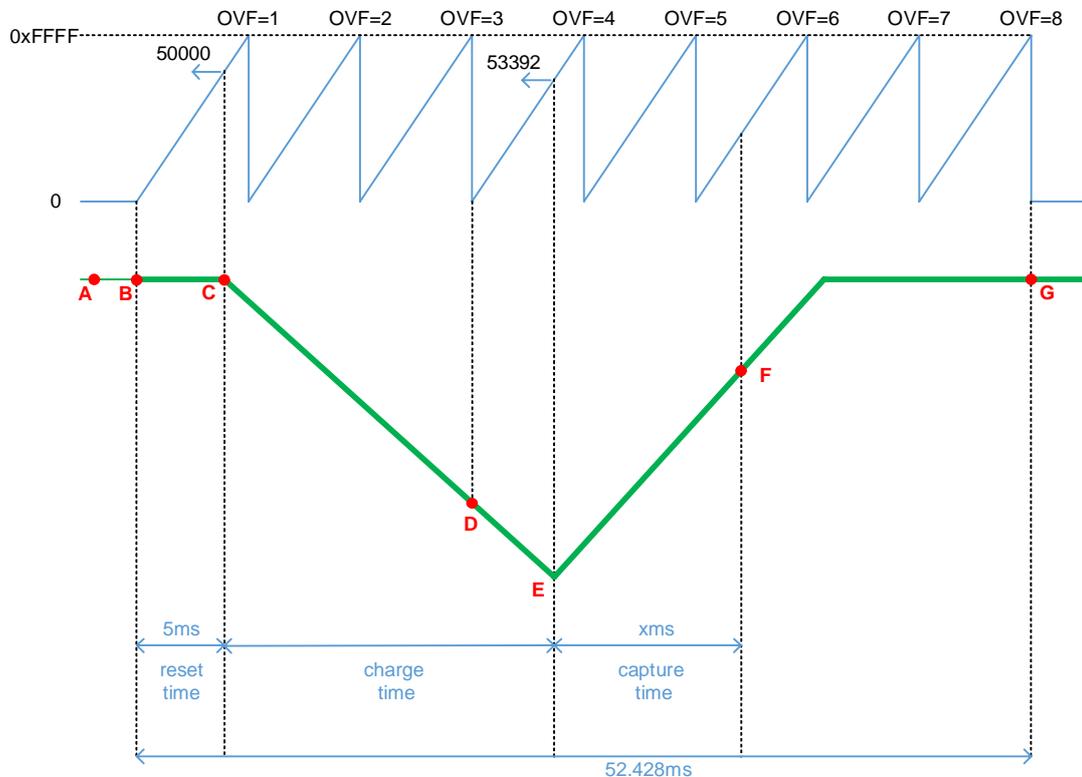


## Timer step flow chart



- A :** 1.stop TA2  
 2.assign compare output pin and capture input pin  
 3.enable overflow interrupt (TAIE=1,use for overflow count)  
 4.set TA2CCR0(CCR0) as compare register  
 5.set compare output pin initial status=low level
- B :** 1.set compare match register(TA2CCR0)=50000  
 2.set next compare match output pin auto switch to high level  
 3.start timer
- C :** 1. compare output pin auto switch to high level  
 2. this compare match doesn't enter compare match interrupt subroutine
- D :** 1.overflow=3 interrupt subroutine  
 2.set compare match register(TA2CCR0)=53392  
 3.set next compare match output pin auto switch to low level  
 4.enable compare match interrupt(next compare match enter compare match interrupt subroutine)

**E** : 1.enter compare match interrupt subroutine  
2.compare match output pin auto switch to low level  
3.set TA2CCR1(CCR1) as capture register  
4. set raising edge capture  
5.enable capture interrupt (when capture occur, enter capture interrupt subroutine)  
6.disable compare match interrupt

**F** : 1.capture timer value

**G** : 1.stop timer  
2.clear overflow