

Modellrechner

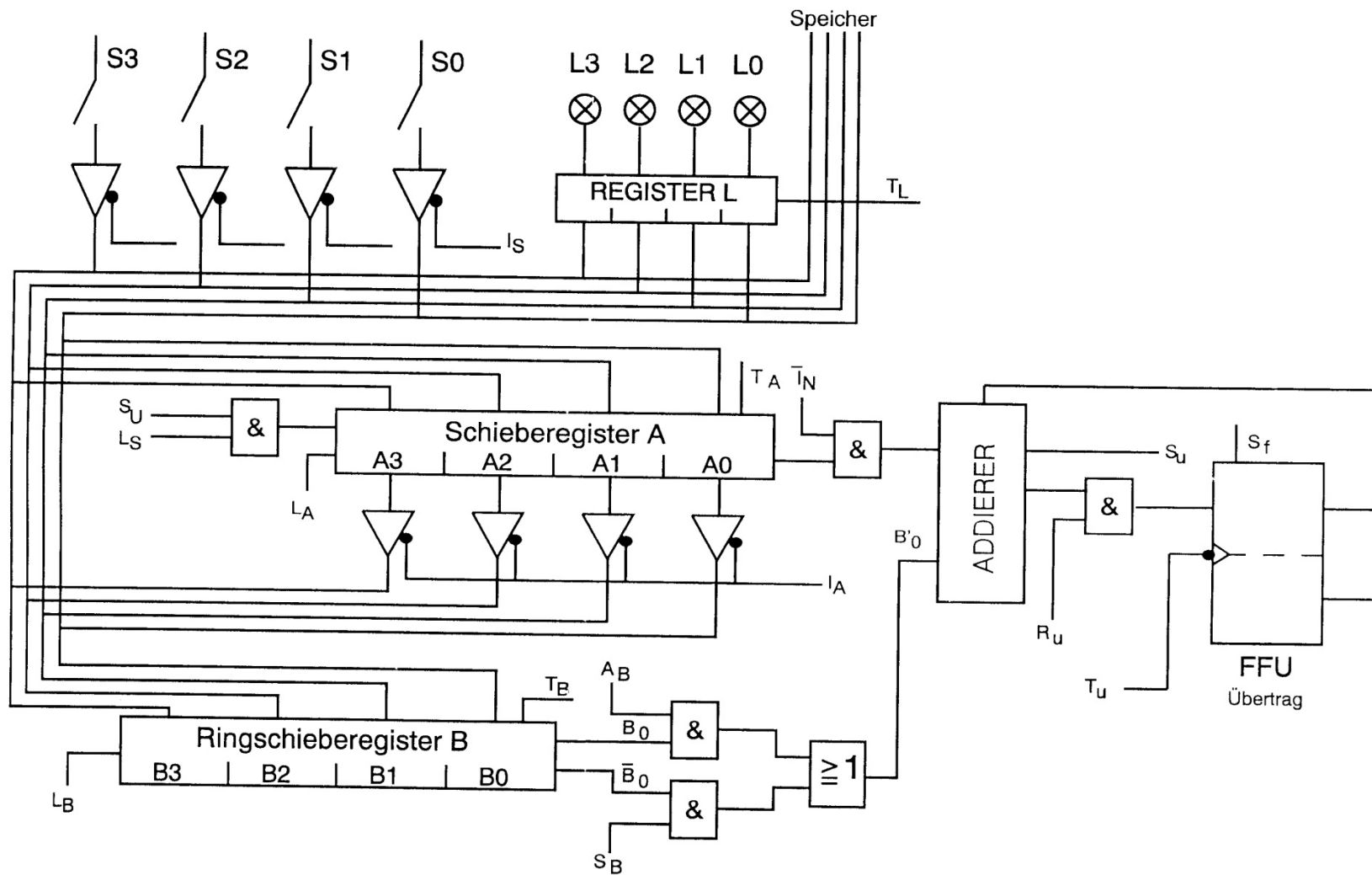
Grundoperationen:

Addition

Subtraktion (mittels Zweierkomplement)

