**• Timers**

TA1, CC: capture compare registers

Timer\_A5 or Timer 0\_A5

Timer counting modes

UP: Count till the value of register TAxCCR0;  *In this case TA0CCR0*

Continuous: count upto the max value (16 bit ; so can count upto 2^16)

Clocks: ACLK, SCLK, MCLK

Timer A registers: TAxCTL, TAxCCTL, TAxCCR3, TAxR ; x represents capture compare instance

Overflow in timer results interrupt flags

Capture compare bits : CCIE

CCIFG

**Capture mode and compare mode**

**Vector interrupt: group**

CCIFG0 -> HIGHEST priority separate vector location

CCIFG1 – 4 , TAIFG

***Offset not required in upcount, only required in continuous count***

**Multiple CCL**

TA0CCR0 =60000;

TA0CCR1 = 25000;

TA0CCR2 = 50000;

TA0CCTL0 = CC1E; -> ISR

TA0CCTL1 = CCIE; -> ISR

TA0CCTL2 = CCIE;

TA-CTL = MC\_2 + TASSEL\_2;

**PWM OUTMODS**

TA0CCR1 = 256

TA0CCR0 = 512

(R is for registers …can be 0,1,….)

TAxCCRn;

**UART**

**Ucrxifg - > Data receive in UCAIRX buffer flag**