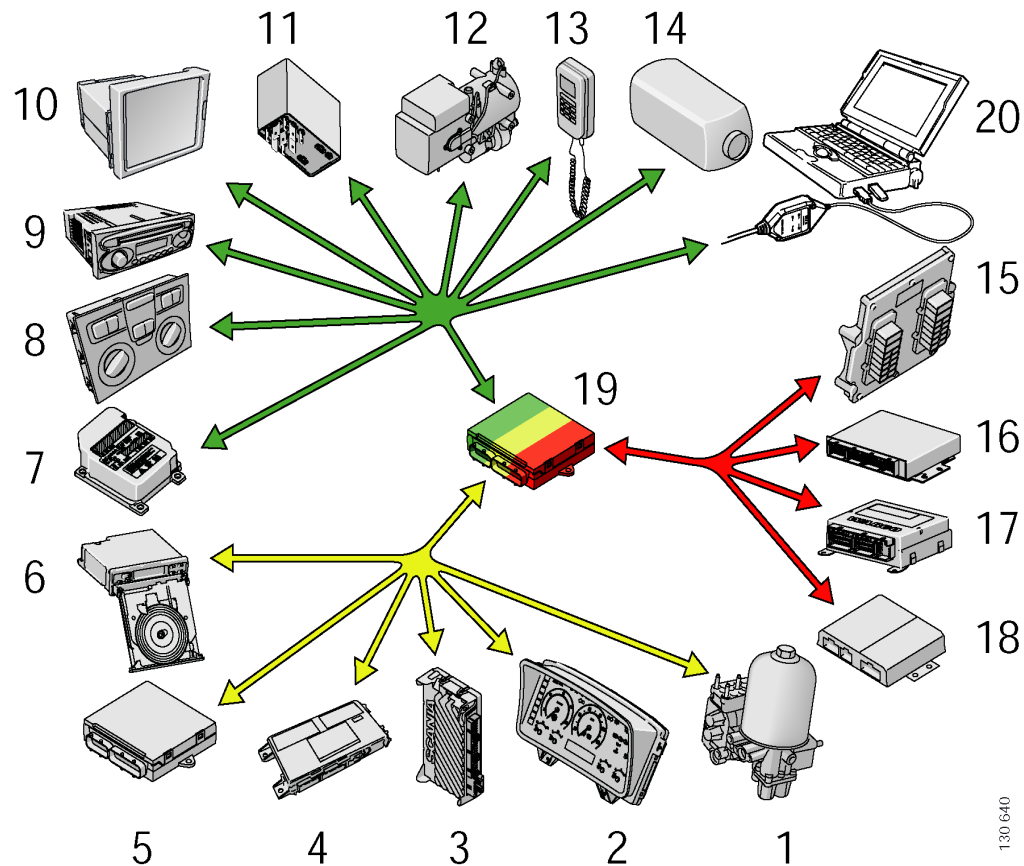


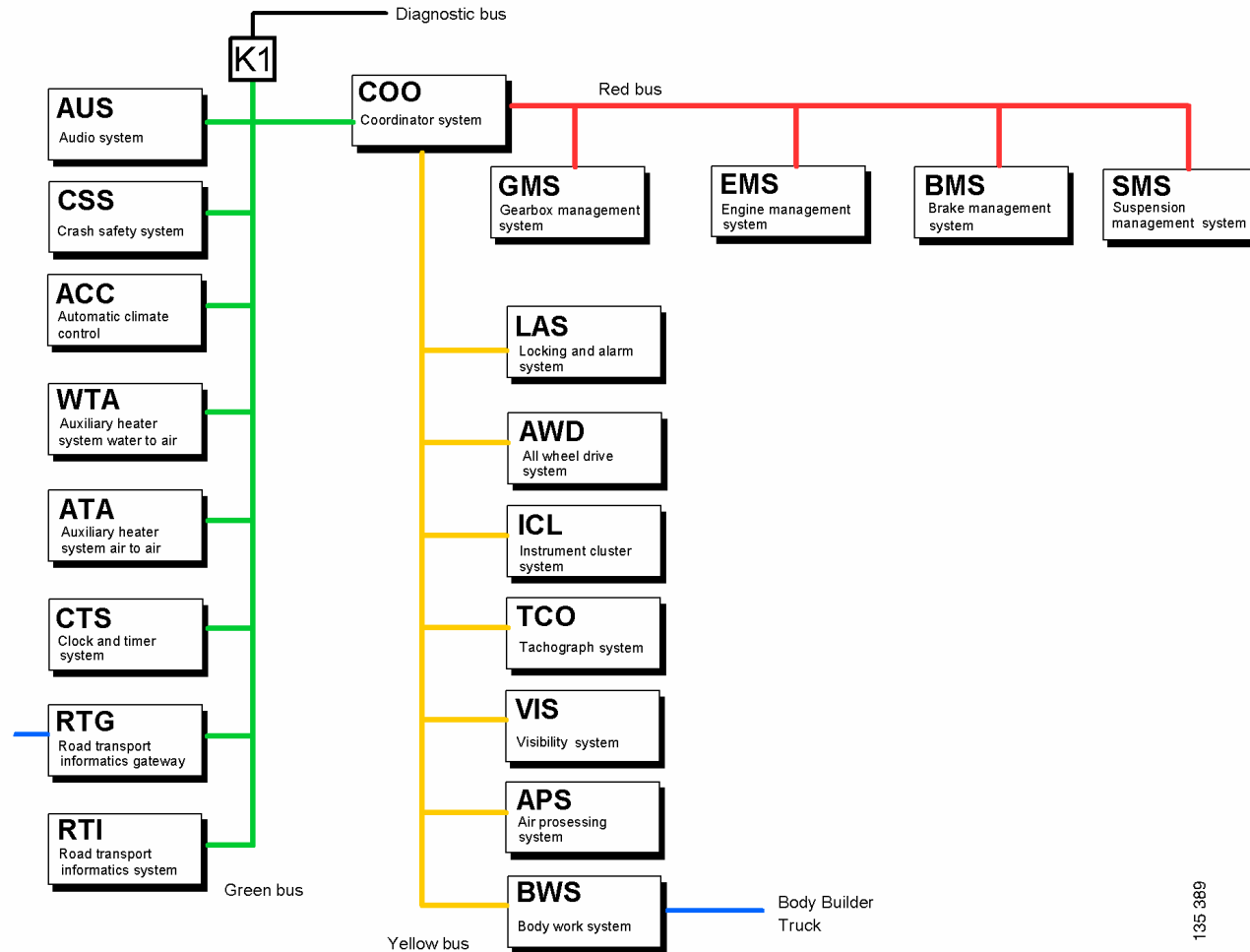