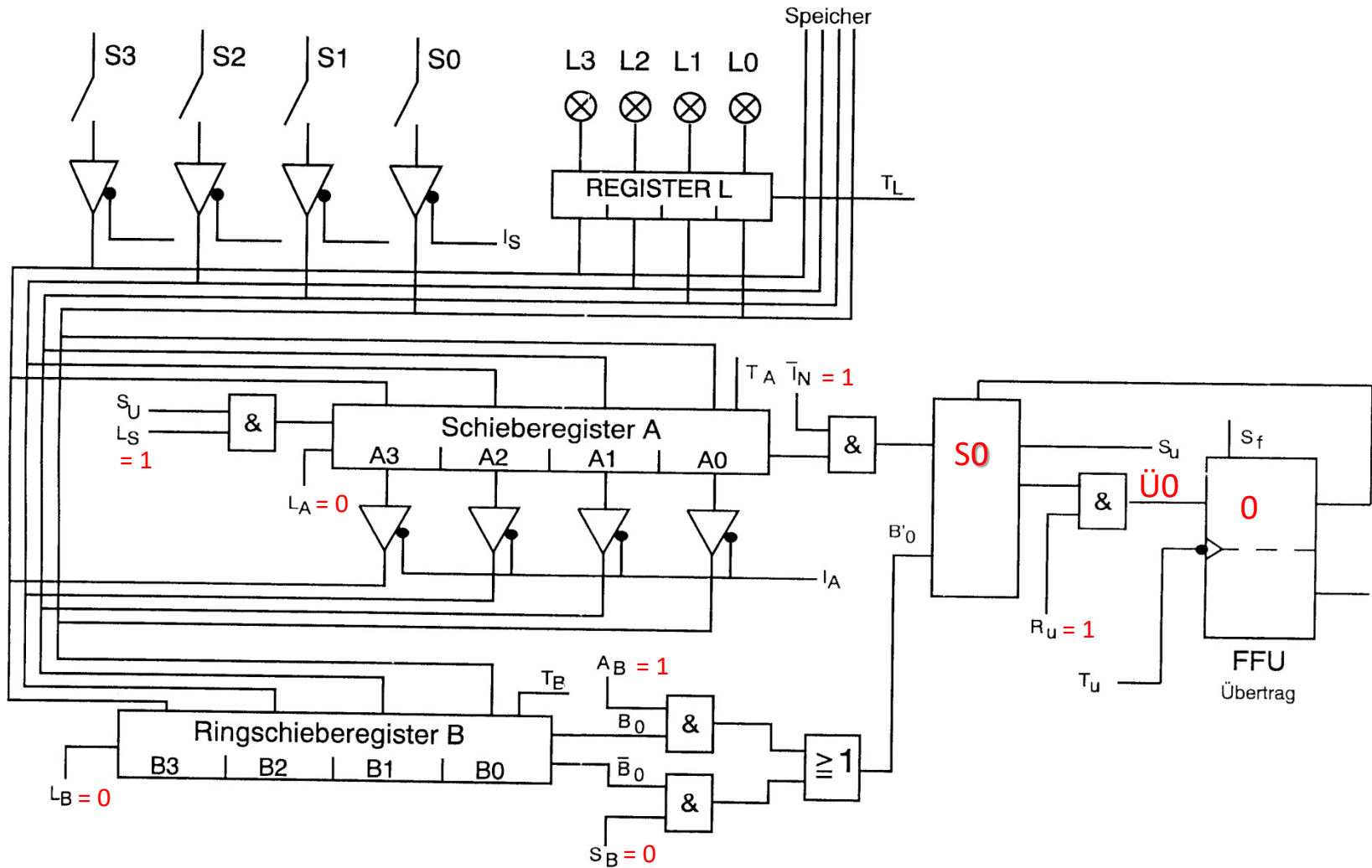
Inkrementierung

Negation

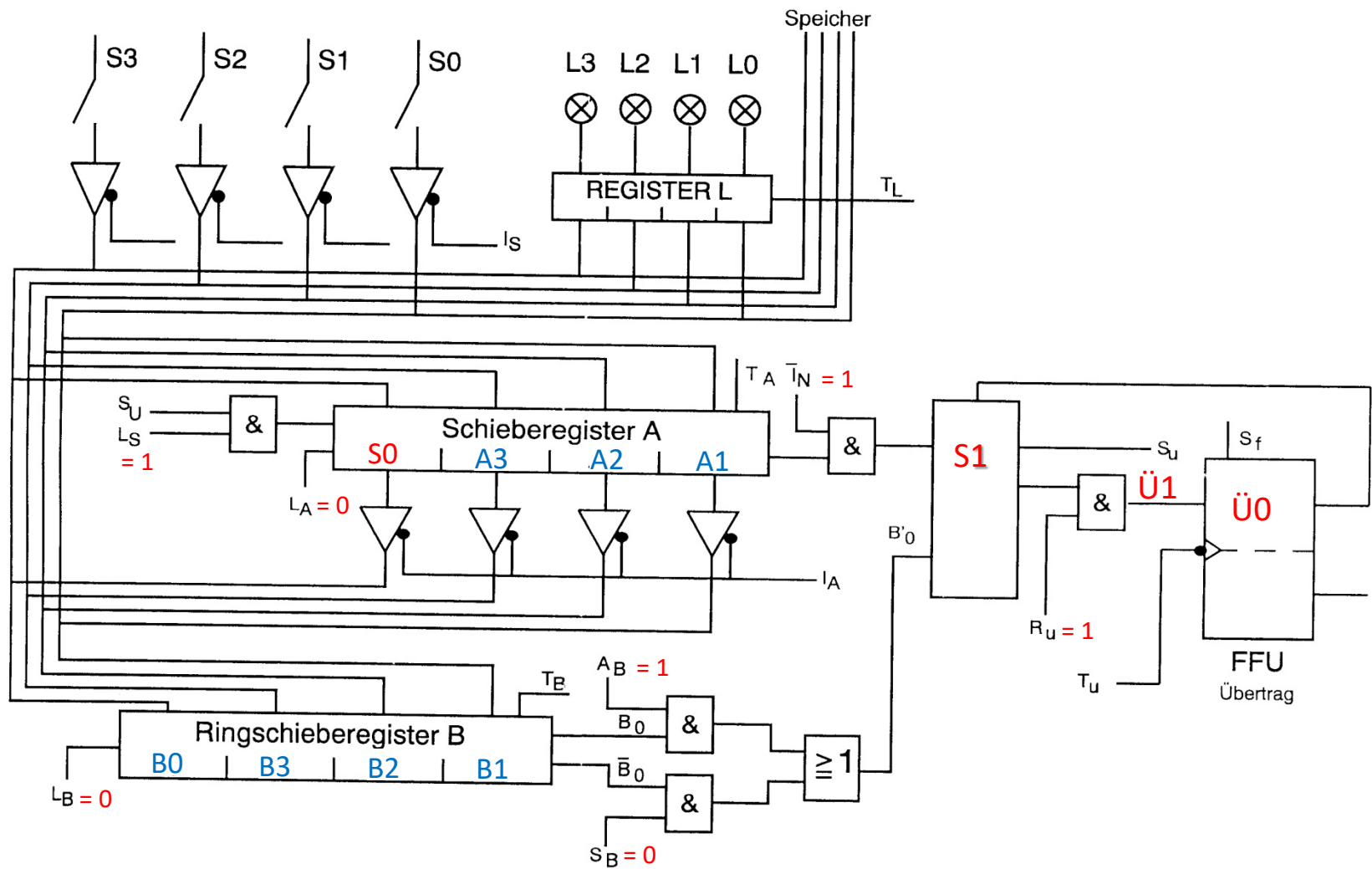


