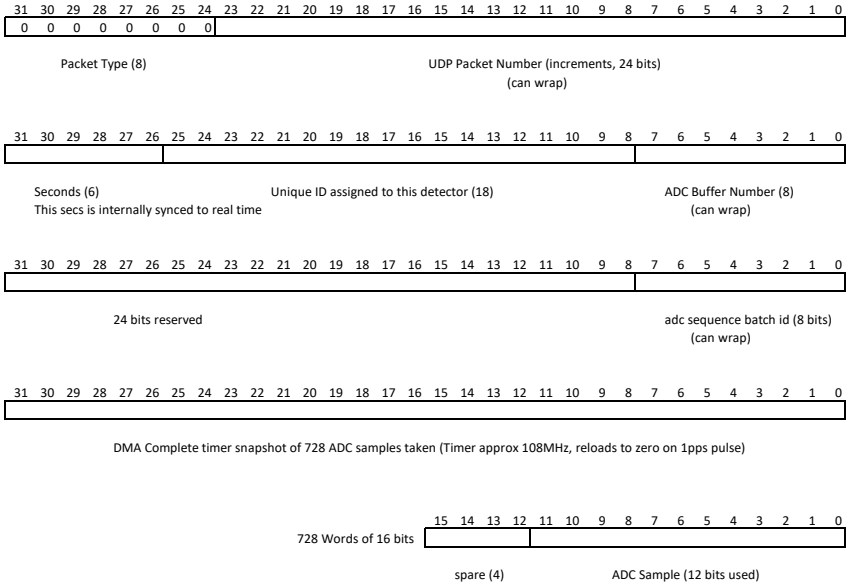
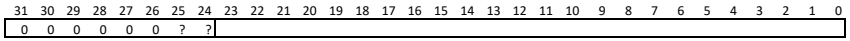
Version 1.6 2nd April 2018

ADC SAMPLE PACKET (1472 Bytes)



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

Status Packet (140 Bytes)



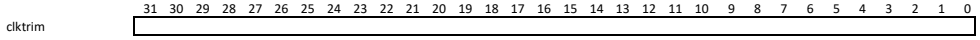
	1	0 = timed status
same thing	Packet Type (8)	0 1 = end seq status

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

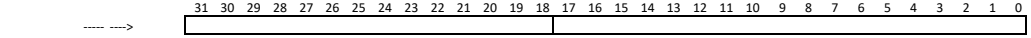
```
uint32_t udpcount;          // udp packet sent index (24 bits, other 8 bits are packet type)

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..6  10       NOTE This secs is not real time - it has latency.
    char          valid;      // -     Validity Flags (see g  11
    unsigned  long  tAcc;     // ns    Time accuracy estimate UTC  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 I  21
    unsigned  char  reserved1; // -    22
    unsigned  char  numSV  23
    long          lon;        // deg   Longitude (1e  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
```

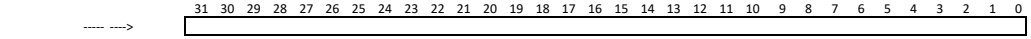
```
long        velN;     // mm/s   NED north velocity                  48
long        velE;     // mm/s   NED east velocity                       52
long        velD;     // mm/s   NED down velocity                       56
long        gSpeed;   // mm/s   Ground Speed (2-D)                 60
long        heading;  // deg    Heading of motion 2-D (1  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;
```



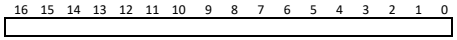
average of STM32 clock frequency referenced to 1pps



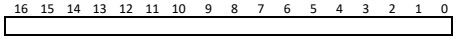
uint32_t uid; // only 18 bits used



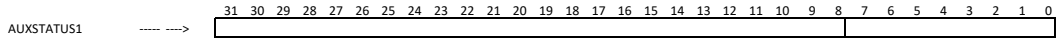
uint32_t adcpktssent; // Number of ADC pks sent in this trigger event



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
uint16_t adcnoise;       // adc average peak noise
```




```
uint24_t reserved        // spare        AUXSTATUS1
uint8_t                  adc sequence batch id

uint32_t reserved1;      // spare
uint32_t reserved2;      // spare
uint32_t reserved3;      // spare
```

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

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