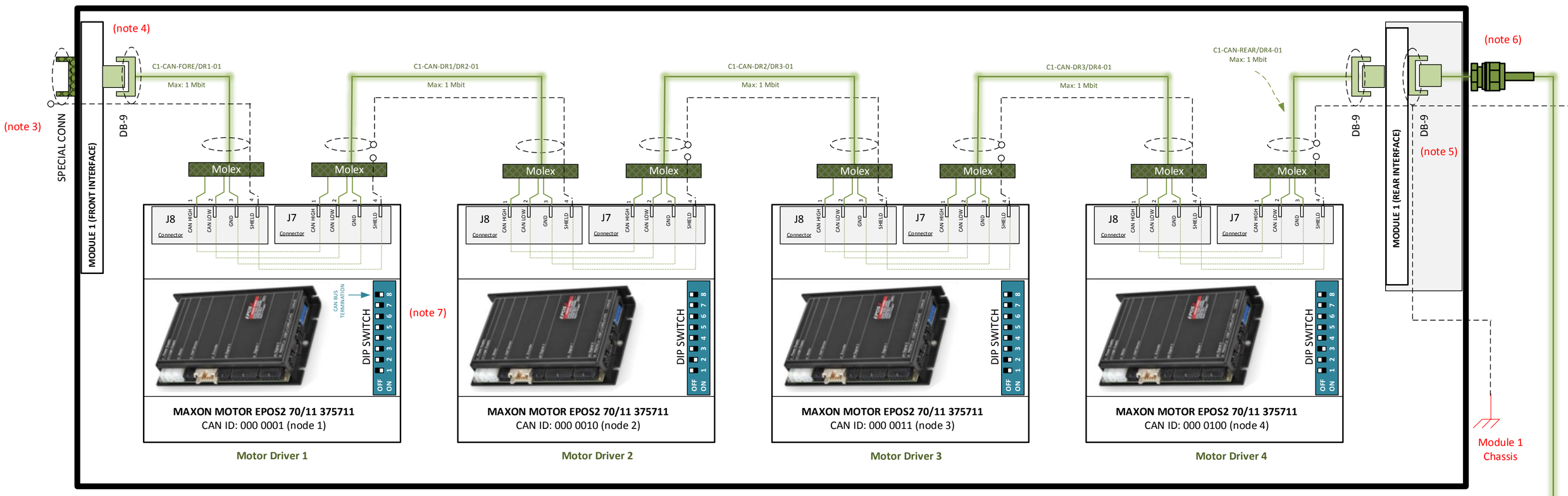
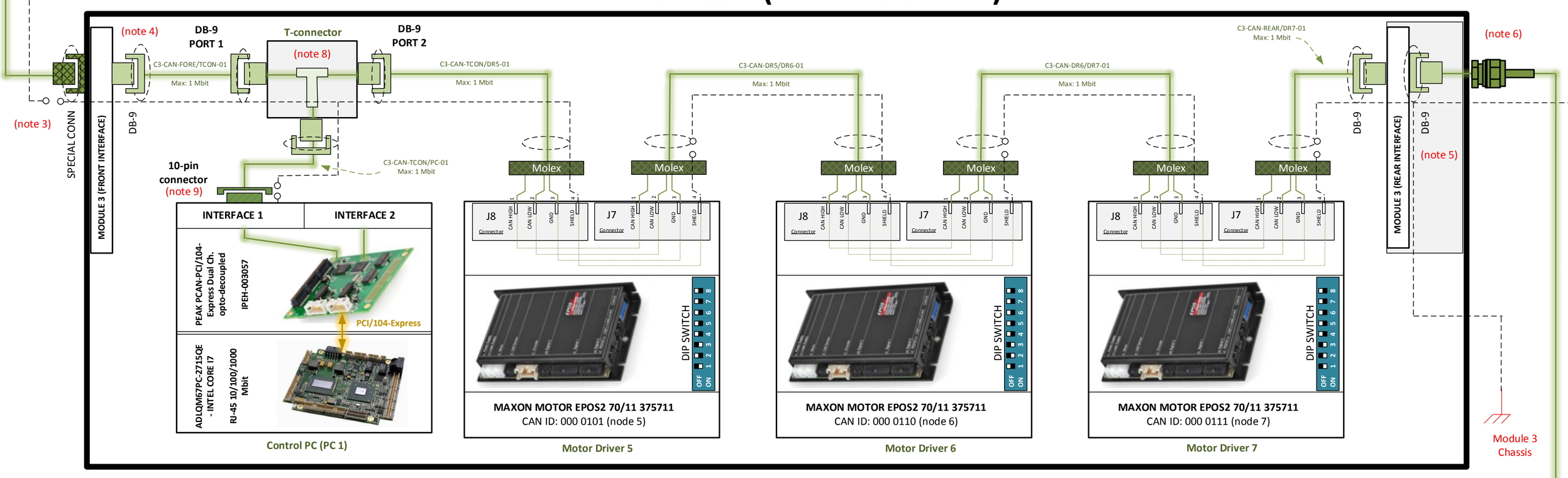
MODULE 1 (TRACTION)