Zur Struktur eines Digitalrechners

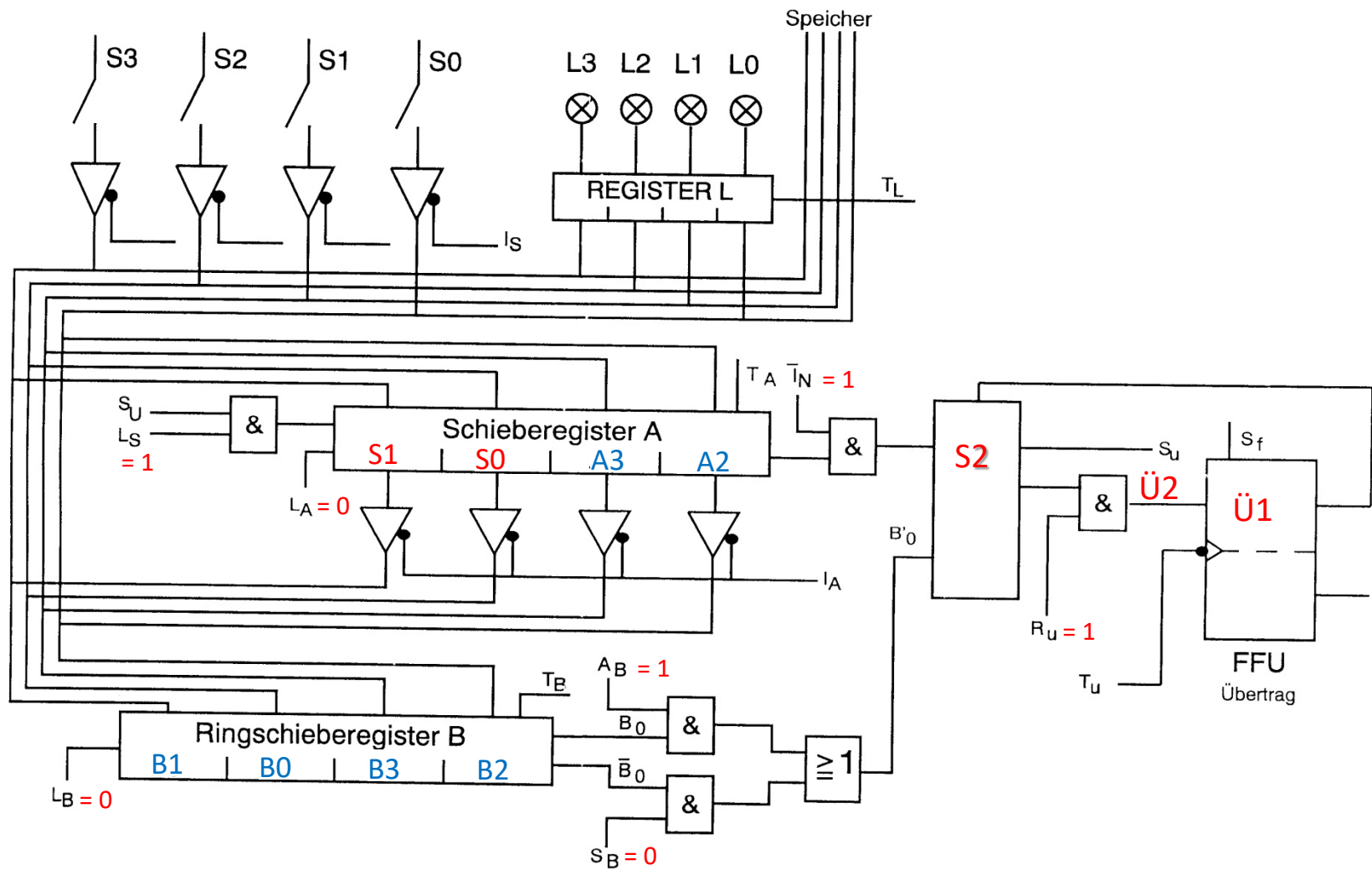
Addition $A + B \rightarrow A$



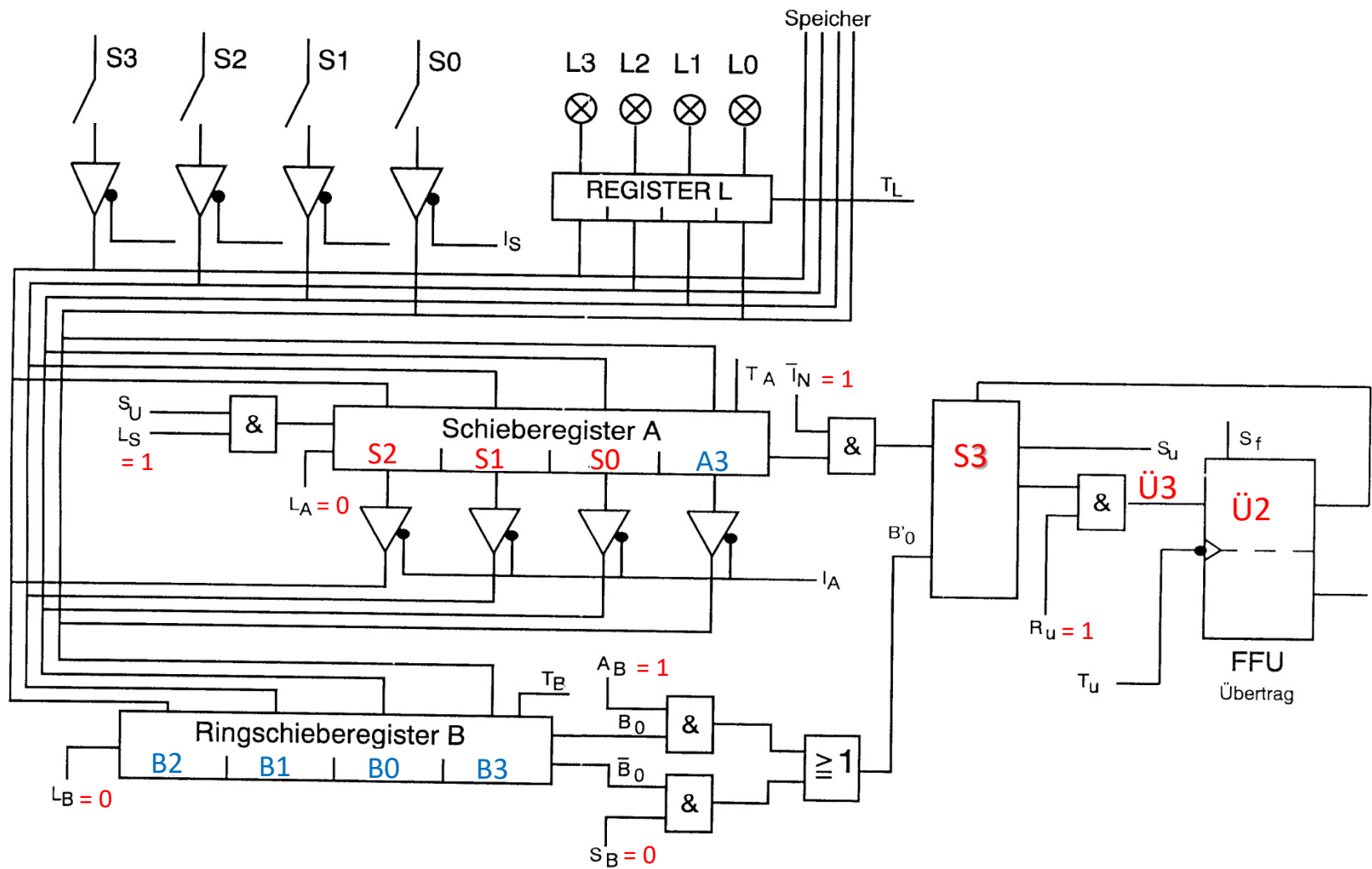
