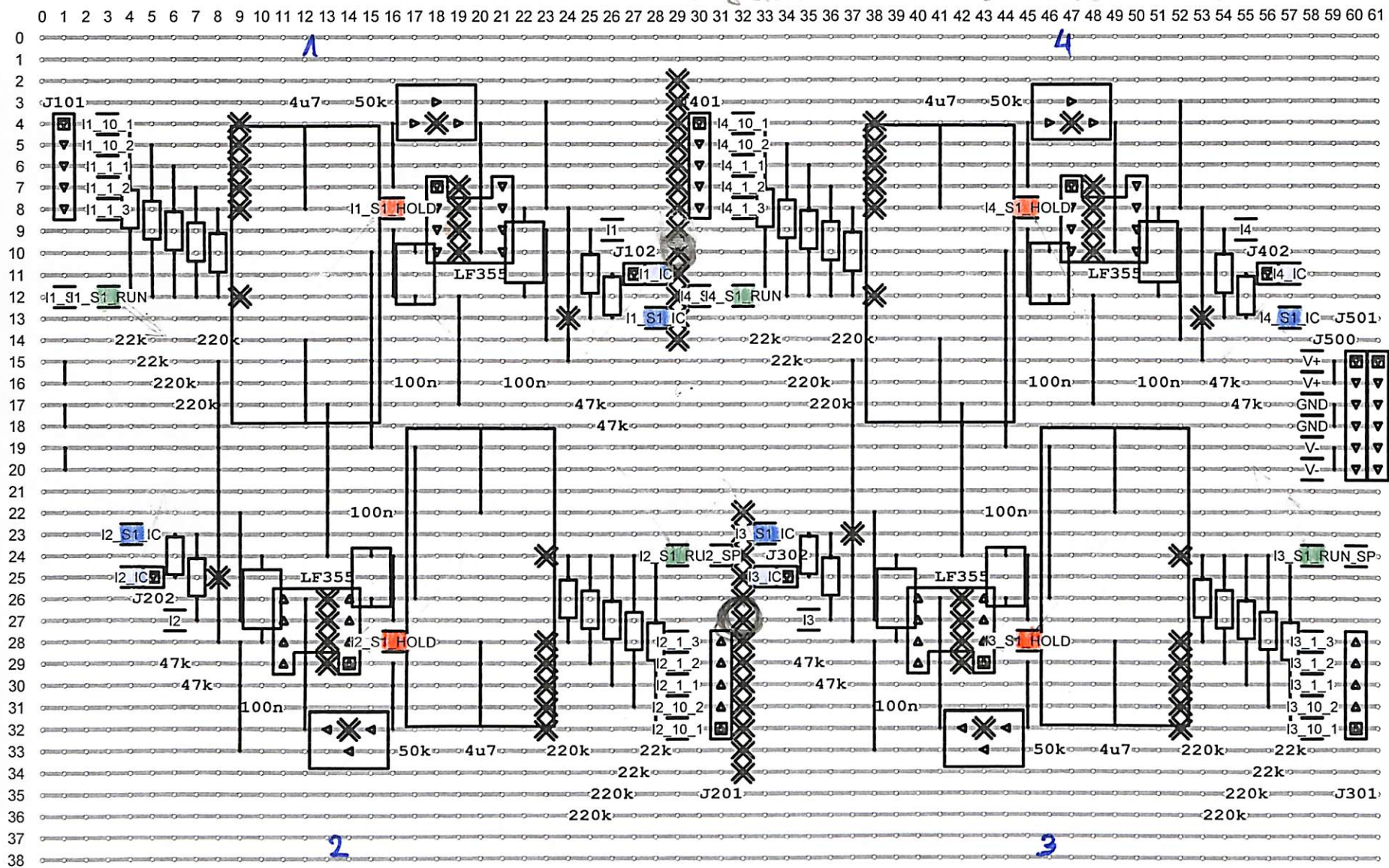
