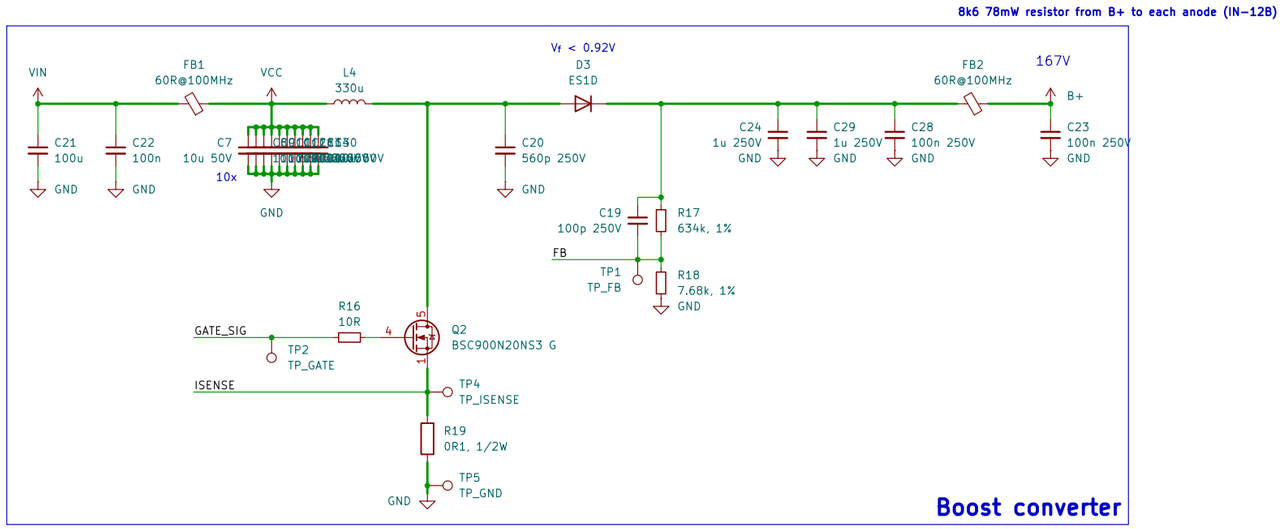
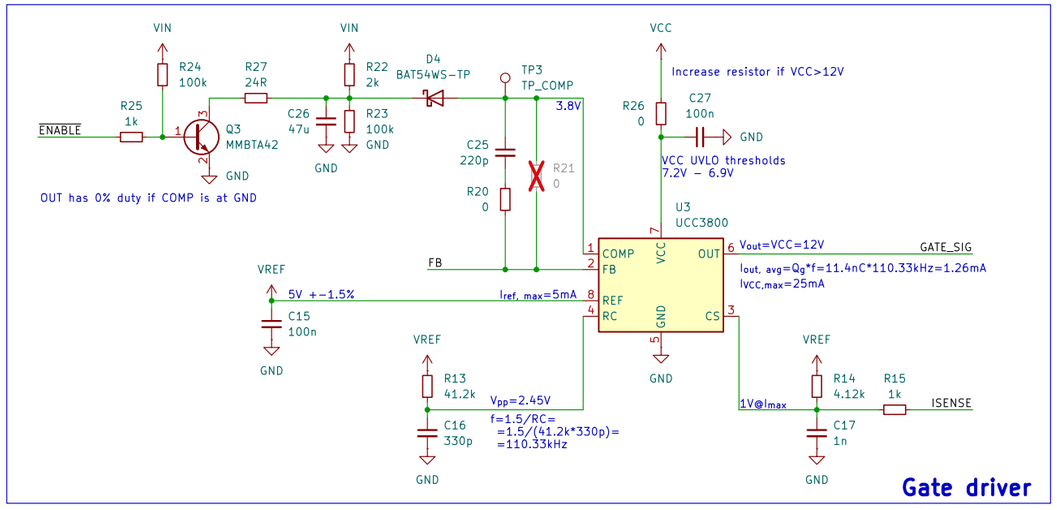