Addition vor Takt 1



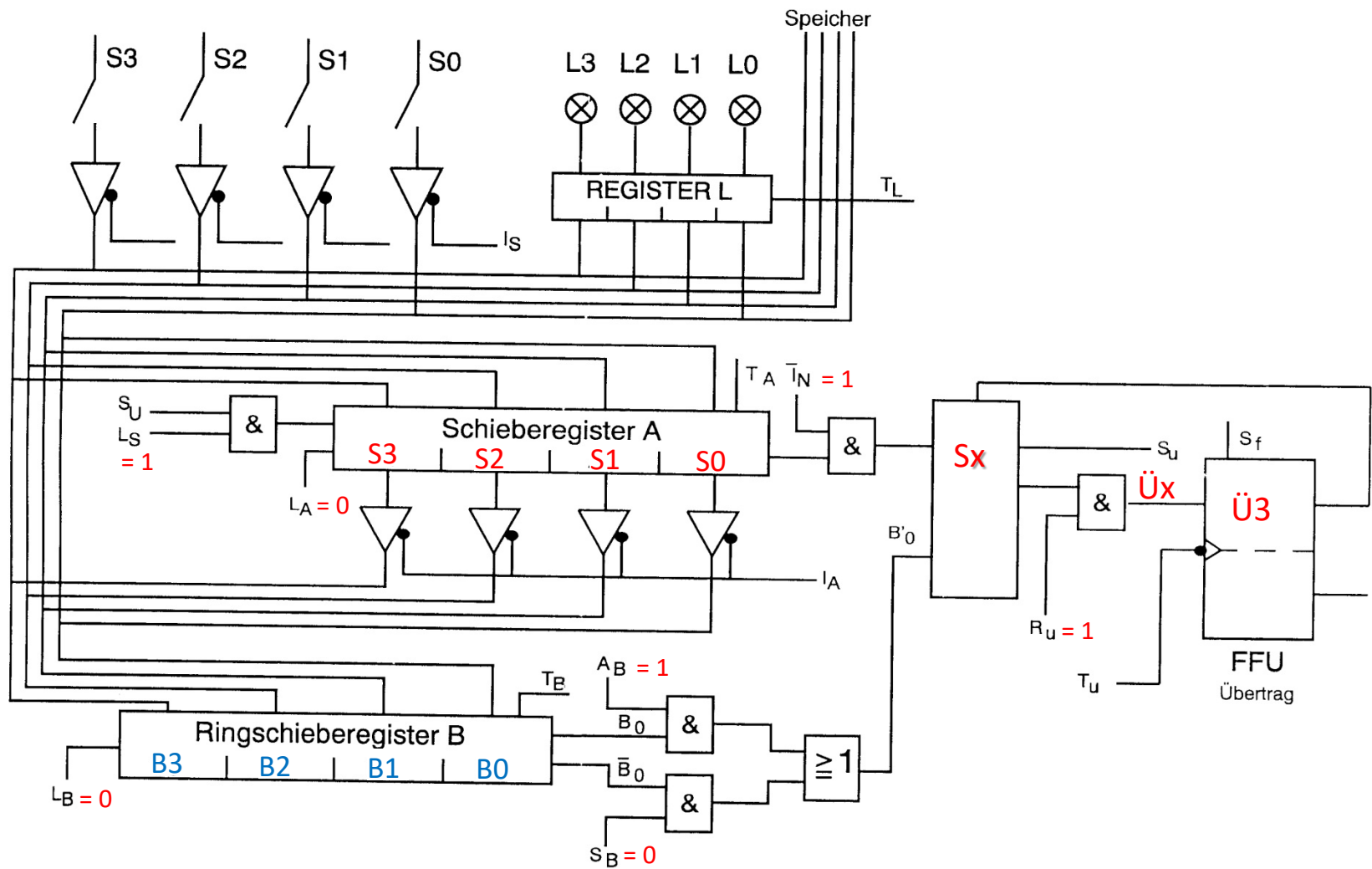
Addition nach Takt 1 auf T_A , T_B , T_u