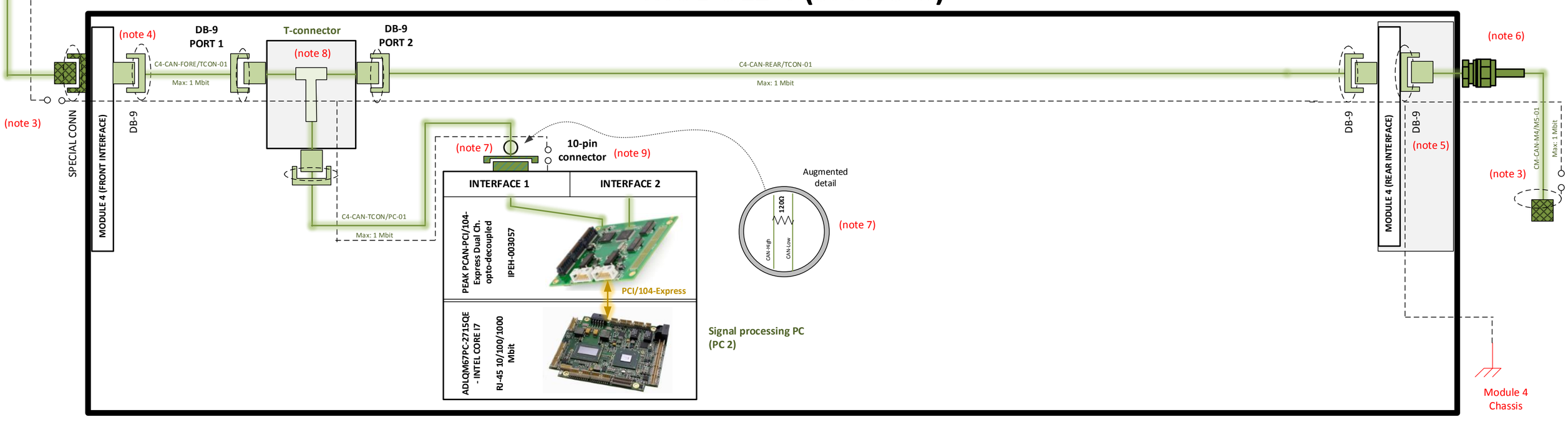


MODULE 2 (POWER SUPPLY)

MODULE 3 (MANIPULATOR)



MODULE 4 (S. PROC.)



Legend:

- DB-9 (Male)
- DB-9 (Female)
- Connector shield (both male and female)
- Special connector (Male) for module outside (see connector list)
- Special connector (Female) for module outside (see connector list)
- Cable shield interruption
- Cable Gland for module outside
- Cable shield
- CABLE TAG (see "Cable List" in next chapter) / Maximum CAN speed — CAN Cable (1 twisted pair + GND)
- Molex — Connector Molex Molex Micro-Fit 3.0 4 poles (430-25-0400)

Notes:

1 – All DB-9 (male/female) connectors and CAN cables are shielded.
2 – The shield envelopment is interrupted near the connector of all CAN devices, with the exception of: a) J7 molex connectors at the drivers; b) T-connectors; c) module rear interfaces.
3 – The shield envelopment of all outdoor cables (CM-CAN-MX/MX-01) must be interruped near the special connector of the next module front). For example: CM-CAN-M2/M3-01 shield is cutted off near the special connector of module 3 front interface.
4 – All DB-9 connectors at front interfaces are completely isolated from the module chassis.
5 – In each module rear interface, the shield of DB-9 connectors is connected to the module chassis. Then, the chassis of all modules are connected by a separate external wire (for more details, see "Grounding system" section and the Power Supply-G3 project).
6 – Each module is equipped with: a) one female special connector on the front interface (outside); b) one female DB-9 on the rear interface (inside the module); c) one cable gland pressing the external cable exiting the rear of this module towards the front of the next module.
7 – This device has the CAN bus termination. A 120Ω resistor should be placed in parallel with CAN-High and CAN-Low wires. In case of a CAN bus termination in a driver, it can be implemented by turning on the 8-pin of the DIP Switch.
8 – The T-connector implements: a) the connection of a PC in the CAN bus; b) a bypass of the CAN bus to future extensions.
9 – The 10-pin connector is the CAN interface of this PC model. Pinout: CAN-High (7), CAN-Low (2), GND (3), Shield (5).
10 – All DB-9 connections follow this pinout: CAN-High (pin 7), CAN-Low (pin 2), GND (pin 3), Shield (pin 5).