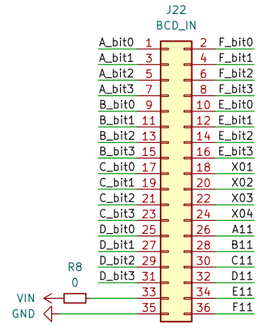
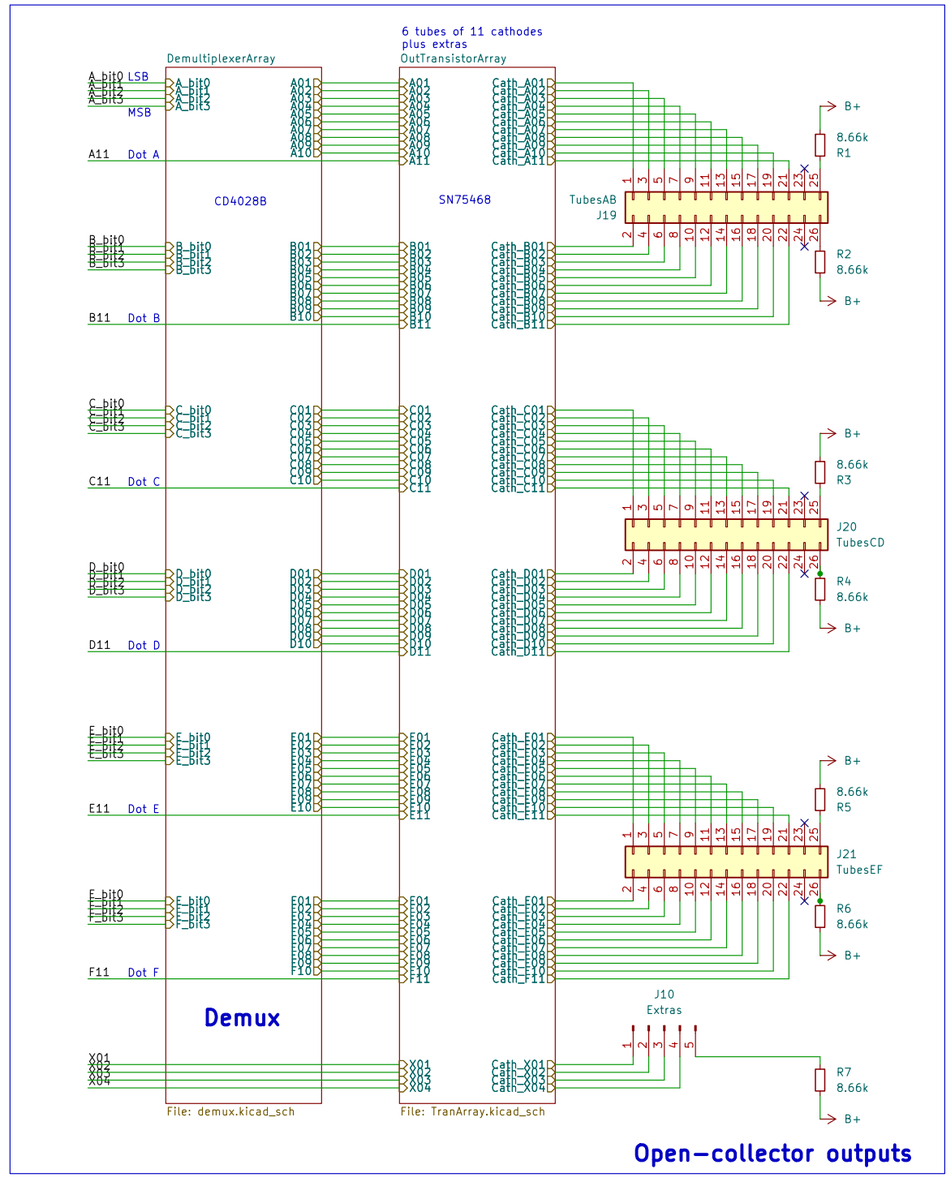