Addition nach Takt 2 auf TA, TB, Tu

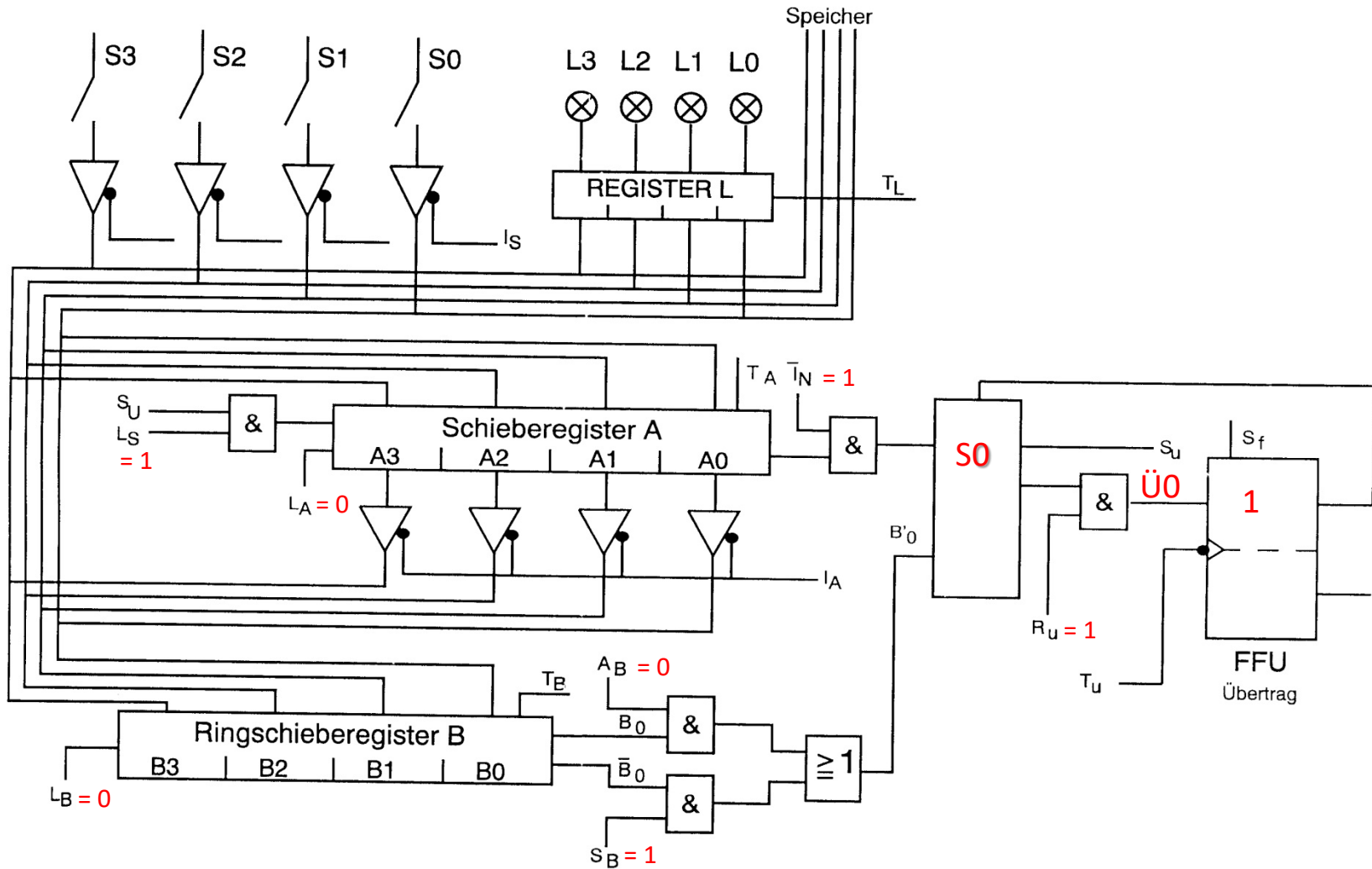


Addition nach Takt 3 auf T_A , T_B , T_u

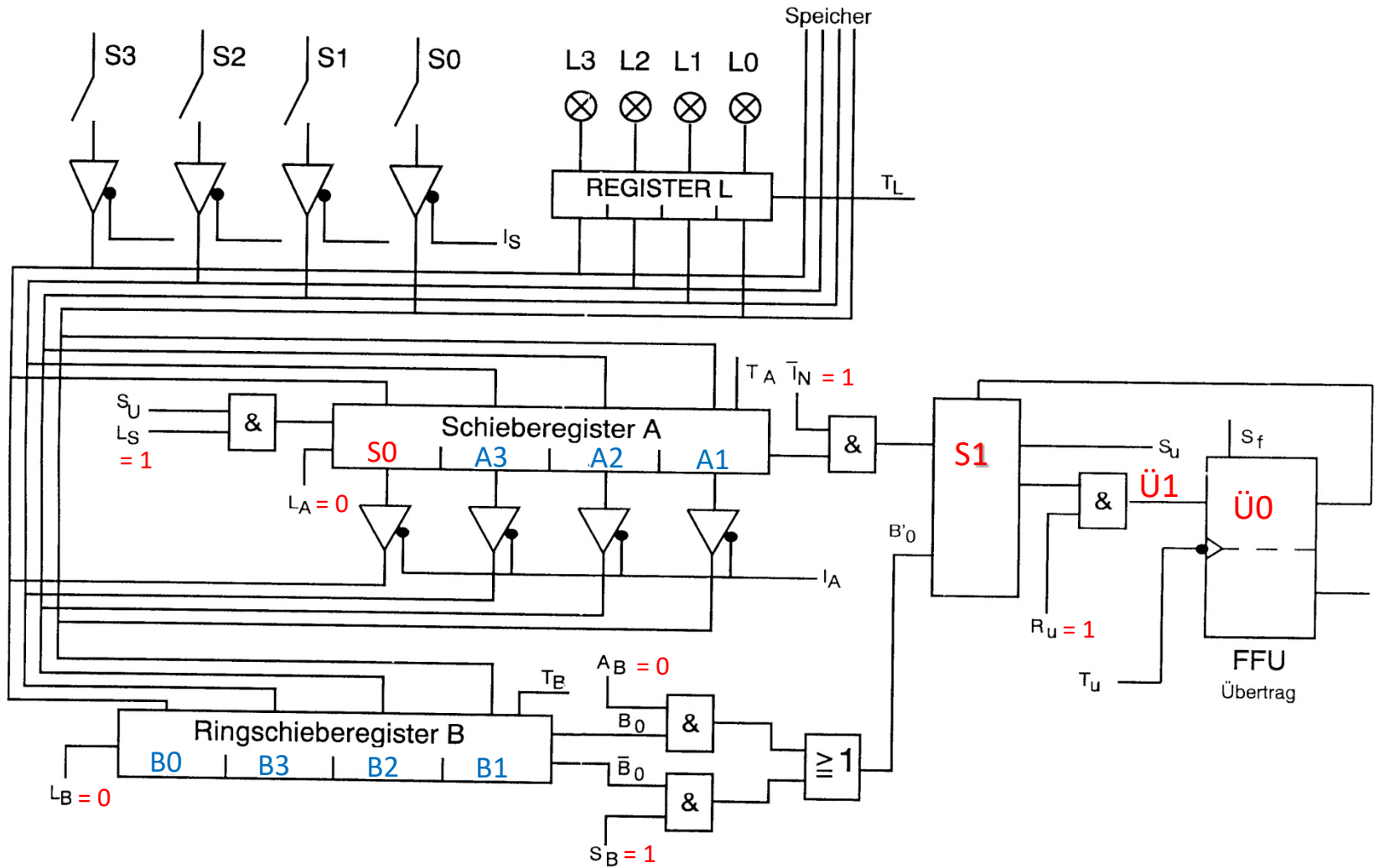