CAN bus properties



130 640



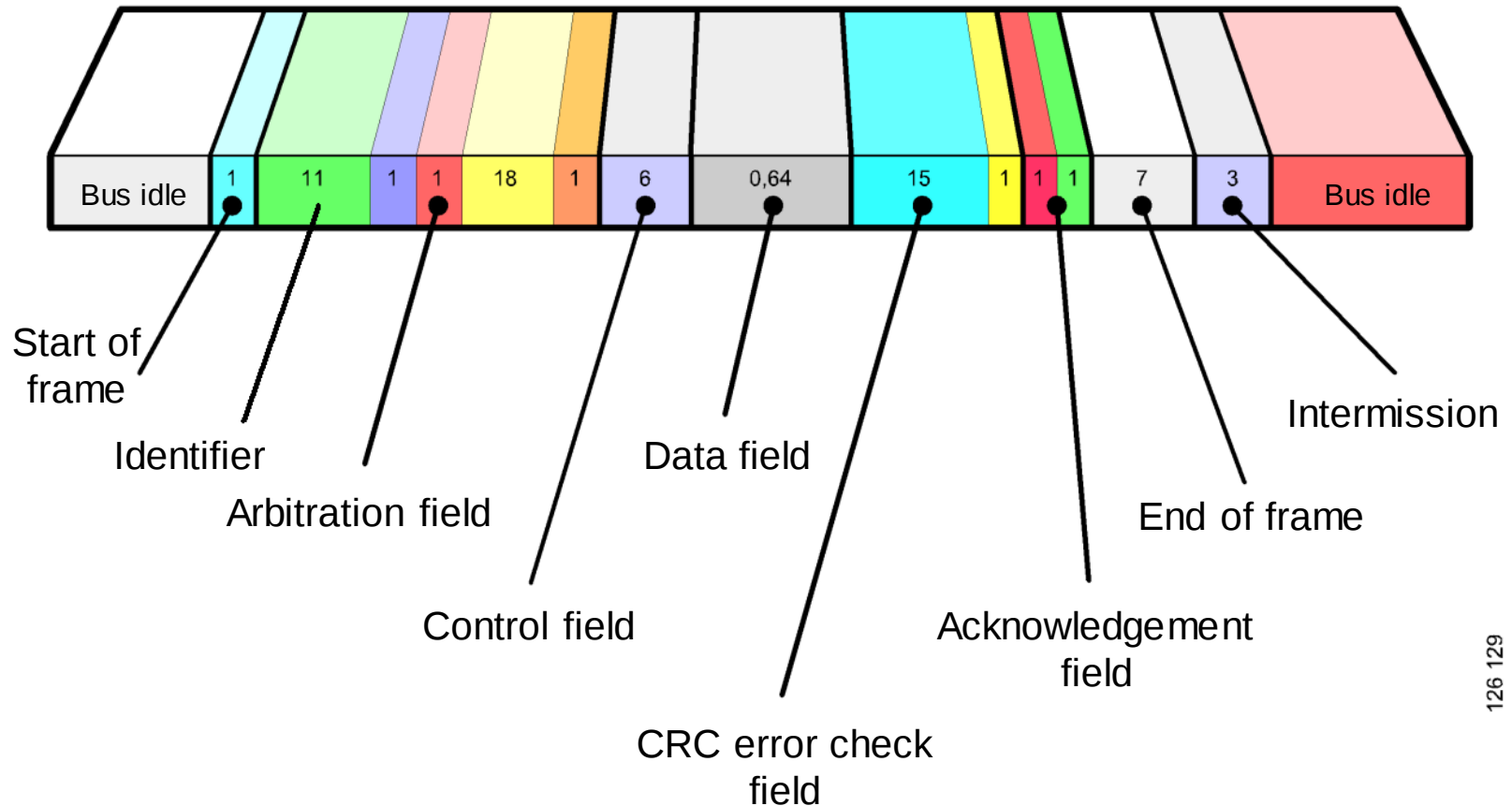