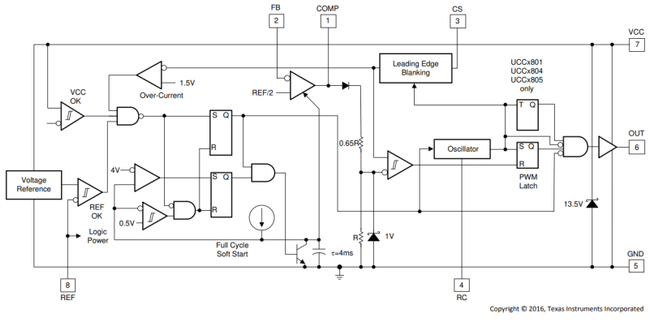


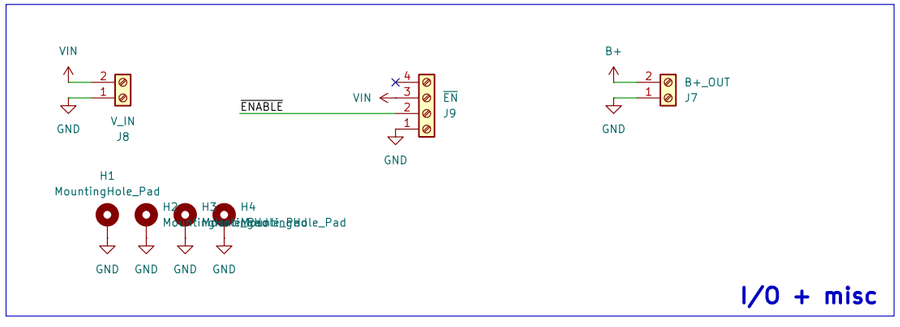
The maximum duty cycle limit is set by the ratio of the external oscillator charging resistor RT and the internal oscillator discharge transistor on-resistance