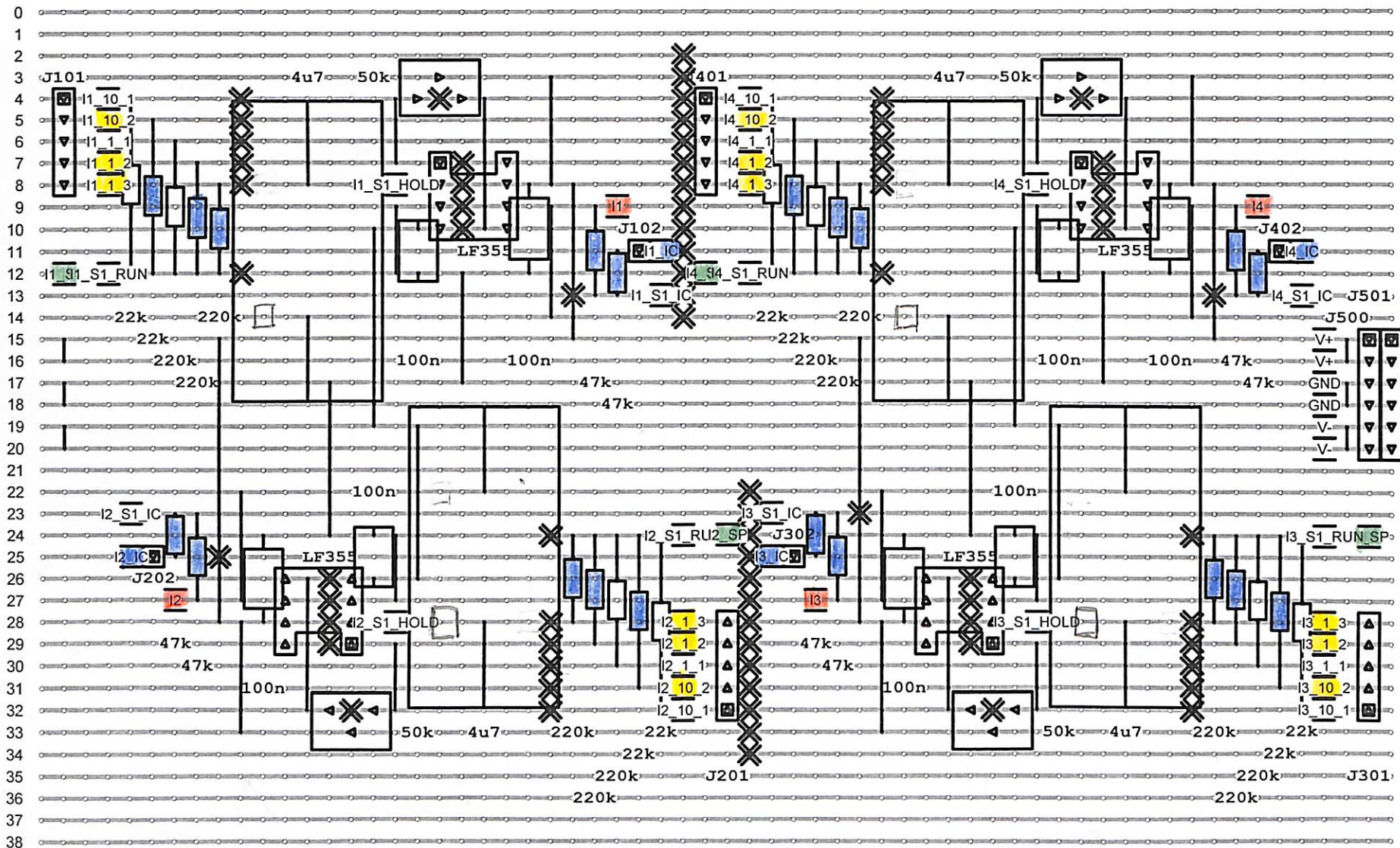