CAN networks on PGRT



135 389

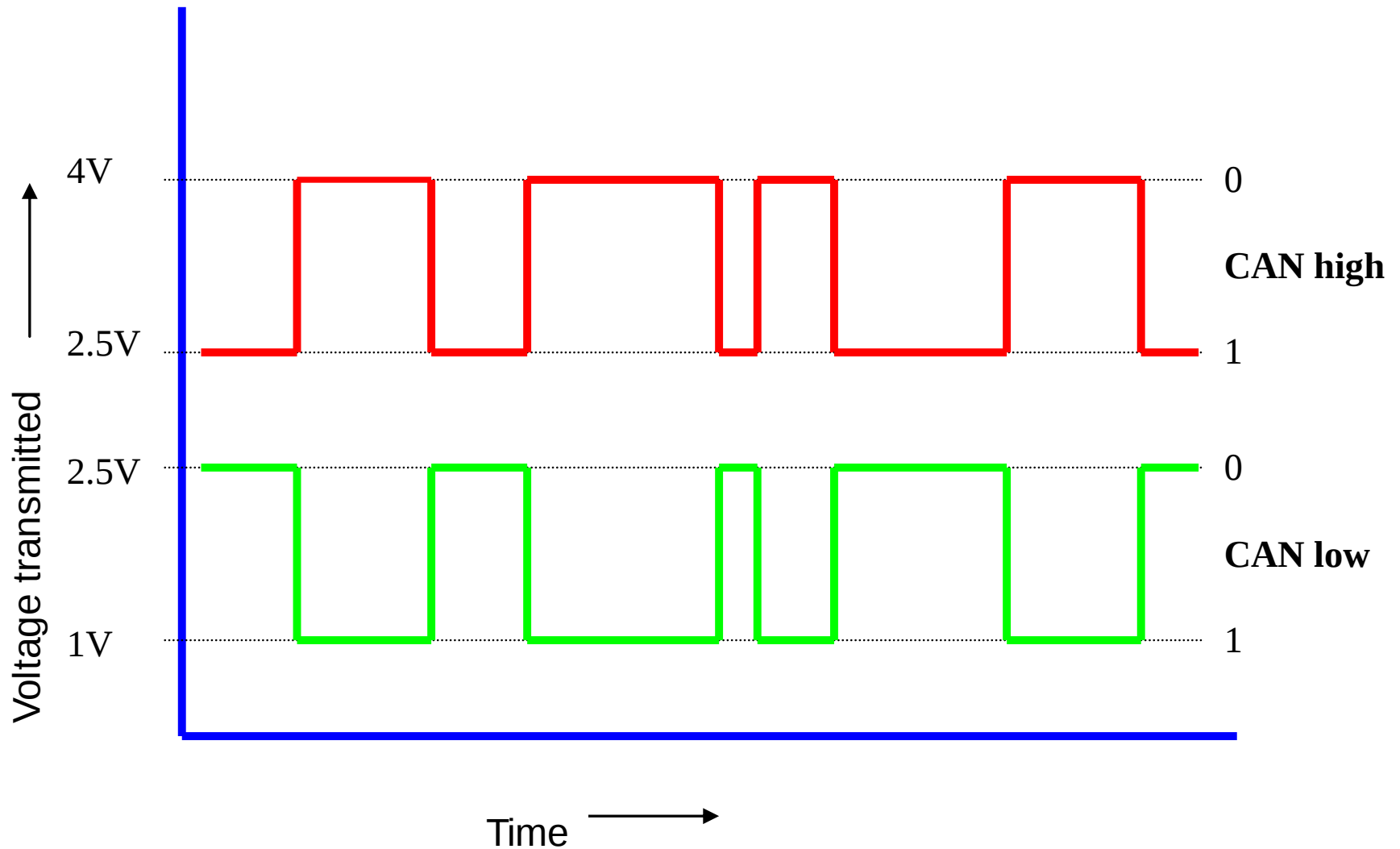

SCANIA