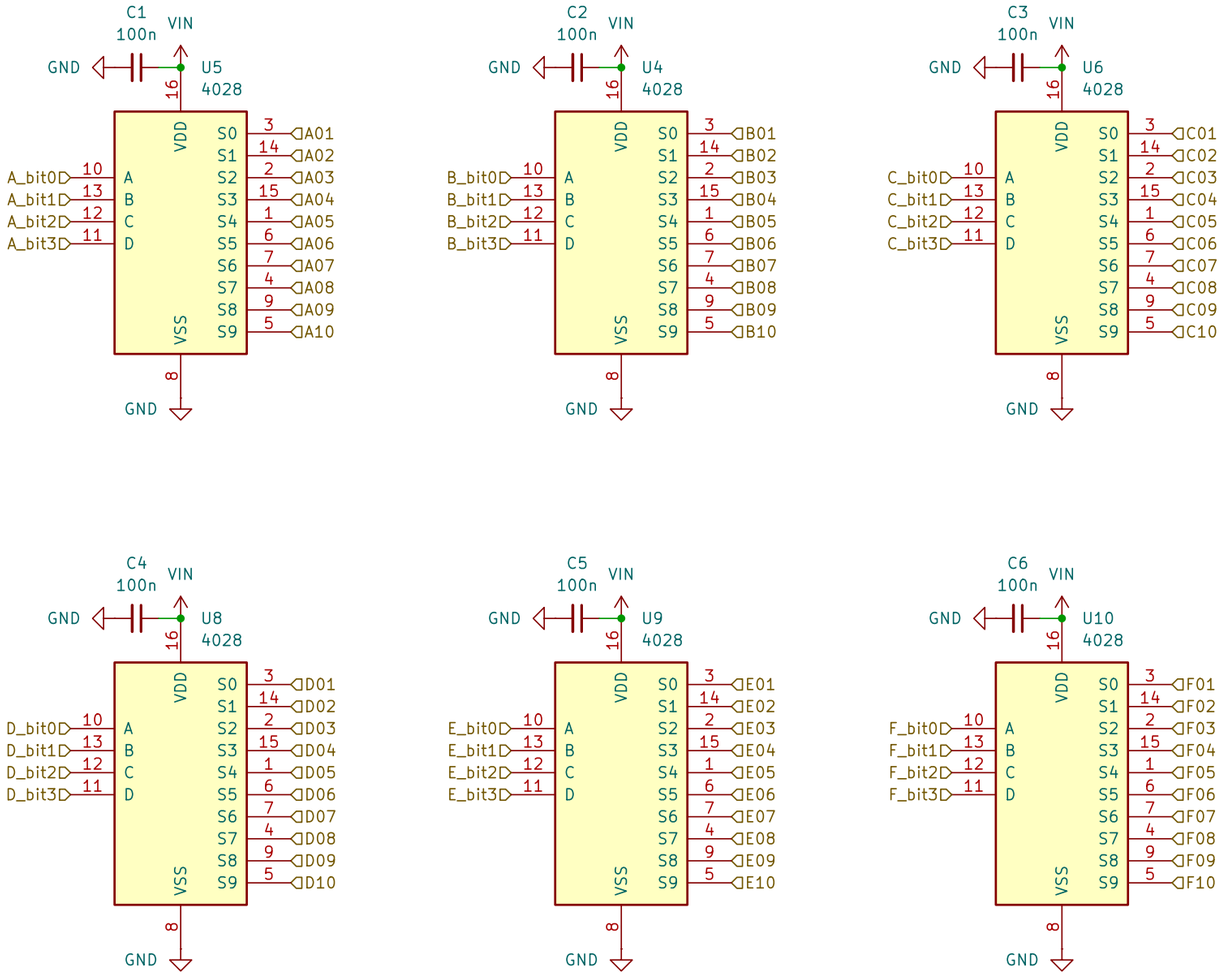
Device Comparison Table

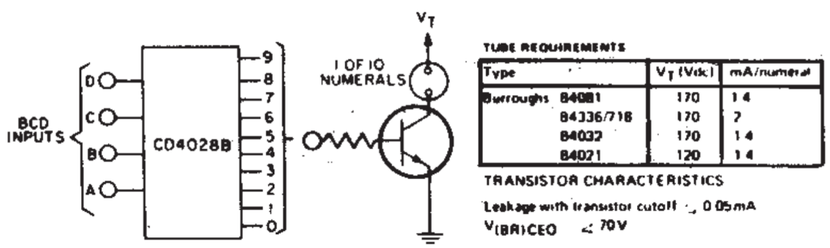
PART NUMBER	MAXIMUM DUTY CYCLE	REFERENCE VOLTAGE	TURNON THRESHOLD	TURNOFF THRESHOLD
UCC2800	100%	5 V	7.2 V	6.9 V
UCC2801	50%	5 V	9.4 V	7.4 V
UCC2802	100%	5 V	12.5 V	8.3 V
UCC2803	100%	4 V	4.1 V	3.6 V
UCC2804	50%	5 V	12.5 V	8.3 V
UCC2805	50%	4 V	4.1 V	3.6 V

9.2 Functional Block Diagram









TUBE REQUIREMENTS

Type	V_T (Vdc)	mA/numeral
Burroughs B4081	170	1.4
B4336/718	170	2
B4032	170	1.4
B4021	120	1.4

