

Enseignes et afficheurs à LED

Registres série-parallèle



Pierre-Yves Rochat



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- Besoin de broches
- Registre série
- Registre série-parallèle
- Le circuit 74HC595
- Sorties à courant constant
- Programmation

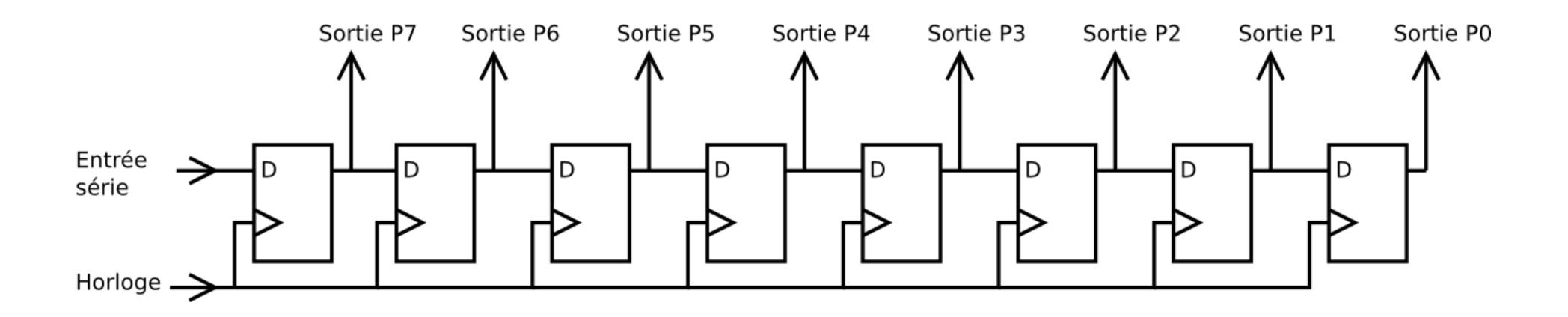
Besoin de broches



- Beaucoup de LED...
- Beaucoup de broches!
- Circuits logiques
- Latch adressables (74HC259)
- Registres série-parallèle (74HC595)