CAN message

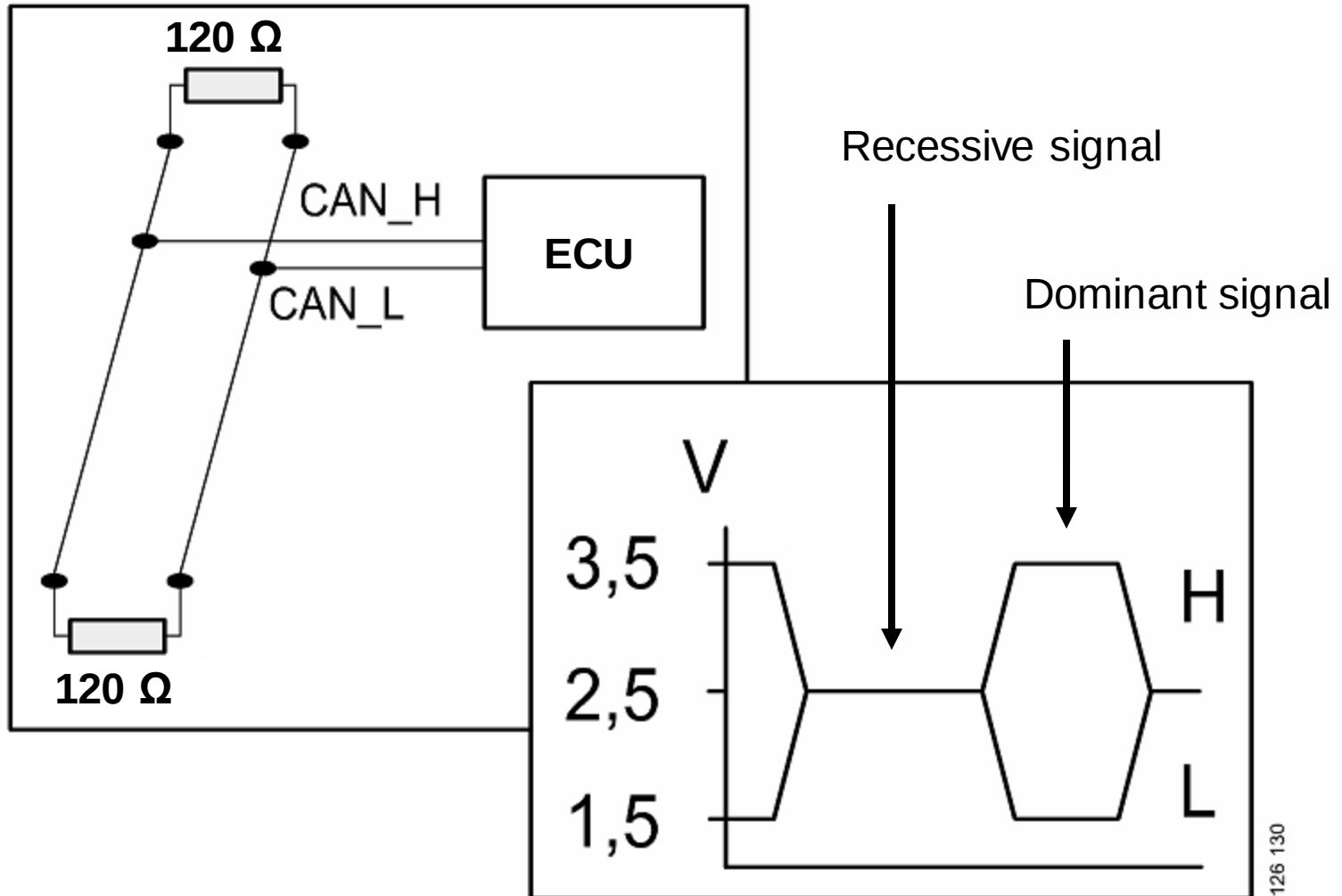


126 129

