

CAN Expansion Module V1

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| Document Number | | PR035_CANExpansionModuleV1_12JAN2023 | |
| Title | | CAN Expansion Module V1 | |
| Team Member / Engineer | | Raheel Farouk | |
| Prepared By | Date | Checked By | Change History |
| Raheel Farouk | 12JAN2023 | - | Initial Version |
| Raheel Farouk | 16JAN2023 | - | Added Endianness and Cleaned up formatting |
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Messaging Structure

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|----------------|---------------------------|
| Base CAN ID: | |
| Message Length | 8 |
| Byte0 | Brake Temp (0-7) |
| Byte1 | Brake Temp(8-9)/DPOS(0-5) |
| Byte2 | DPOS(6-9)/SlipAngle(0-3) |
| Byte3 | SlipAngle(4-9)/Aux(0-1) |
| Byte4 | Aux(2-9) |
| Byte5 | Firmware Version |
| Byte6 | Compound ID |
| Byte7 | Counter |
| Endianness | Big Endian |

*Note: The numbers in brackets are the bit numbers for the data

Data and respective bytes

Brake Temp: Bit0 – Bit9

DPOS: Bit10 – Bit19

SlipAngle: Bit20 – Bit29

Aux: Bit30 – Bit39

Firmware: Bit40 – Bit47

Compound: Bit48 – Bit55

Counter: Bit56 – Bit63

Setup Guide

Setting up the Expansion Module requires a CAN ID for the expansion module and the sensors to be plugged into the right spots. The MoTeC firmware will decide between what input will be used for each function, for example brake temperature will select the brake temperature input but you will be able to choose between front and rear, left and right.

Notes

Auxiliary sensor attached to wind speed and steering position.