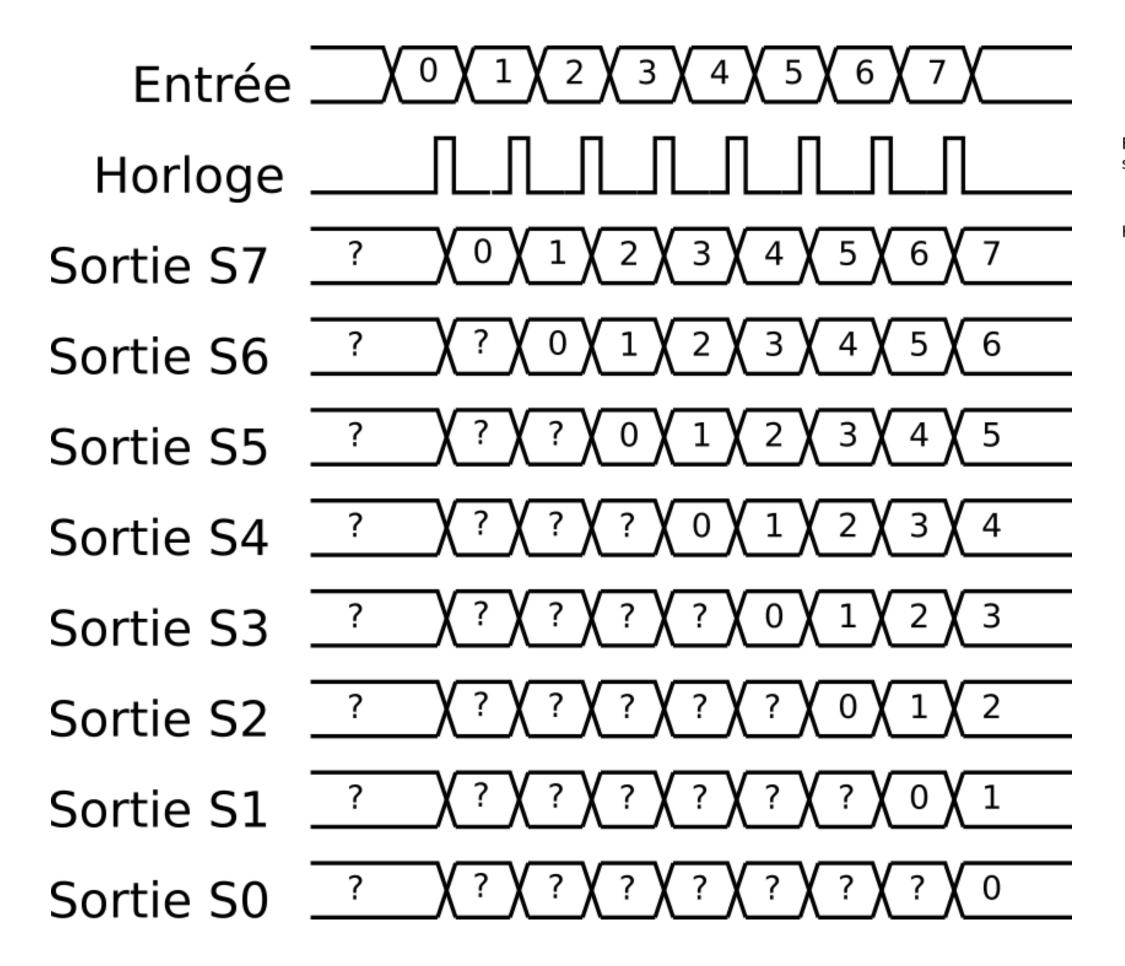
Registres série

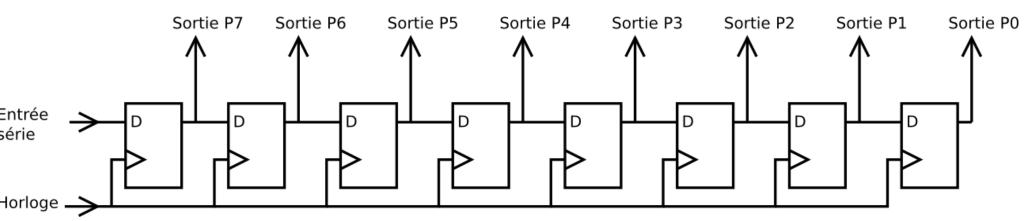




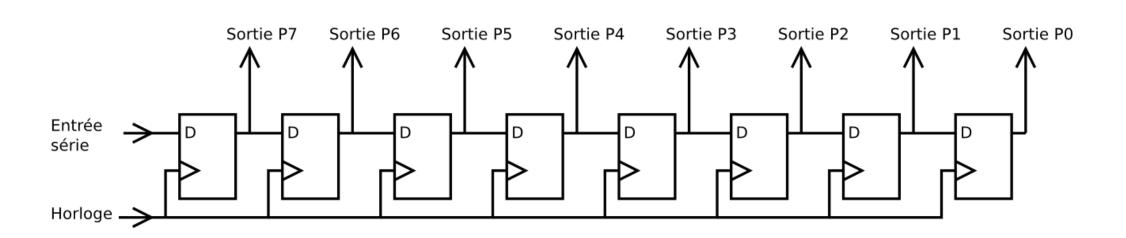
Registres série



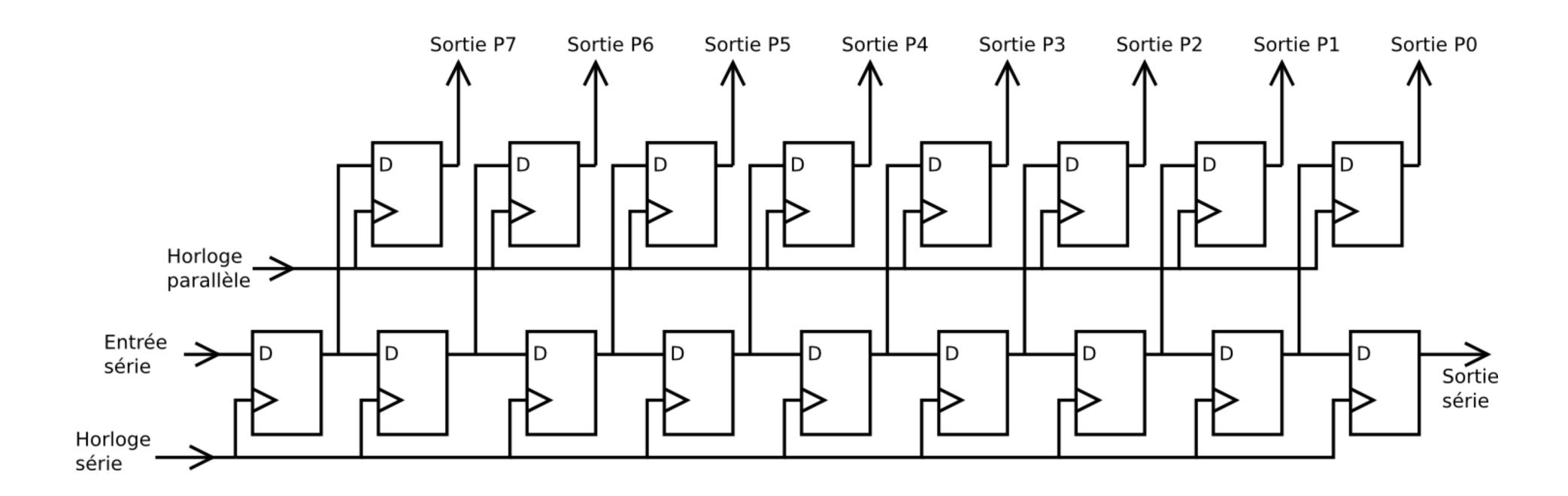