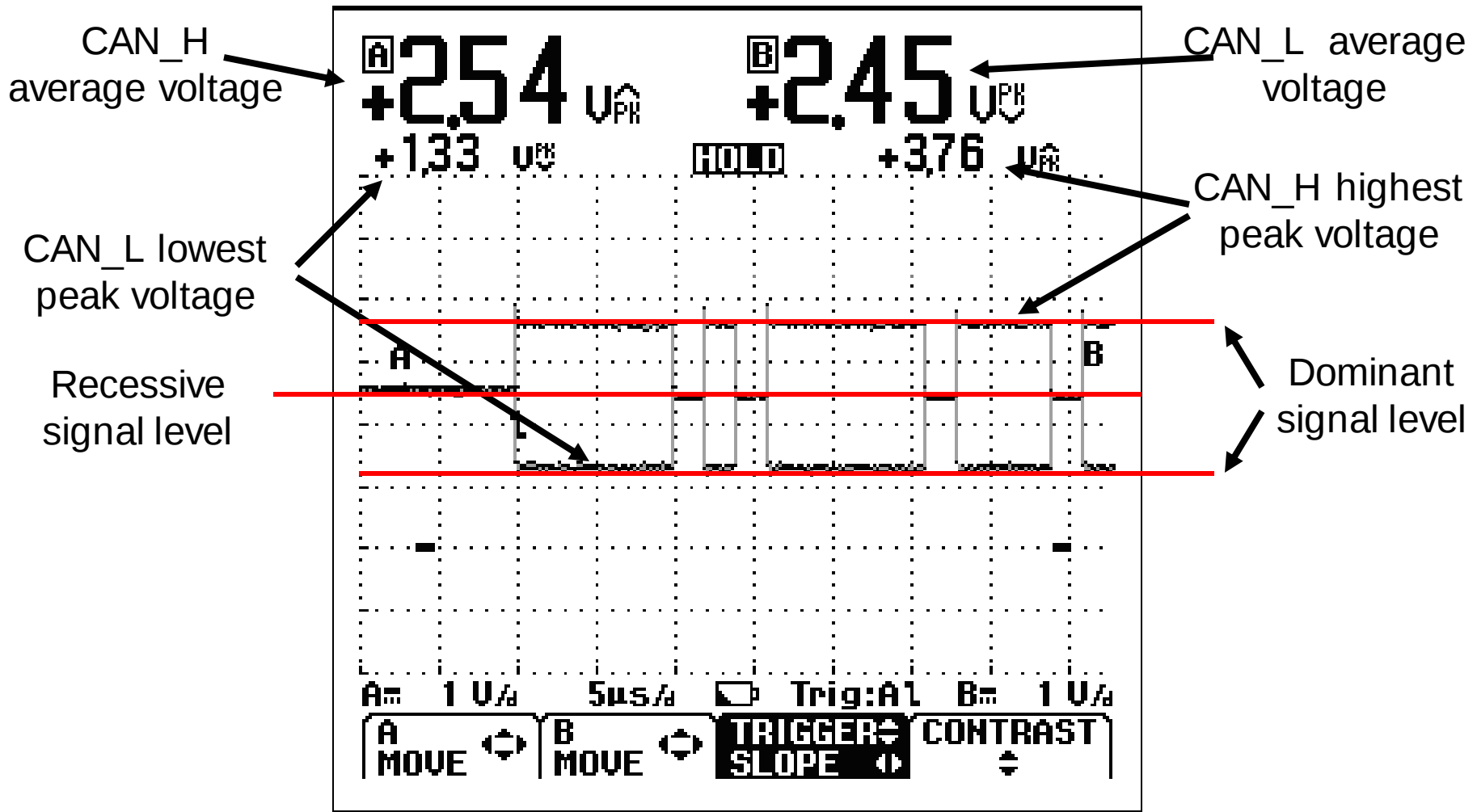
Achieving the electrical bit



