CAN_ID = BOARD_ID + MESSAGE_ID

	5		4		3		2		1		0	
DIRECTION	47 46 45 44 43 42 41 40	39 38 37 36 35 34 33 32	31 30 29 28 27 26 25 24	23 22 21 20 19 18 17 16	15 14 13 12 11 10 9 8	7 6 5 4 3 2 1 0	

| | PAYLOAD | | | | | | CAN_ID |

PID KP PACKET

| BBB ==> DRIVER | 0 | CONTROLLER TYPE (8)
(POS/0, LVL/1, TOR/2, TL/3) | KP
SINGLE-PRECISION FLOATING-POINT FORMAT (32) | BOARD_ID
+
MSG_ID |

PID KI PACKET

| BBB ==> DRIVER | 0 | CONTROLLER TYPE (8)
(POS/0, LVL/1, TOR/2, TL/3) | KI
SINGLE-PRECISION FLOATING-POINT FORMAT (32) | BOARD_ID
+
MSG_ID |

PID KD PACKET

| BBB ==> DRIVER | 0 | CONTROLLER TYPE (8)
(POS/0, LVL/1, TOR/2, TL/3) | KD
SINGLE-PRECISION FLOATING-POINT FORMAT (32) | BOARD_ID
+
MSG_ID |

PID SETPOINT PACKET

| BBB ==> DRIVER | 0 | CONTROLLER TYPE (8)
(POS/0, LVL/1, TOR/2, TL/3) | SETPOINT
SINGLE-PRECISION FLOATING-POINT FORMAT (32) | BOARD_ID
+
MSG_ID |

PRECOMPRESSION PACKET

| BBB ==> DRIVER | 0 | CONTROLLER TYPE (8)
(POS/0, LVL/1, TOR/2, TL/3) | PRECOMPRESSION
SINGLE-PRECISION FLOATING-POINT FORMAT (32) | BOARD_ID
+
MSG_ID |

EVENT PACKET

| BBB ==> DRIVER | 0 | 0 | EVENT
INTEGER FORMAT (32) | BOARD_ID
+
MSG_ID |

REFERENCE ALPHA ANGLE PACKET

| BBB ==> DRIVER | 0 | 0 | REFERENCE ALPHA ANGLE
SINGLE-PRECISION FLOATING-POINT FORMAT (32) | BOARD_ID
+
MSG_ID |

REFERENCE FIX LINK ANGLE PACKET

| BBB ==> DRIVER | 0 | 0 | REFERENCE FIX LINK ANGLE
SINGLE-PRECISION FLOATING-POINT FORMAT (32) | BOARD_ID
+
MSG_ID |

AUXILIARY VARIABLE PACKET

| BBB ==> DRIVER | 0 | VARIABLE TYPE (8)
(0, 1, 2, 3) | AUXILIARY VARIABLE
SINGLE-PRECISION FLOATING-POINT FORMAT (32) | BOARD_ID
+
MSG_ID |

SENSORS PACKET

| HAL <== DRIVER | LEVER ARM ANGLE (16)
[-3999, 4000] | RESERVED (4) | CURRENT (10) | VEL (2) | VELOCITY (12) | ERROR (4) | BOARD_ID
+
MSG_ID |

JOINT STATE PACKET

| HAL <== DRIVER | TORQUE (16)
[-32768, 32767] | ALPHA ANGLE (16)
[-8191, 8192] | FIX LINK ANGLE (16)
[-3999, 4000] | BOARD_ID
+
MSG_ID |

PID PACKET

| HAL <== DRIVER | MEASURED OUTPUT (16)
[-32768, 32767] | CONTROL OUTPUT (16)
[-32768, 32767] | SYSTEM SETPOINT (16)
[-32768, 32767] | BOARD_ID
+
MSG_ID |