CAN A

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Processor 1 : Front Axle + ICE (+ Clutch command)

Mechanical modules :
- Front Axle/ICE/ICE (&)
- Front Axle/Clutch (@)
- Front Axle/gearbox + differential ($)
- Front Axle/FA_TQ_to_F_BRAKE (#)

Shared variables :
- FA_N_ICE (@ → &)
- FA_ICE_TQ_SP (% → &)
- FA_STARTER_REQUEST (% → &)
- FA_ICE_STATE (% → &)
- FA_TQ_STARTER (& → %)
- FA_CLU_STUCK (@ → %)
- FA_TQ_CLU (@ → $)
- FA_TQ_ICE (& → @)
- FA_N_GBX ($ → @)
- FA_TQ_MAX_ICE (& → $)
- FA_TQ_MIN_ICE (& → $)

Command modules :
- Front Axle/ICE/ICE control (%)

SYSE_SOC (2 → 3)
PLA_SPEED (2 → 3)
PLA_N (2 → 13)
SYSE_VOLTAGE_HV (2 → 3)
RA_TQ_MIN (2 → 3)
RA_TQ_MAX (2 → 3)
SYSE_TQ_MIN (2 → 3)
SYSE_TQ_MAX (2 → 3)

CMD_CLUTCH_SP (3 → 1)
DRI_GBX_SP (3 → 1)
PLA_N (2 → 1)
CM_FA_MECHANICAL_BRAKE (3 → 1)
CMD_FA_TQ_SP (3 → 1)
FA_START_ICE (3 → 1)

FA_GAS_CONSUMPTION (1 → 3)
FA_TQ (1 → 2)
FA_TQ_MIN (1 → 3)
FA_TQ_MAX (1 → 3)
FA_PLA_F_BRAKE (1 → 2)
FA_N_ICE (1 → 3)

Processor 2 → Rear Axle + EMA + Platform + Environment

Mechanical modules :
- Real Axle/Electrical machine/Power efficiency (&)
- Rear Axle/Differential (@)
- Rear Axle/RA_TQ_to_F_BRAKE ($)
- Electrical system/Lithium-ion battery management system (#)
- Electrical system/Auxiliary network 12V (%)
- Platform (*)
- Environment (£)

Shared variables :
- RA_TQ_ME (€ → &@)
- RA_N_EM (@ → &µ)
- RA_EM_CURRENT (& → #)
- SYSE_VOLTAGE_HV (# → & %µ)
- RA_TQ_MIN_ME (€ → @)
- RA_TQ_MAX_ME (€ → @)
- PLA_N (* → @)
- RA_PLA_F_BRAKE ($ → *)
- SYSE_AUX_CURRENT (% → #µ)
- RA_TQ (@ → *)
- ENV_VECT (£ → *)
- SYSE_SOC (# → µ)

Command modules :
- Real Axle/Electrical machine/Engine representation (€)
- Electrical system/Electrical system supervision (µ)

CMD_RA_MECHANICAL_BRAKE (3 → 2)
FA_TQ (1 → 2)
FA_PLA_F_FRAKE (1 → 2)
CMD_RA_TQ_SP (3 → 2)

PLA_SPEED (2 → 3)
FA_N_ICE (1 → 3)
PLA_N (2 → 3)
FA_GAS_CONSUMPTION (1 → 3)
SYSE_SOC (2 → 3)
SYSE_VOLTAGE_HV (2 → 3)
RA_TQ_MIN (2 → 3)
RA_TQ_MAX (2 → 3)
SYSE_TQ_MIN (2 → 3)
SYSE_TQ_MAX (2 → 3)
FA_TQ_MIN (1 → 3)
FA_TQ_MAX (1 → 3)

DRI_GBX_SP (3 → 1)
CMD_FA_TQ_SP (3 → 1)
CMD_RA_TQ_SP (3 → 2)
FA_START_ICE (3 → 1)
CMD_CLUTCH_SP (3 → 1)
CMD_FA_MECHANICAL_BRAKE (3 → 1)
CMD_RA_MECHANICAL_BRAKE (3 → 2)

Processor 3 → Supervision

Mechanical modules :

Shared variables :
- DRI_REF_GBX (& → @)
- DRI_REF_SPEED (& → @)
- CMD_ANTI_WINDUP ($ → @)
- DRI_GBX_SP (@ → $)
- DRI_TQ_SP (@ → $)
- DRI_CLUTCH_SP (@ → $)
- START (@ → $)
- DRI_CMD_BRAKE (@ → $)

Command modules :
- Reference (NEDC) (&)
- Driver1 (@)
- Command ($)

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