Integrator V2 - Relais-Board Connections



Integrator V2 - Front Panel Connections

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61



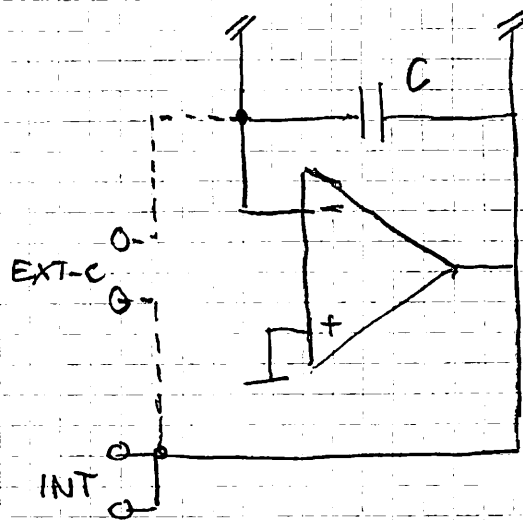
- 1/10
- SP
- INT
- IC

□ connection for external capacitor,
+ provide 3 INT connectors instead of 2.

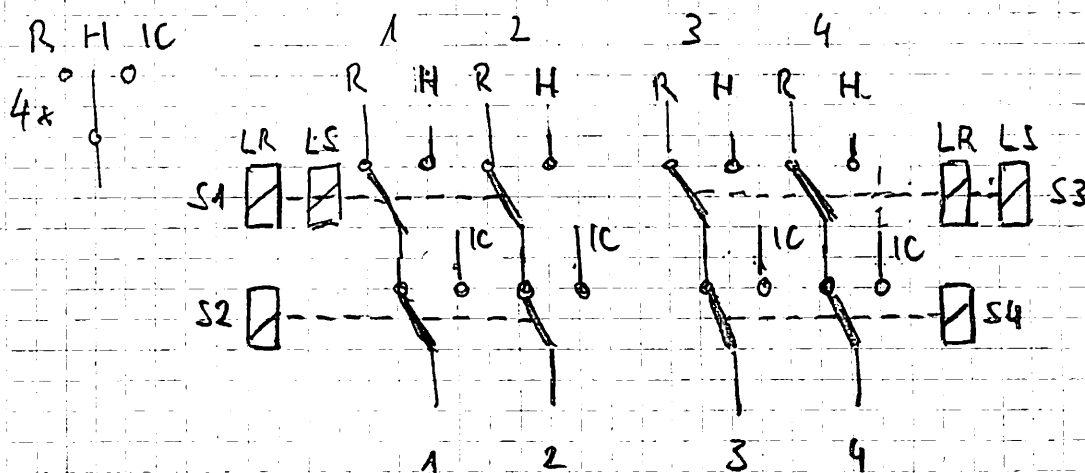
26.11.2017

Analog Computer Integrator V2

Extension for external integration capacitors

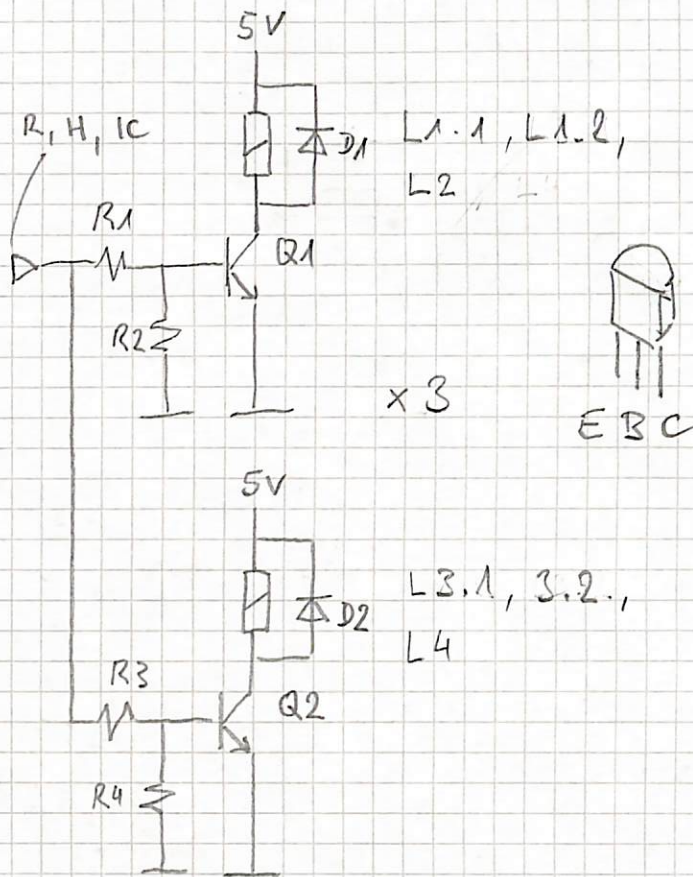


Relais-switching the Integrator



S1, S3 bistable, two coils

S2, S4 monostable, single coil



$$L1, L3 \quad I = 40 \mu A$$