Addition nach Takt 4 auf TA, TB, Tu

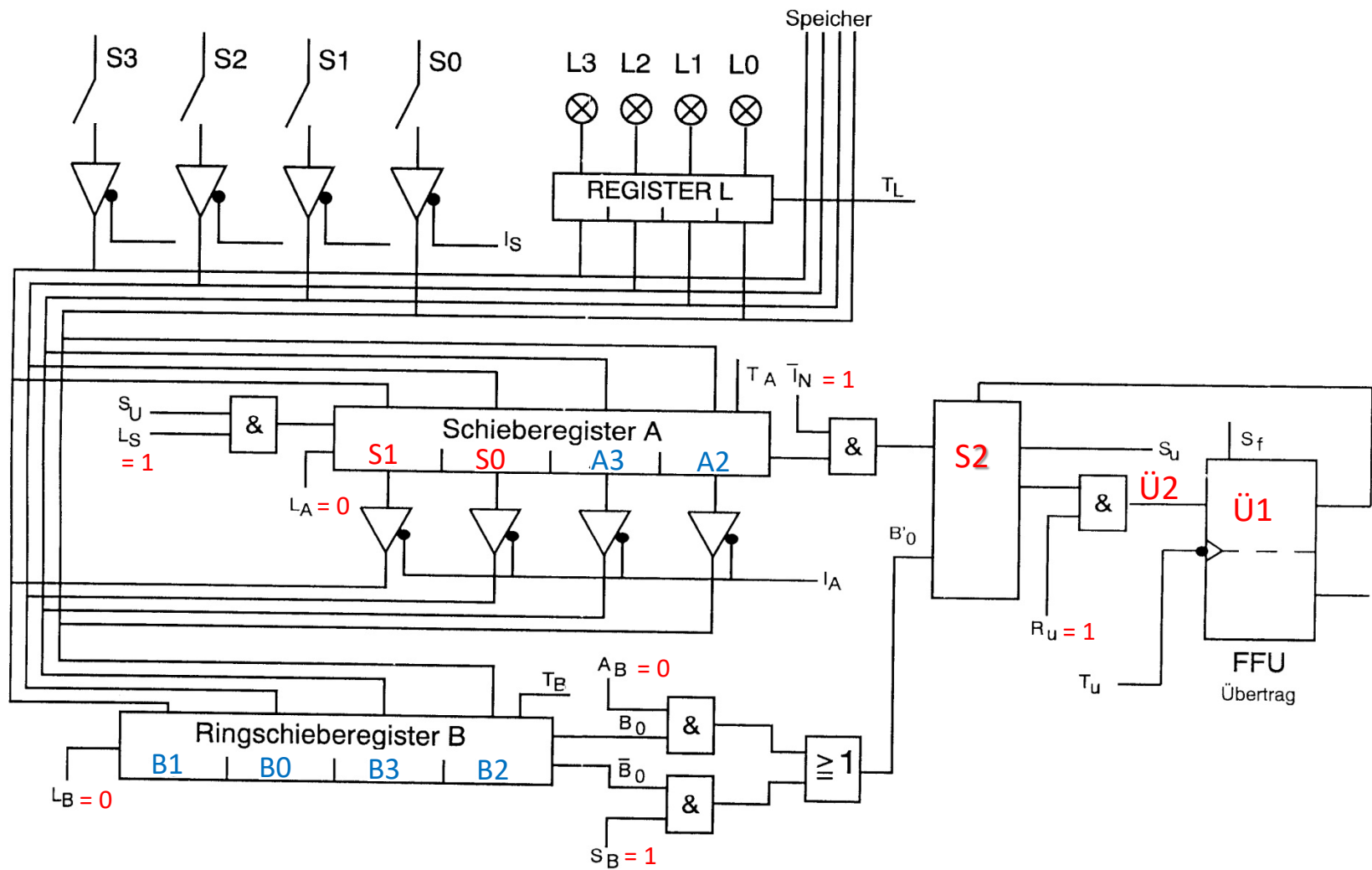
Subtraktion $A - B \rightarrow A$



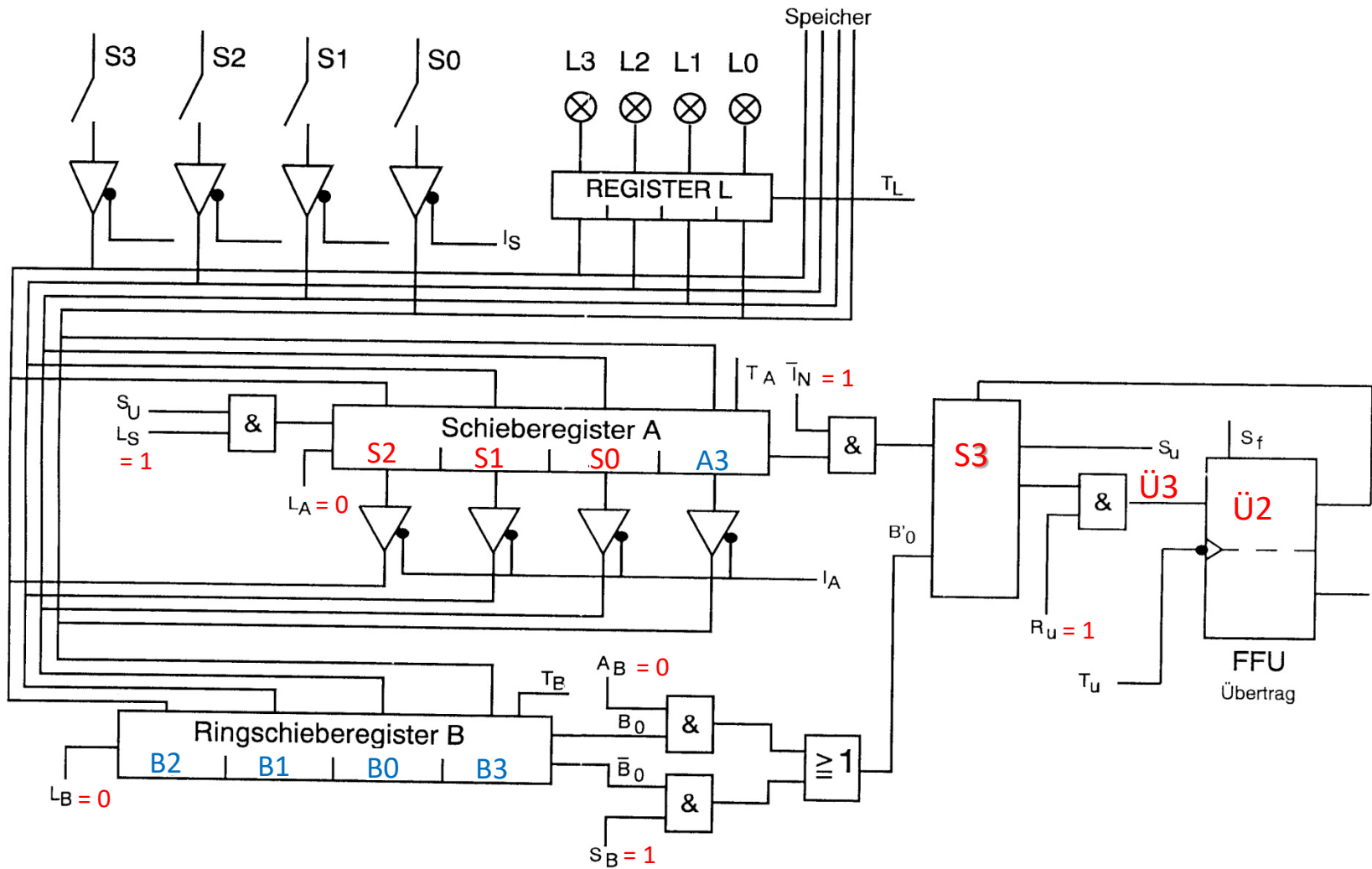
Addition des Zweierkomplementes vor Takt 1