TRANSISTOR CHARACTERISTICS

Leakage with transistor cutoff ≤ 0.05 mA

$V_{(BR)CEO}$ ≤ 70 V

92CS-29413

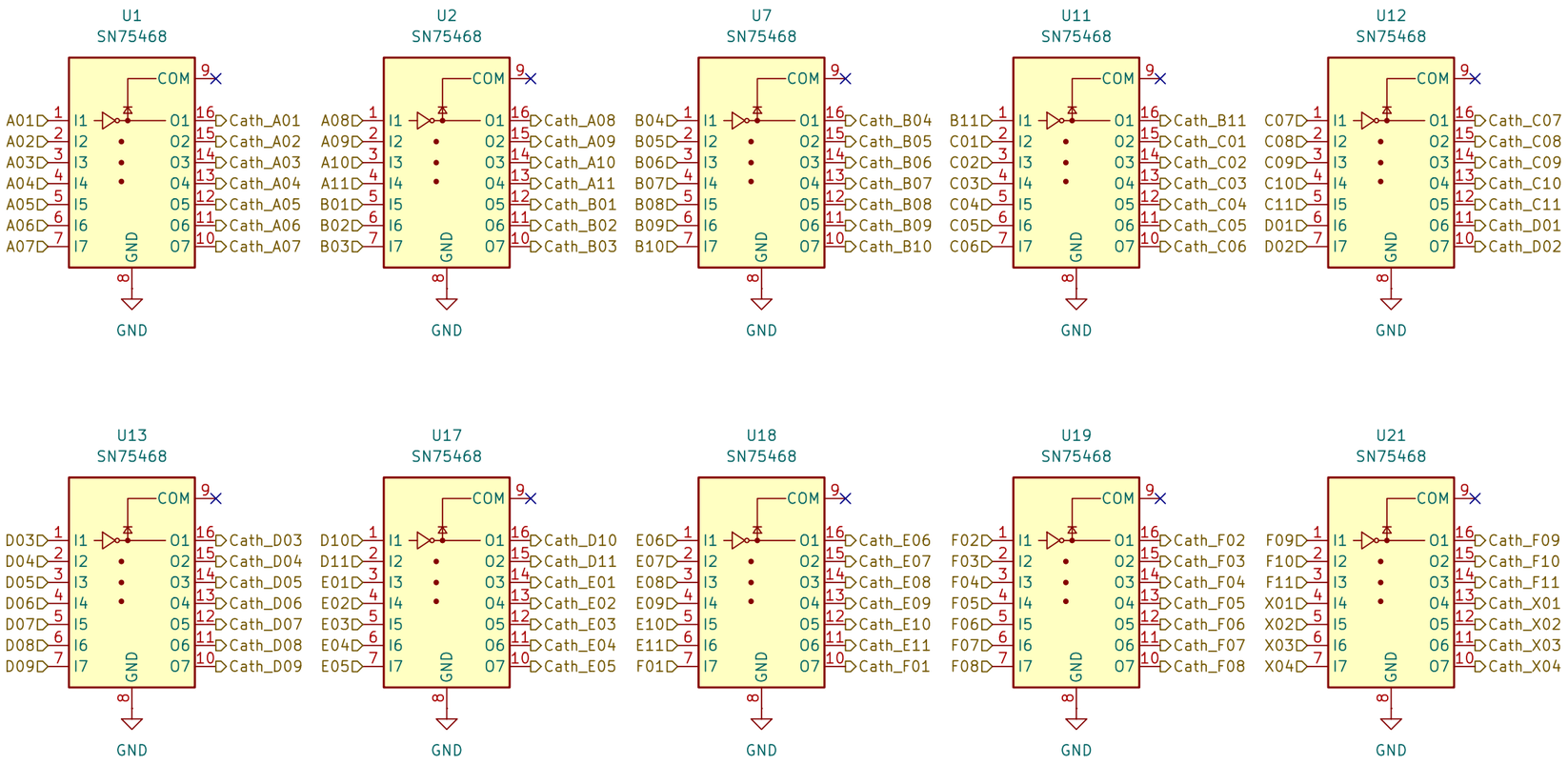
▲(Trademark) Burroughs Corp.

Fig. 14 — Neon readout (Nixie Tube▲) display application.

TABLE I – TRUTH TABLE

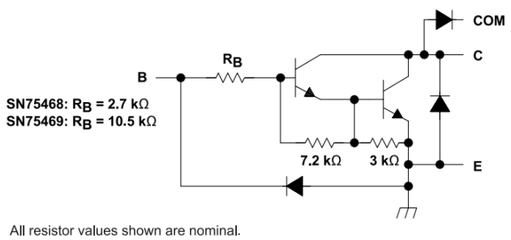
D	C	B	A	0	1	2	3	4	5	6	7	8	9
0	0	0	0	1	0	0	0	0	0	0	0	0	0
0	0	0	1	0	1	0	0	0	0	0	0	0	0
0	0	1	0	0	0	1	0	0	0	0	0	0	0
0	0	1	1	0	0	0	1	0	0	0	0	0	0
0	1	0	0	0	0	0	0	1	0	0	0	0	0
0	1	0	1	0	0	0	0	0	1	0	0	0	0
0	1	1	0	0	0	0	0	0	0	1	0	0	0
0	1	1	1	0	0	0	0	0	0	0	1	0	0
1	0	0	0	0	0	0	0	0	0	0	0	1	0
1	0	0	1	0	0	0	0	0	0	0	0	0	1
1	0	1	0	0	0	0	0	0	0	0	0	0	0
1	0	1	1	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	1	0	0	0	0	0	0	0	0	0	0
1	1	1	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	0	0	0	0	0	0	0	0	0	0

1 = HIGH LEVEL 0 = LOW LEVEL



TODO: CONSIDER HIGHER VOLTAGE VERSION (SN75469)

The SN75468 has a 2700-Ω series base resistor for each Darlington pair for operation directly with TTL or 5-V CMOS. The SN75469 has a 10.5-kΩ series base resistor to allow its operation directly with CMOS or PMOS that use supply voltages of 6 to 15 V. The required input current is below that of the SN75468.



All resistor values shown are nominal.