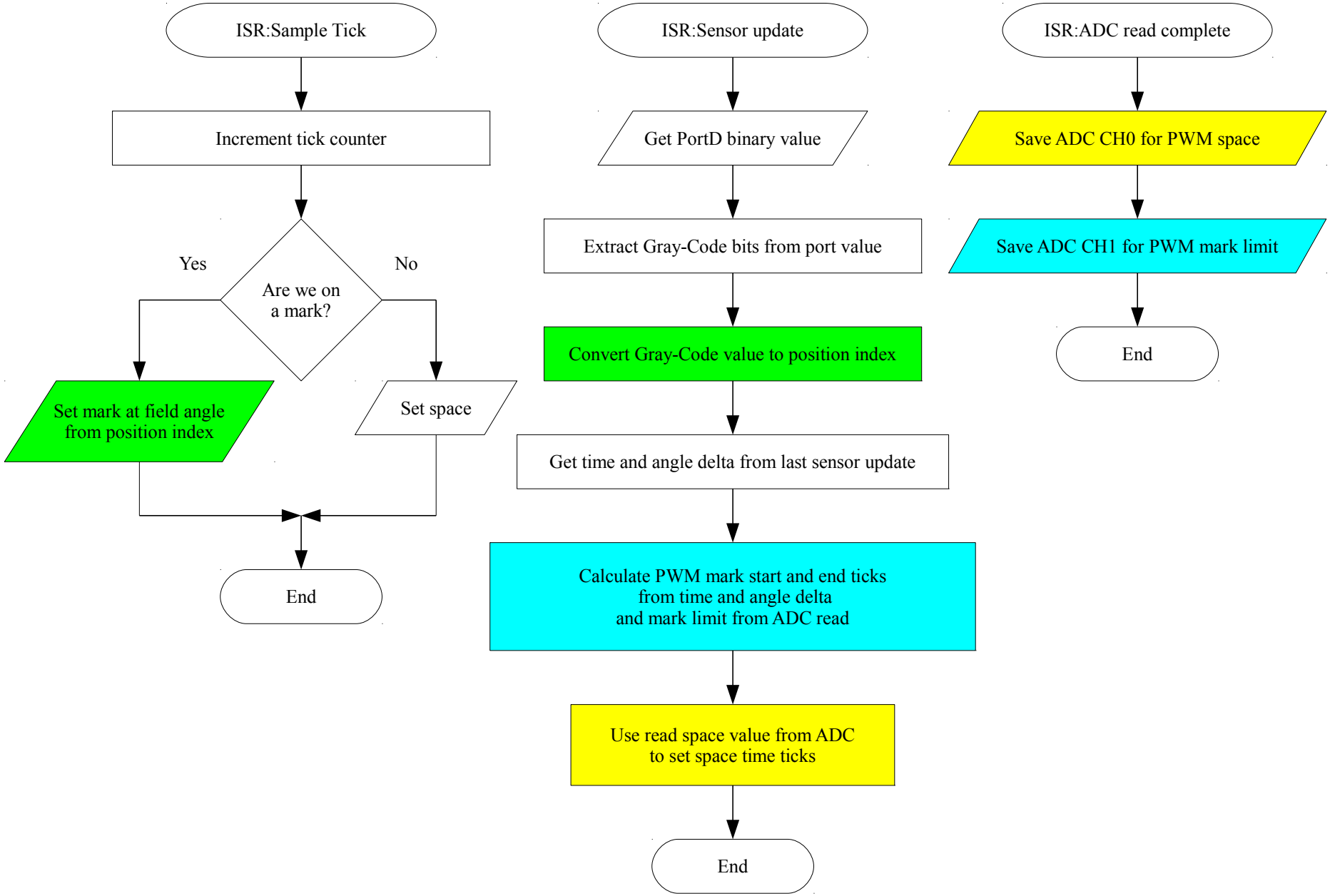
ISR:Sample Tick
Increment tick counter
Are we on a mark?
Yes
No
Set mark at field angle from position index
Set space
End
ISR:Sensor update
Get PortD binary value
Extract Gray-Code bits from port value
Convert Gray-Code value to position index
Get time and angle delta from last sensor update
Calculate PWM mark start and end ticks from time and angle delta and mark limit from ADC read
Use read space value from ADC to set space time ticks
End
ISR:ADC read complete
Save ADC CH0 for PWM space
Save ADC CH1 for PWM mark limit
End