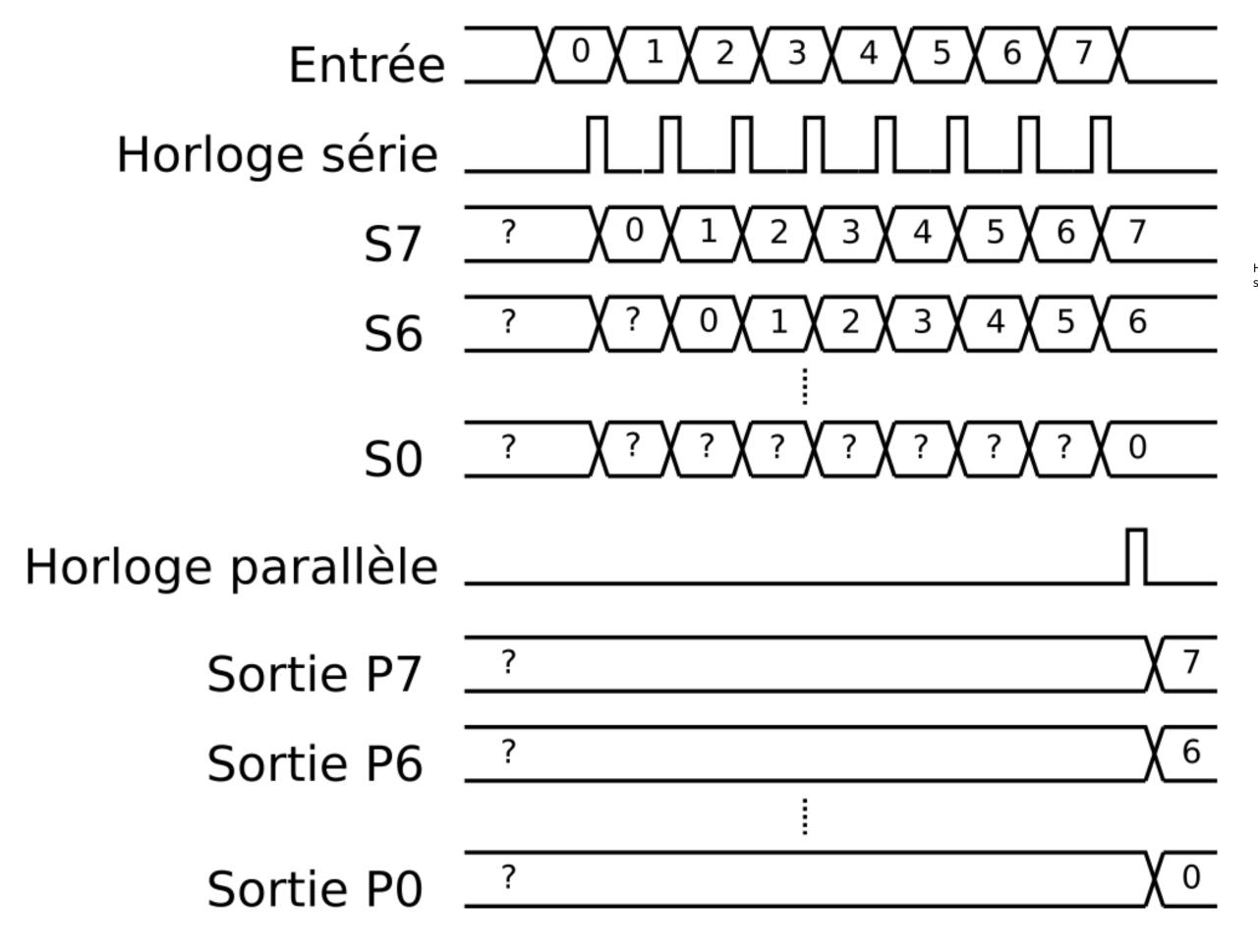


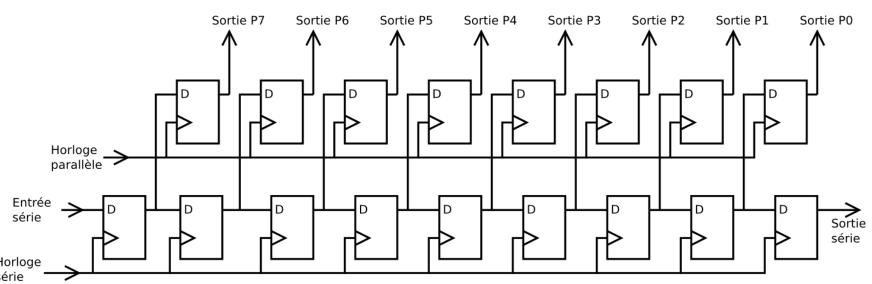




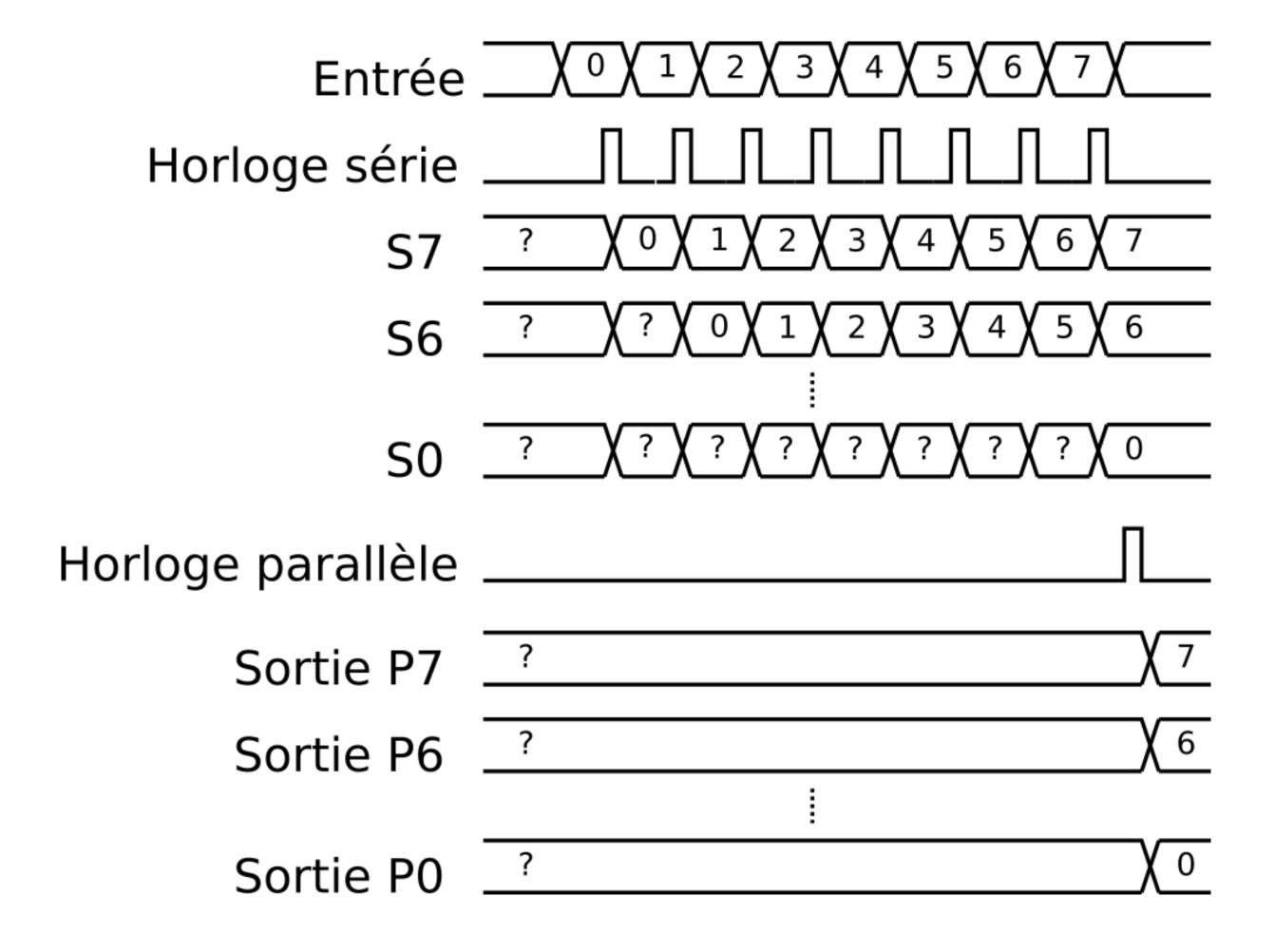


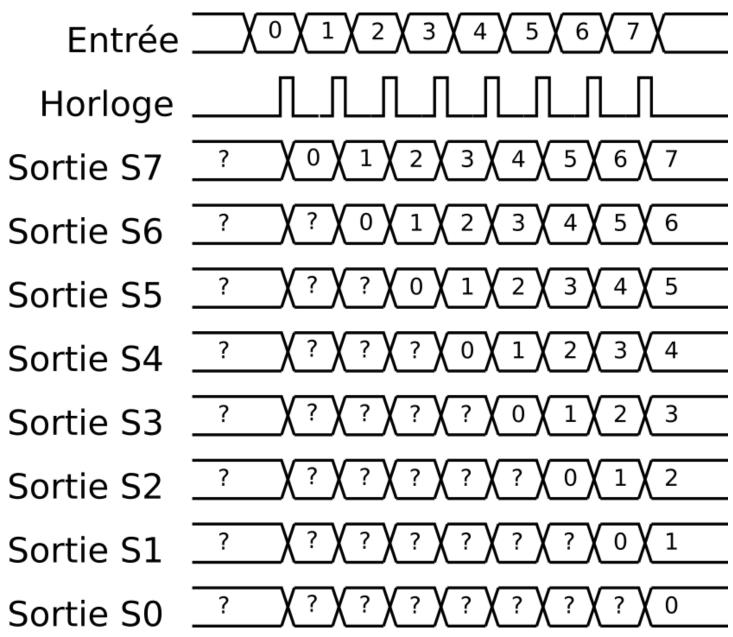






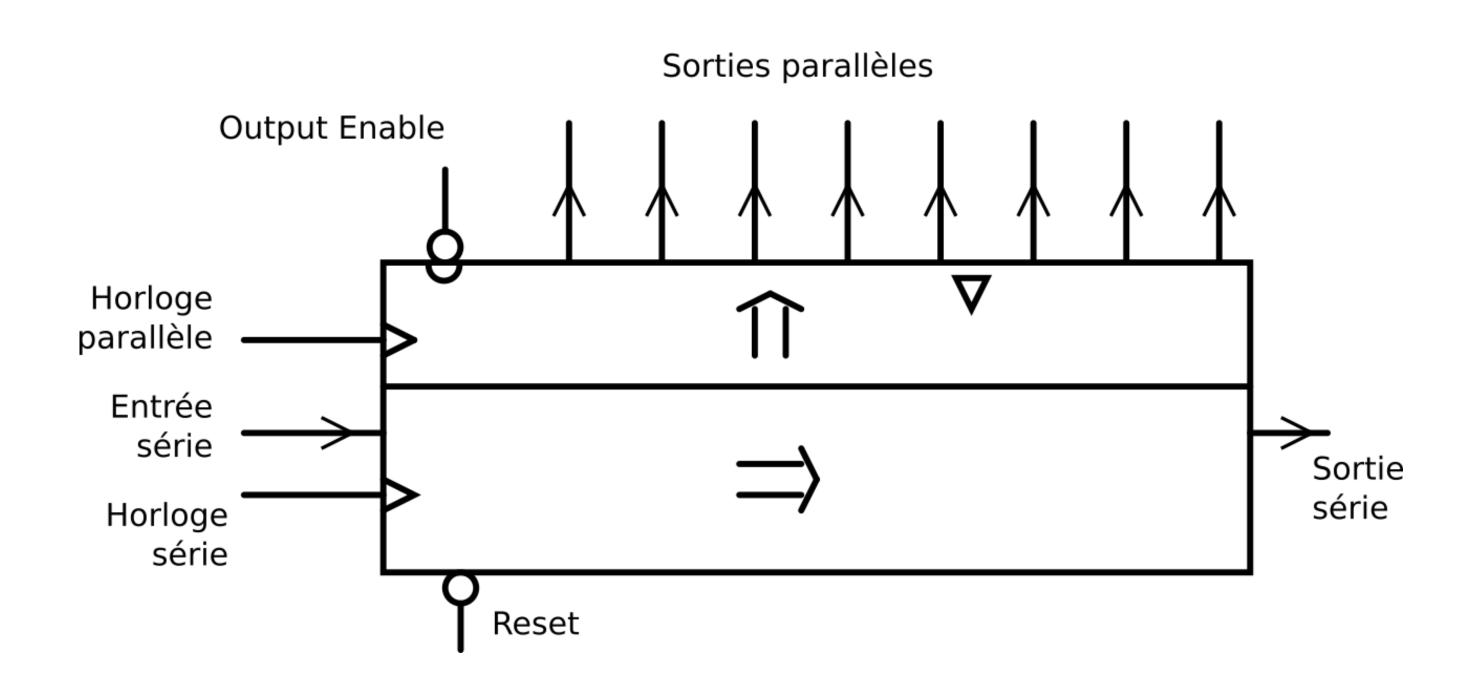


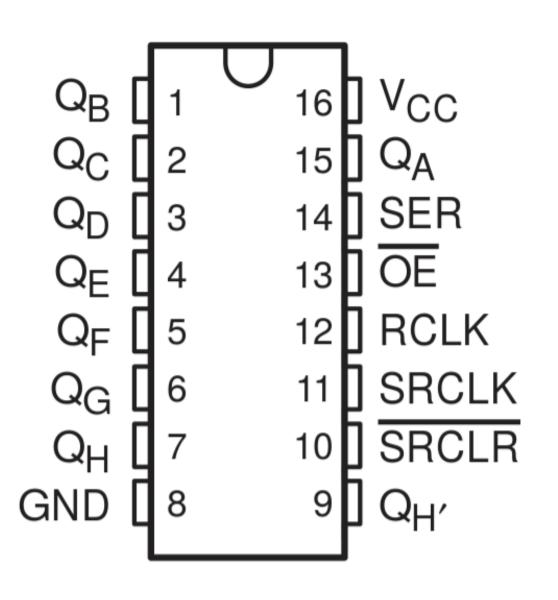




