Conventions

* Sending an empty packet with the correct type from the computer to the hardware queries that attribute on the hardware; sending a packet with data will set the associated parameters

* The hardware should reply to every packet type sent from the computer with a packet of the same type as an acknowledgment (it can have a payload in the case of parameters to be queried, or can be an empty packet to ack any operation that does not have associated data.

ESC RS-485/UDP Packet Example

			FSM Fault Response Payload (4B)						
Header (32b)	Payload Type (16b)	Payload Length (16b)	P1V2 O/C: 0 (1b)	P3V3 O/C: 0 (1b)	P5V0 O/C: 1 (1b)	P24V0 O/C: 0 (1b)	Reserved (4b+3B)	Footer (32b)	CRC32 (bzip2 poly)

Payload length: CCSDS (space) uses 8k packets

Recommended but not required that all payloads are multiples of 32bits

?Do we need NACK for high-speed re-transmit (i.e. DM)? => implies Sequence Number/PktID (16b); ...otherwise corrupted packets are simply ignored and last commanded value used on actuators
* using a 32b value for the sequence would allow some add'l checksum or parity to be built into seq number in case of extreme corruption and keep packet 32b aligned...