**Data Packets Format**

Each stream of data is constructed in the below way

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Leading 0's | Read | Notify | Address | Data | Sub-System |
| Number of bits | 6 bits | 1 bit | 1 bit | 16 bits | 32 bits | 8 bits |
| bit Positions | 64-59 | 58 | 57 | 56-41 | 40-8 | 7-0 |

An Example for the structure for the number x packets.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Packet  # | SS | Data | Addr | Flags | DataStream |
| X | 3 | 2 | 0 | False  False | 0000000000000000000000000000000000000000000000000000001000000011 |
| X | 3 | 1 | 0 | False  False | 0000000000000000000000000000000000000000000000000000000100000011 |
| X | 3 | 2147549188 | 0 | False  False | 0000000000000000000000001000000000000001000000000000010000000011 |
| X | 3 | 3 | 0 | False  False | 0000000000000000000000000000000000000000000000000000001100000011 |
| X | 3 | 8 | 0 | False  False | 0000000000000000000000000000000000000000000000000000100000000011​ |

**So far we know that:**

* Gain setting gives 5 packets (Updated on 26-05-2017) --> Gain Doc
* Set LO CBX gives 7 packets (Updated on 26-05-2017) --> SetLO\_CBX Doc
* Set LO UBX gives 7 + 0/7 packets (Updated on 09-06-2017) --> SetLO\_UBX Doc