74HC595

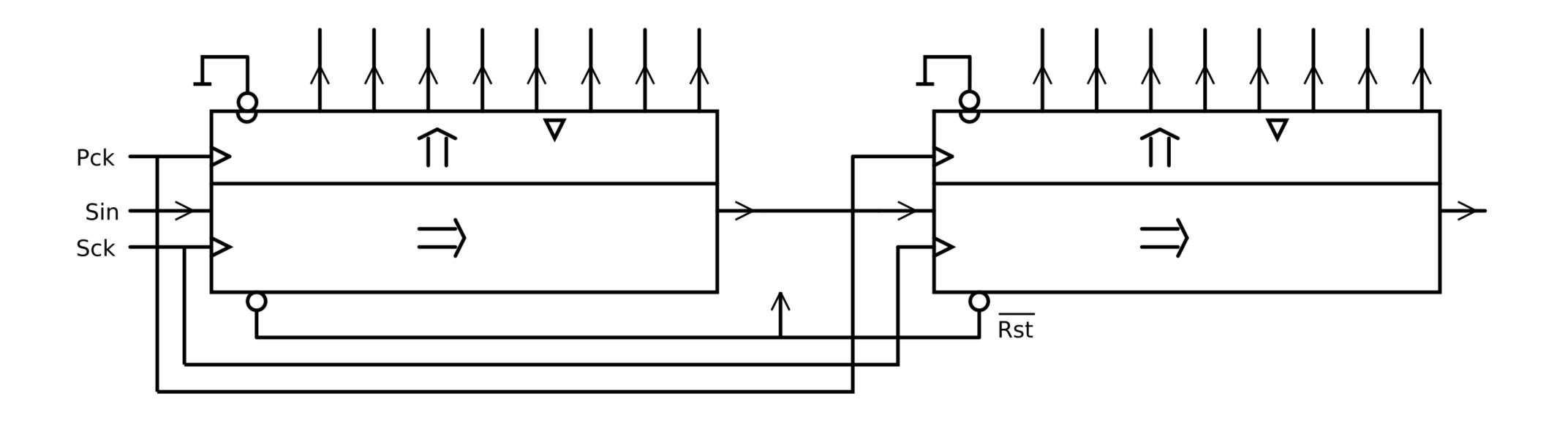






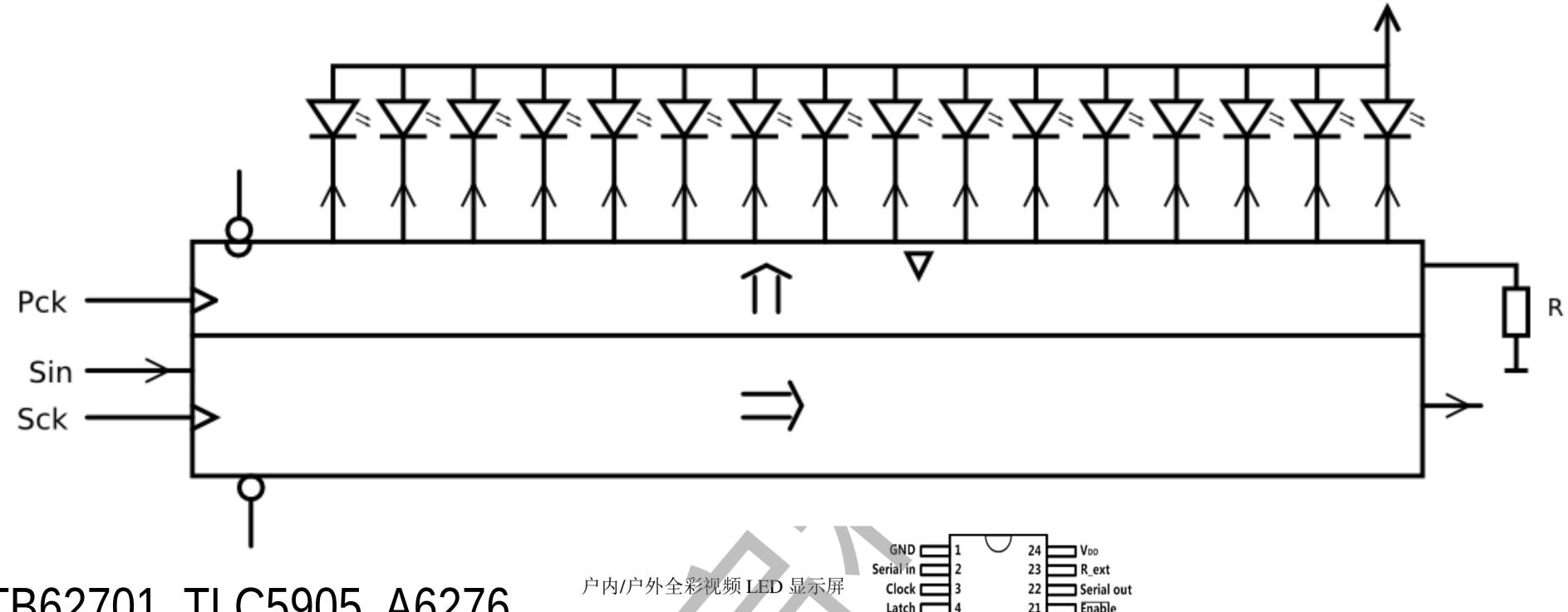
Registres en cascade





Registres à sorties à courant constant

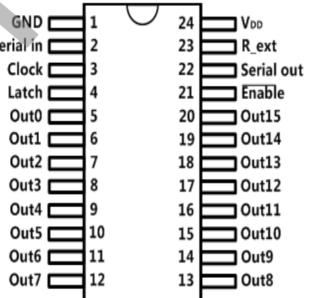




