```
void InitEcap3()
{
    // Code snippet for CAP mode Delta Time, Rising edge trigger
    //=======================
    // ECAP module 1 config
    ECap3Regs.ECCTL1.bit.CAP1POL = EC_RISING;
    ECap3Regs.ECCTL1.bit.CAP2POL = EC_RISING;
    ECap3Regs.ECCTL1.bit.CAP3POL = EC_RISING;
    ECap3Regs.ECCTL1.bit.CAP4POL = EC_RISING;
    ECap3Regs.ECCTL1.bit.CTRRST1 = EC_DELTA_MODE;
    ECap3Regs.ECCTL1.bit.CTRRST2 = EC_DELTA_MODE;
    ECap3Regs.ECCTL1.bit.CTRRST3 = EC_DELTA_MODE;
    ECap3Regs.ECCTL1.bit.CTRRST4 = EC_DELTA_MODE;
    ECap3Regs.ECCTL1.bit.CAPLDEN = EC_ENABLE;
    ECap3Regs.ECCTL1.bit.PRESCALE = EC_DIV1;
    ECap3Regs.ECCTL2.bit.CAP_APWM = EC_CAP_MODE;
    ECap3Regs.ECCTL2.bit.CONT_ONESHT = EC_CONTINUOUS;
    ECap3Regs.ECCTL2.bit.SYNCO_SEL = EC_SYNCO_DIS;
    ECap3Regs.ECCTL2.bit.SYNCI_EN = EC_DISABLE;
    ECap3Regs.ECCTL2.bit.TSCTRSTOP = EC_RUN;        // Allow TSCTR to run
}
/*****************************************************************************/
void CalculateNewFreq()
{
#define IIRTIME 0.05
#define MAINCLK 1.5e8   // 150 mhz
long  T1, T2;
float F1, F2;
float deltaF;
static float DelIIR;
    T1 = (ECap3Regs.CAP1+ECap3Regs.CAP2+ECap3Regs.CAP3+ECap3Regs.CAP4) / 4;
    T2 = (ECap4Regs.CAP1+ECap4Regs.CAP2+ECap4Regs.CAP3+ECap4Regs.CAP4) / 4;

    F1 = MAINCLK/(float)T1;
    F2 = MAINCLK/(float)T2;

    deltaF = fabs(F1-F2);
    DelIIR = DelIIR*(1.0-IIRTIME) + deltaF*IIRTIME;

    ECap5Regs.CAP3 = (unsigned long) (MAINCLK/DelIIR);
    ECap5Regs.CAP4 = (unsigned long) (MAINCLK/DelIIR*0.5);
}
/*****************************************************************************/
```