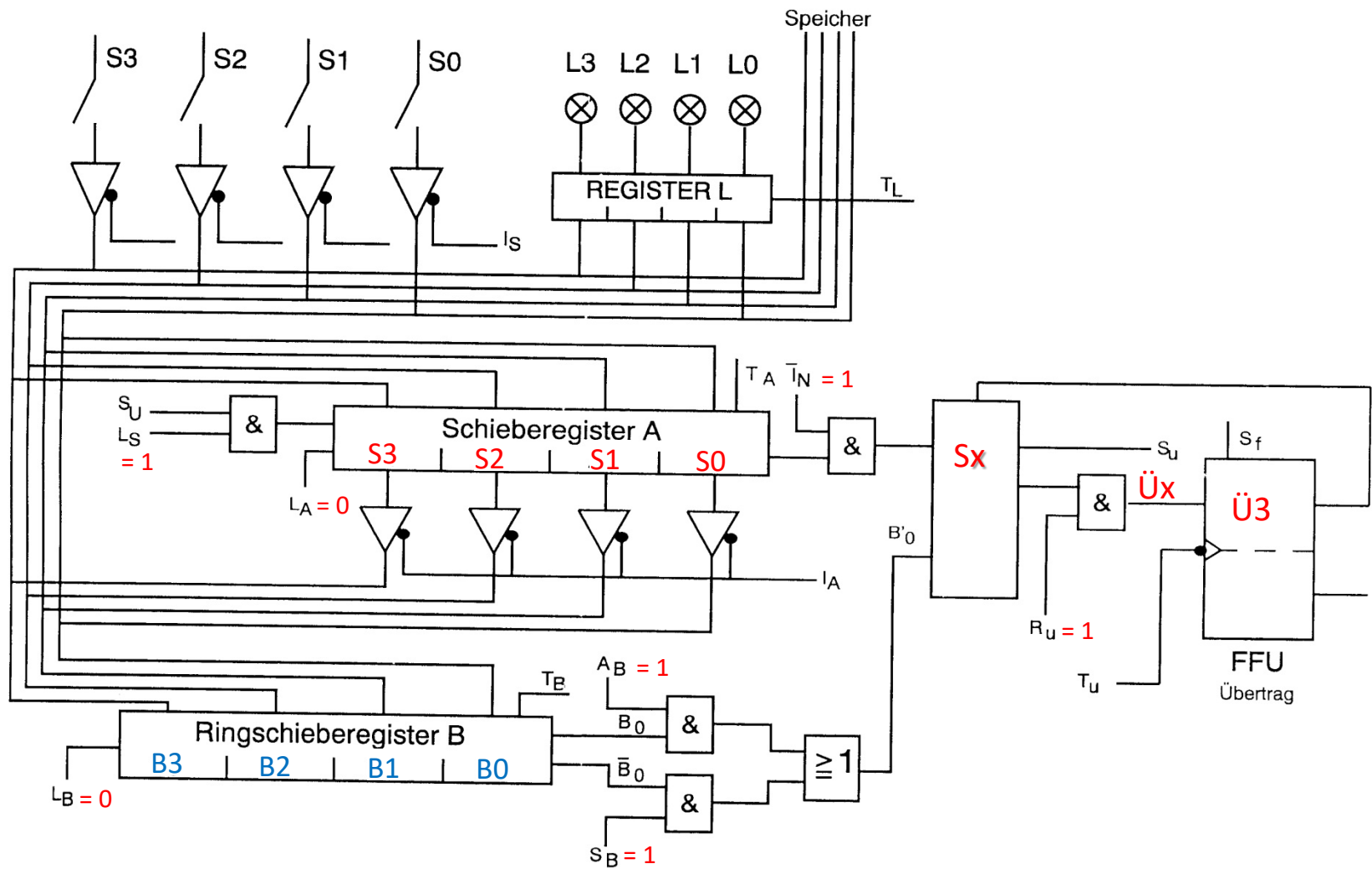
Addition nach Takt 1 auf TA, TB, Tu



Addition nach Takt 2 auf T_A , T_B , T_U



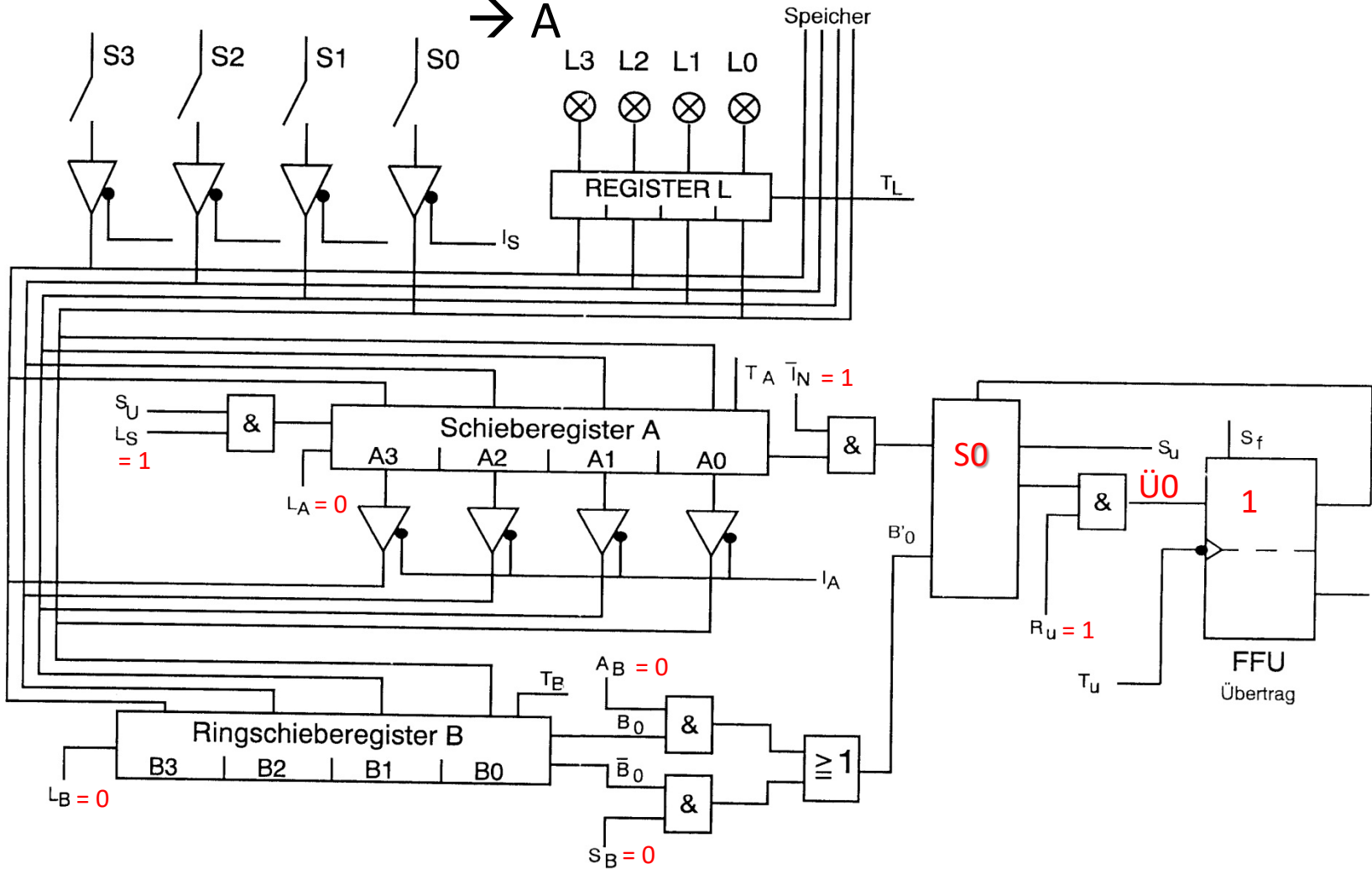
Addition nach Takt 3 auf TA, TB, Tu



