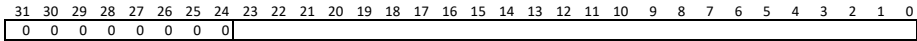


ADC SAMPLE PACKET (1472 Bytes)

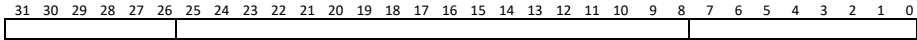
packet types:

- 0 ADC Samples packet
- 1 End of Samples Status packet
- 2 Timed Status packet keep-alive



Packet Type (8)

UDP Packet Number (increments, 24 bits)  
(can wrap)

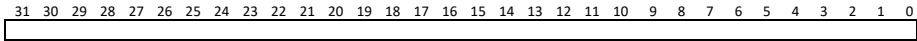


Seconds (6)

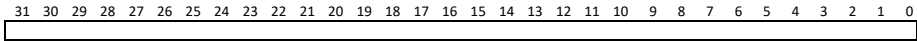
This secs is internally synced to real time

Unique ID assigned to this detector (18)

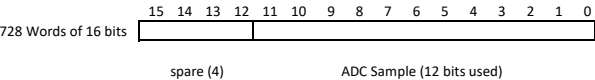
ADC Buffer Number (8)  
(can wrap)



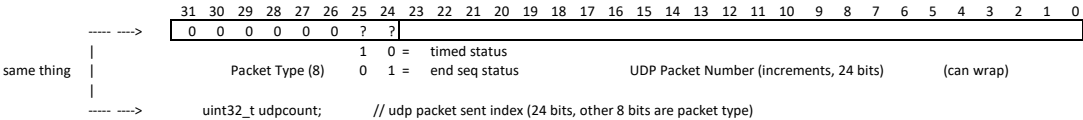
1 Pulse-per-Second Internal Timer snapshot value (32) (Timer approx 108MHz, reloads at 4000000000)



DMA Complete timer snapshot of 728 ADC samples taken (Timer approx 108MHz, reloads at 4000000000)



Status Packet (140 Bytes)

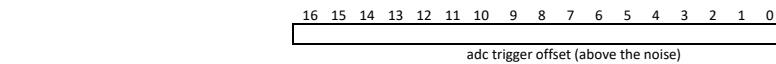
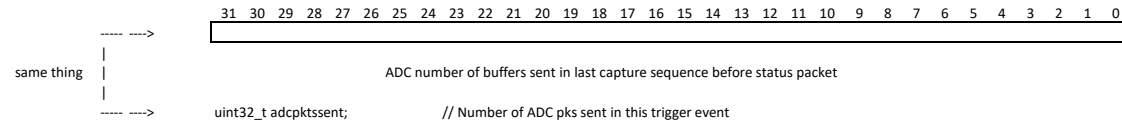
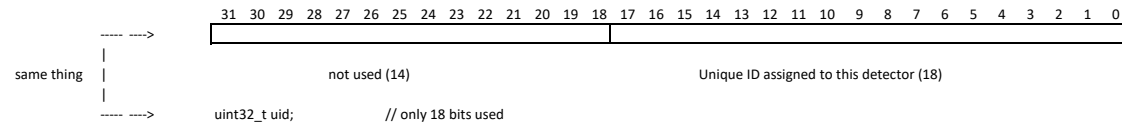


```
struct UbxGpsNavPvt {
    // Type Name Unit Description (scaling)
    unsigned long iTOW; // ms GPS time of week of the navigation epoch. See the description of iTOW for details. 0
    unsigned short year; // y Year UTC 4
    unsigned char month; // month Month, range 1..12 UTC 6
    unsigned char day; // d Day of month, range 1..31 UTC 7
    unsigned char hour; // h Hour of day, range 0..23 UTC 8
    unsigned char min; // min Minute 9
    unsigned char sec; // s Seconds of minute, range 0..10 NOTE This secs is not real time - it has latency. 10
    char valid; // - Validity Flags (see g 11
    unsigned long tAcc; // ns Time accuracy estimate UTI 12
    long nano; // ns Fraction of second, range -1e9..1e9 UTC 16
    unsigned char fixType; // - GNSSfix Type, range 0..5 20
    char flags; // - Fix Status Flags (see graphic 21
    unsigned char reserved1; // - 22
    unsigned char numSV 23
```

```

long lon; // deg Longitude (1e-7) 24
long lat; // deg Latitude (1e-7) 28
long height; // mm Height above Ellipsoid 32
long hMSL; // mm Height above mean sea level 36
unsigned long hAcc; // mm Horizontal Accuracy Estimate 40
unsigned long vAcc; // mm Vertical Accuracy Estimate 44
long velN; // mm/s NED north velocity 48
long velE; // mm/s NED east velocity 52
long velD; // mm/s NED down velocity 56
long gSpeed; // mm/s Ground Speed (2-D) 60
long heading; // deg Heading of motion 2-D (: 64
unsigned long sAcc; // mm/s Speed Accuracy Estimate 68
unsigned long headingAcc; // deg Heading Accu 72
unsigned short pDOP; // - Position DOP (0.01) 76
short reserved2; // - Reserved 78
unsigned long reserved3; // - Reserved 80
} NavPvt;

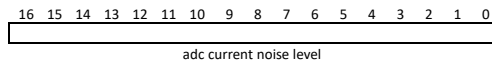
```



```

adctrigoff : uint16_t;
adcnoise : uint16_t;

```



```

uint32_t sysuptime; // number of seconds system up from boot uptime
uint32_t netuptime; // number of seconds network up
uint32_t gpsuptime; // number of seconds gps locked
uint8_t majorversion; // major ver
uint8_t minorversion; // minor ver
uint8_t reserved1; // spare
uint8_t reserved2; // spare
uint32_t reserved3; // spare
uint32_t reserved4; // spare
uint32_t reserved5; // spare
uint32_t reserved6; // spare

```

Any new fields to be added here .....

```

end sentinel marker (keep at the end) uint32_t telltale1; // end of status packet marker 0xFEEDCODE

```