

Laborator de Electronica Digitală (ED)

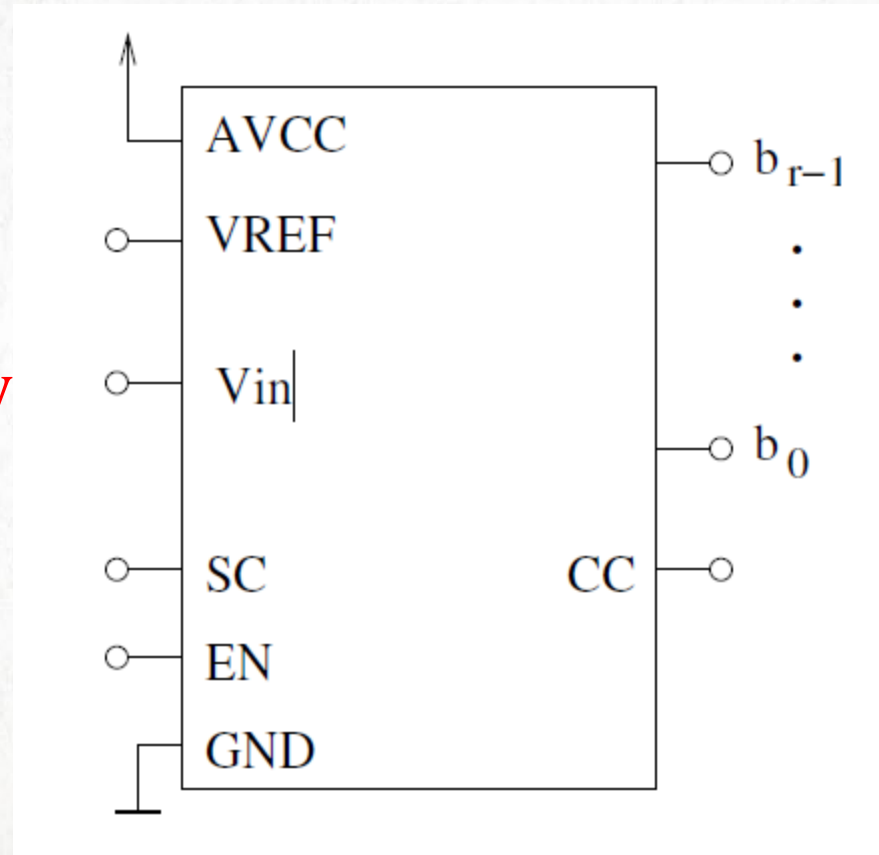
CONVERTORUL ANALOG-DIGITAL

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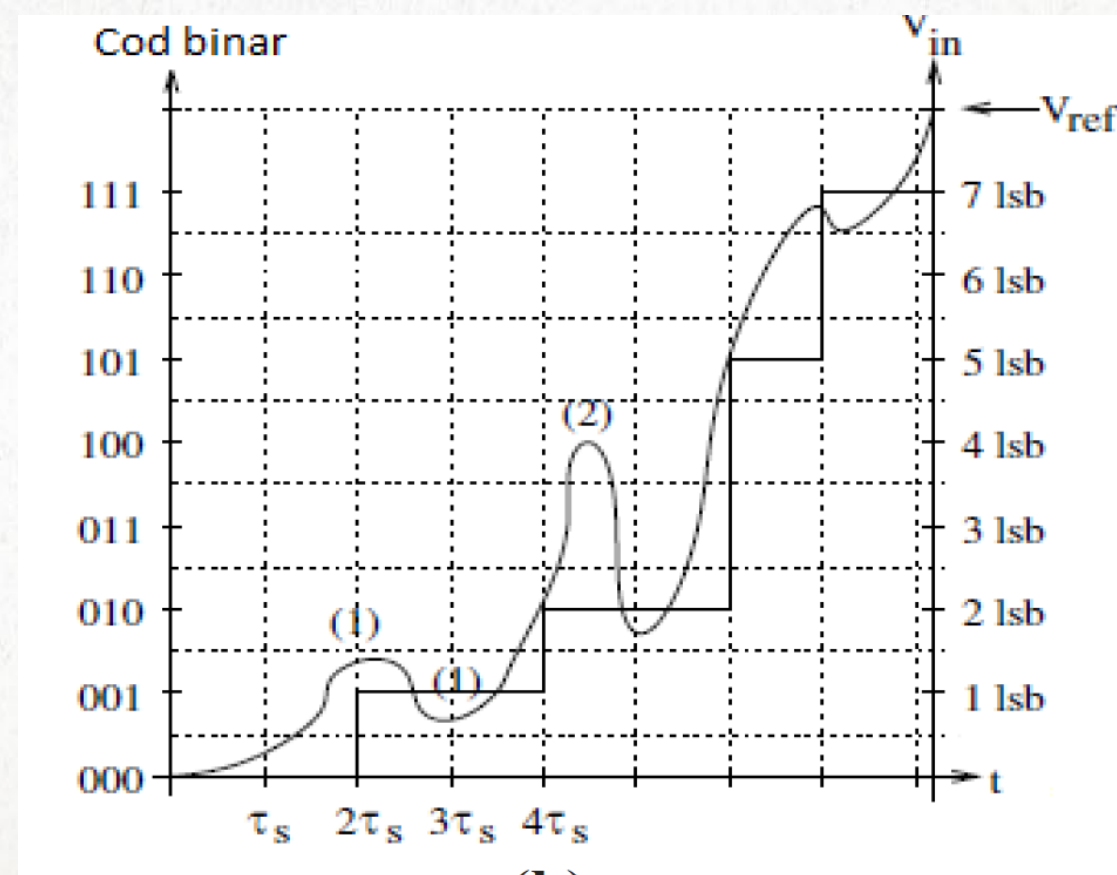
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CAN – CONVERTOR ANALOG NUMERIC