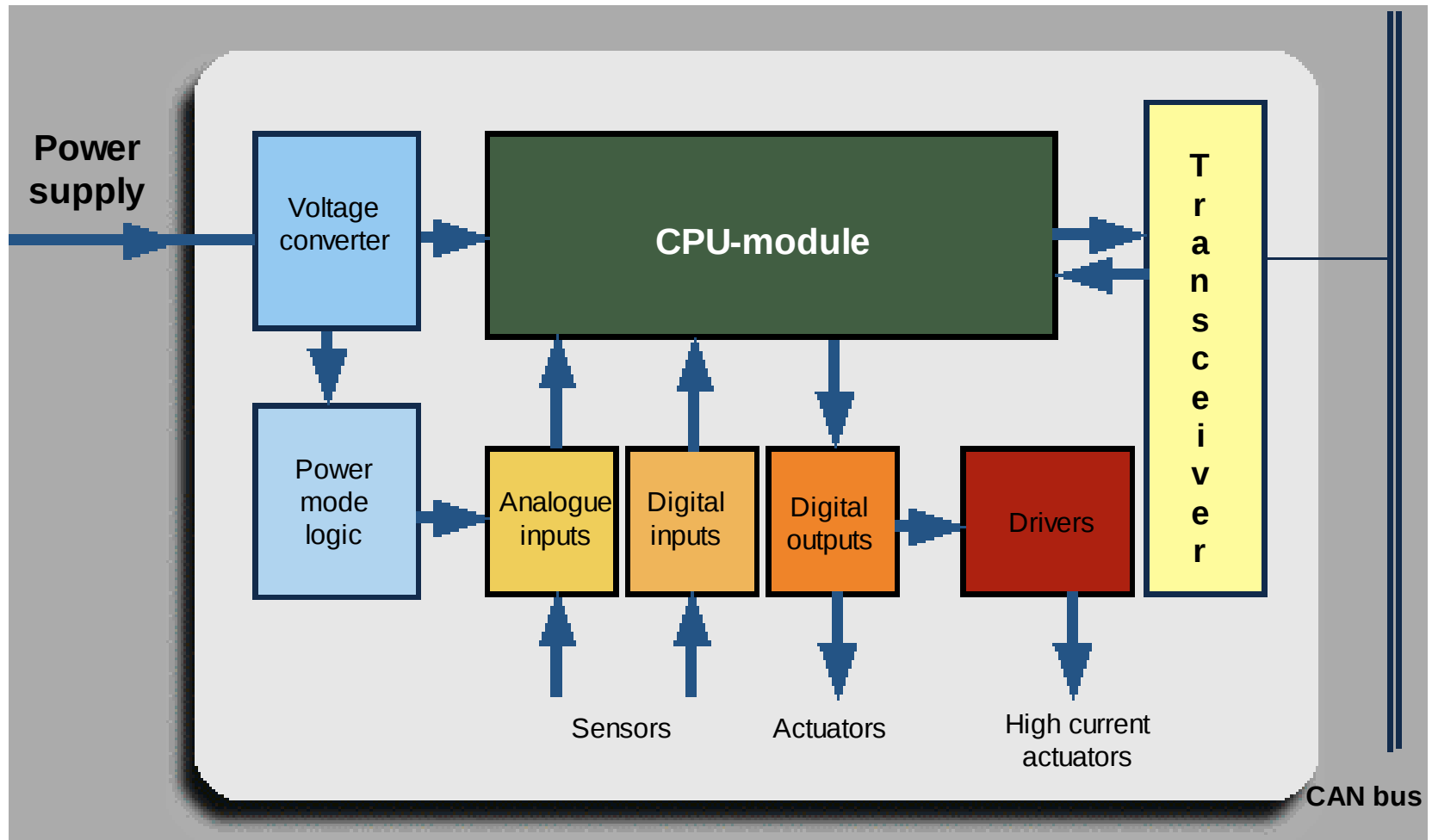
Signal properties of a CAN bus



Visualized with a Scope meter