Addition nach Takt 4 auf T_A , T_B , T_U

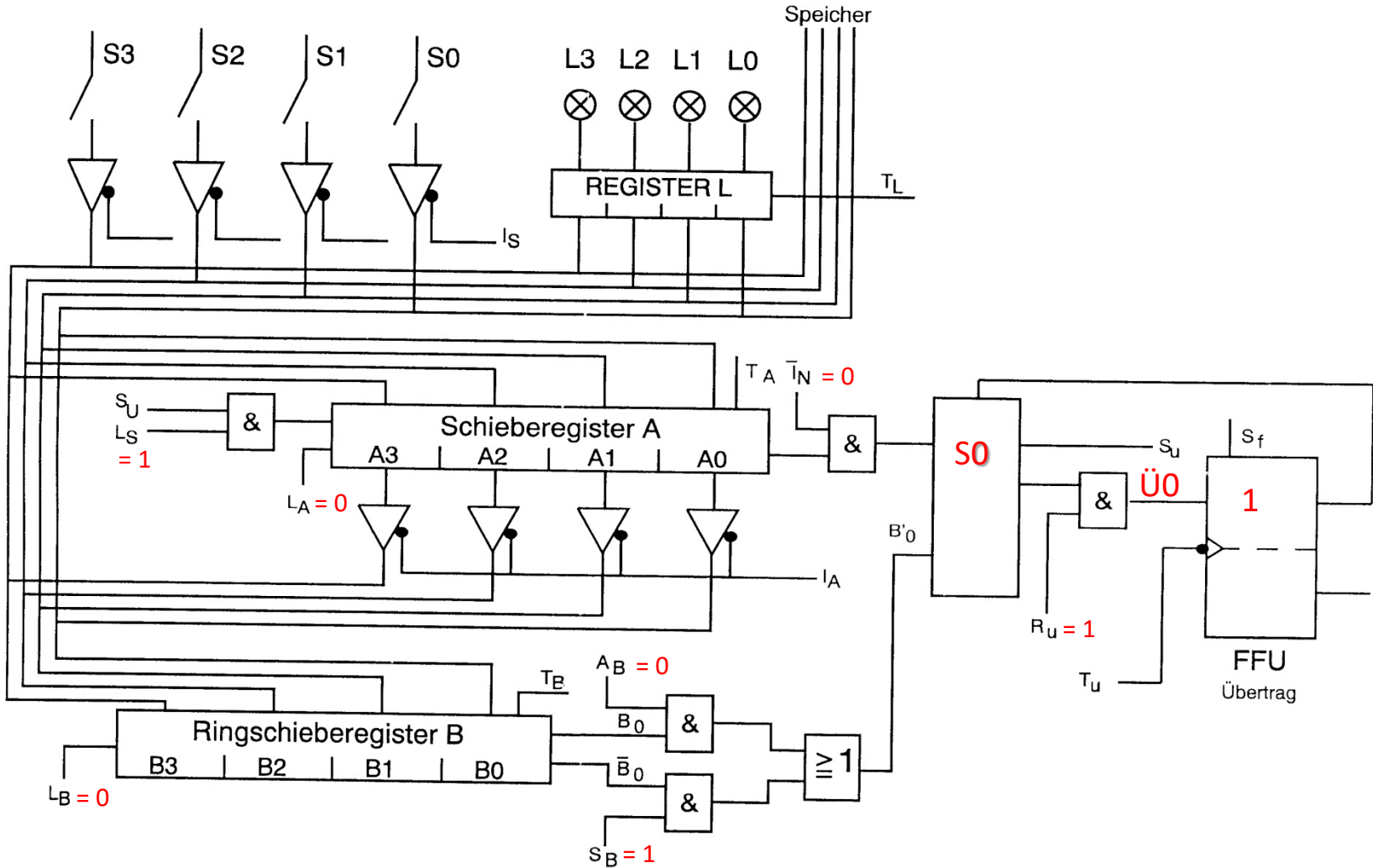
Inkrementieren A + 1

→ A



Addition der 1 vor Takt 1

Negation - B \rightarrow A



Addition des Zweierkomplementes vor Takt 1