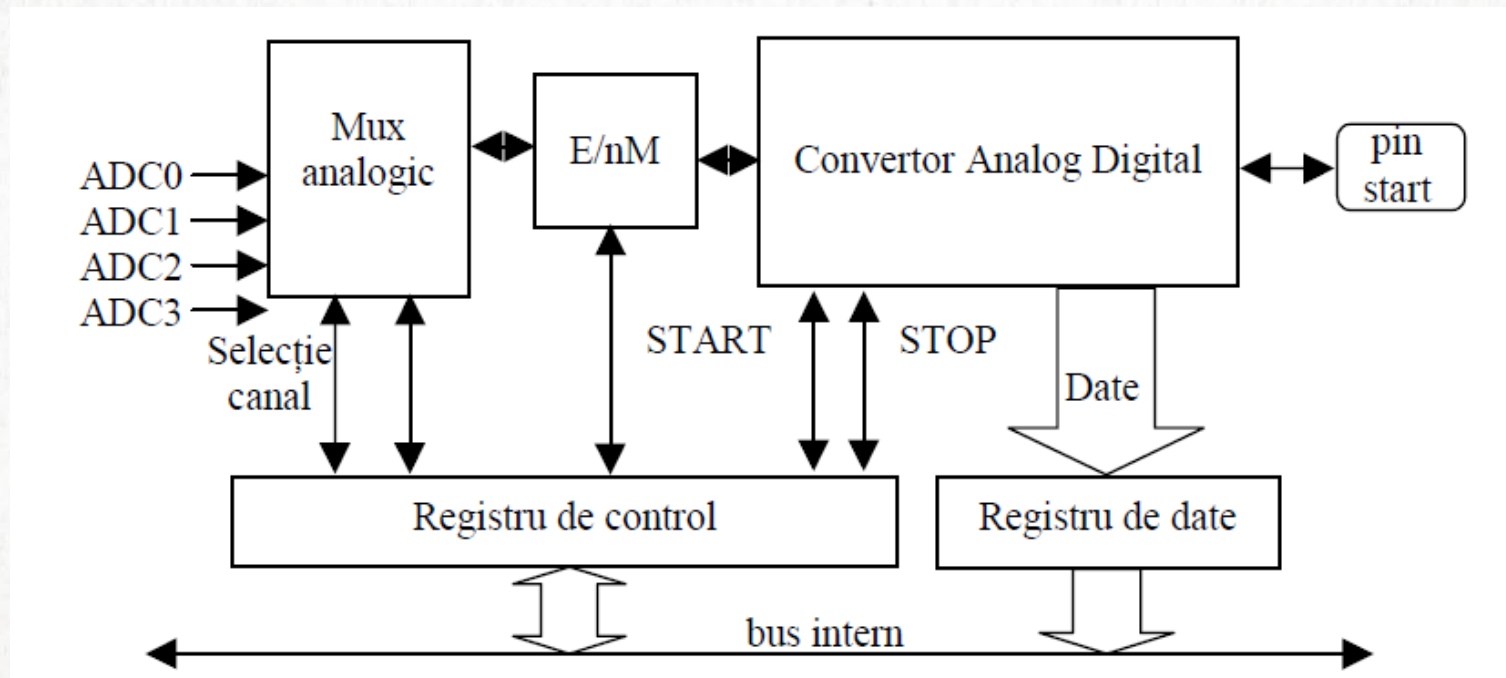
$[0 ; 5] \text{ V}$



$[0 ; (2^n)-1]$



CAN – CONVERTOR ANALOG NUMERIC



INTRERUPERE A TIMERULUI

```
void init_adc()
{
    ADMUX = 0b01000000;
    ADCSRA= 0b10000111;
}

int adc(char ch)
{
    ADMUX &= 0b11100000;
    ADMUX |= ch;
    ADCSRA|=(1<<6);
    while(ADCSRA&(1<<6));
    return ADC;
}
```

```
ISR(TIMER0_COMP_vect)
{
    x++;
    switch(x)
    {
        case 1: display(4,n%10);break;
        case 2: display(3,(n/10)%10);break;
        case 3: display(2,(n/100)%10);break;
        case 4: display(1,(n/1000)%10);
            x=0;break;
    }
    if (t==999){
        n=adc(6);
        t=0;
    }
    else t++;
}
```

CNA – CONVERTOR NUMERIC ANALOGIC