• TB62701, TLC5905, A6276...

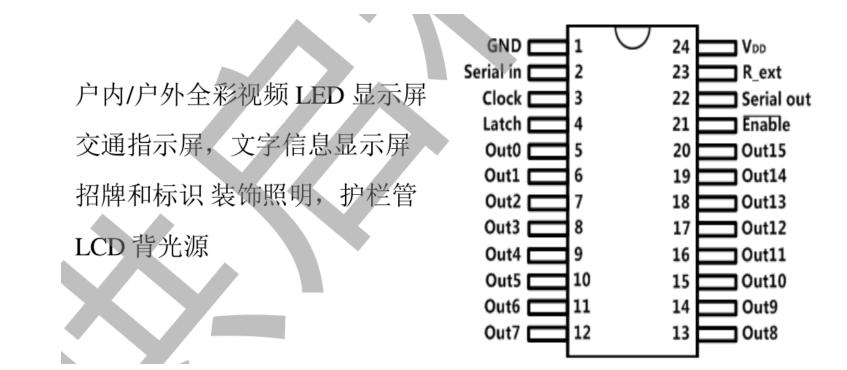
• SUM2016!

交通指示屏, 文字信息显示屏 招牌和标识 装饰照明, 护栏管 LCD 背光源



Chinois...





Programmation



```
#define SortieSerieOn P10UT |= (1<<0)
#define SortieSerieOff P10UT &=~(1<<0)
#define ClockSerHaut P10UT |= (1<<1)
#define ClockSerBas P10UT &=~(1<<1)
#define ClockParHaut P10UT |= (1<<2)
#define ClockParBas P10UT &=~(1<<2)</pre>
```

Programmation



```
10 void Envoie8bitsSerie (uint8_t valeur) {
    uint16 t i;
    for (i=0; i<8; i++) {
      if (valeur & (1<<i)) {
        SortieSerieOn;
    } else {
        SortieSerieOff;
      ClockSerHaut; ClockSerBas;
20
    ClockParHaut; ClockParBas;
21 }
```

Programmation



```
for (i=0; i<8; i++) {
  if (valeur & (1<<0)) {
    SortieSerieOn;
  } else {
    SortieSerieOff;
  ClockSerHaut; ClockSerBas;
  valeur = valeur >> 1;
```



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