$$L2, L4 \quad I = 30 \mu A$$

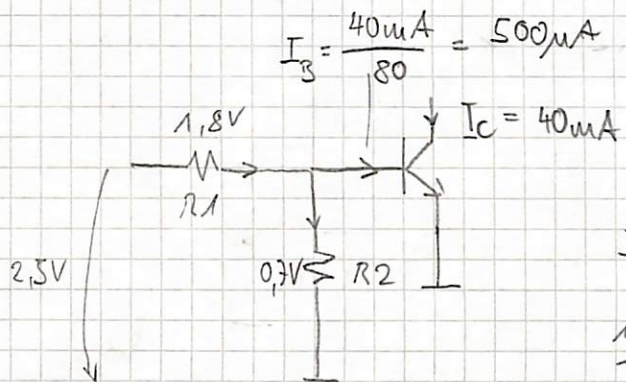
$$Q_n = 2N4401$$

$$h_{FE} (10 \mu A) = 80$$

$$R_1, R_3 =$$

$$R_2, R_4 =$$

$$D1, D2 = 1N4148$$



$$I_{R1} - I_B - I_{R2} = 0$$

$$\frac{1.8V}{R_1} - 500 \mu A - \frac{0.7V}{R_2} = 0$$

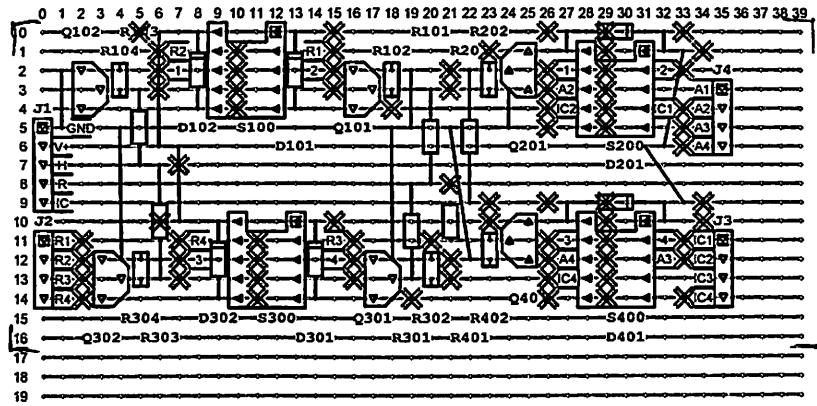
$$I_{R1} = 700 \mu A$$

$$R_1 = 2571 \Omega$$

$$R_1 = 2k\Omega \rightarrow I_{R1} = 667 \mu A$$

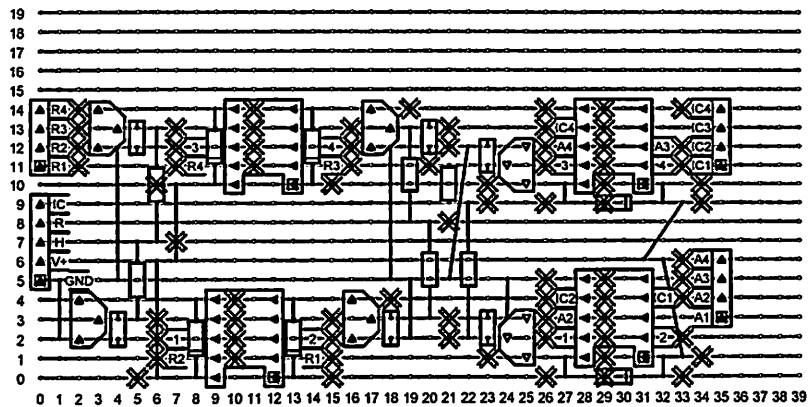
$$R_2 = \frac{0.7}{167 \mu A} = 4191 \Omega = 4k\Omega$$

Integrator V2 - Relais-Board



R

Integrator 1/2 - Relais-Board



F

Integrator 12 - Relais-Board