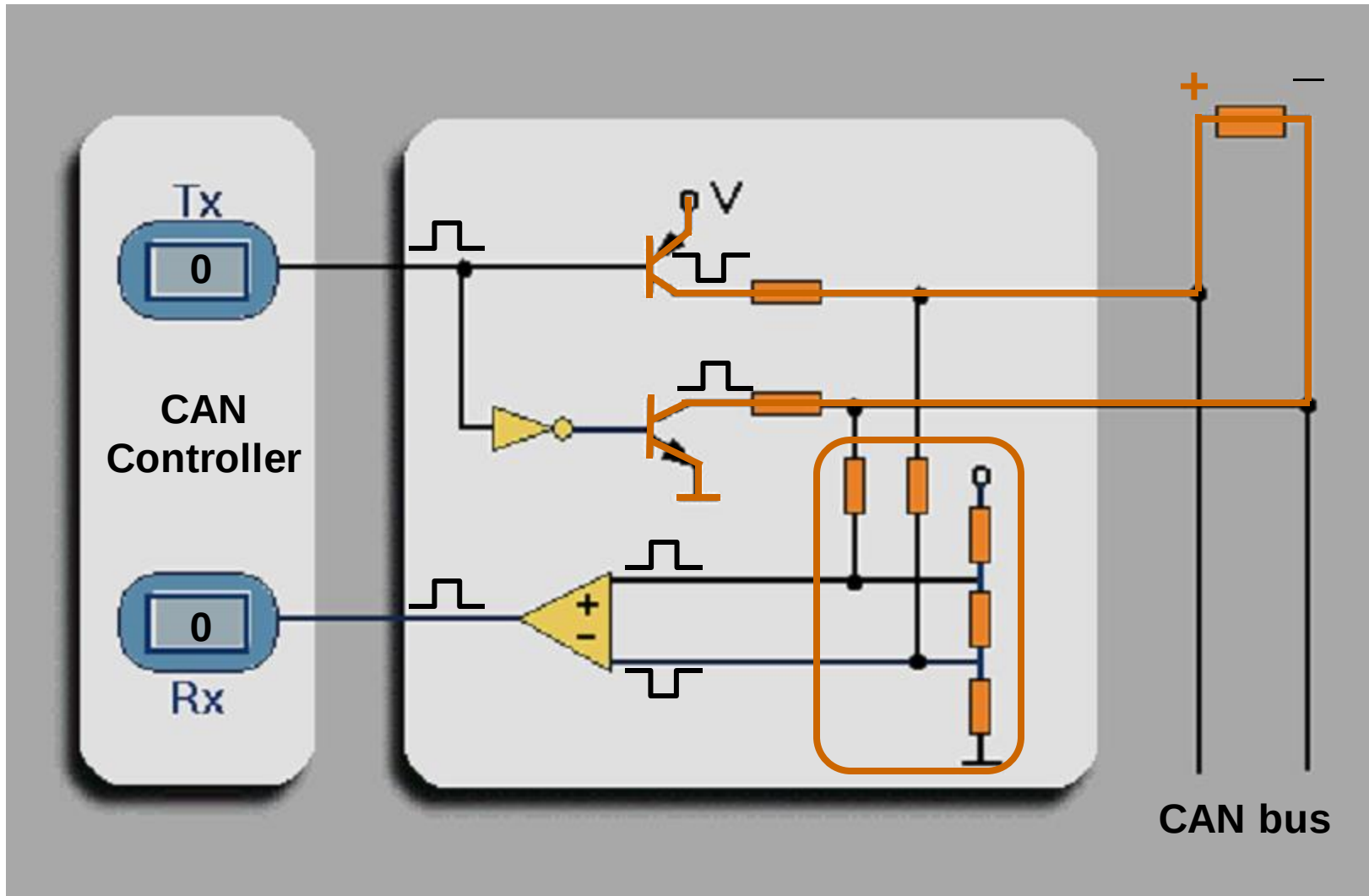


ECU electronic principle

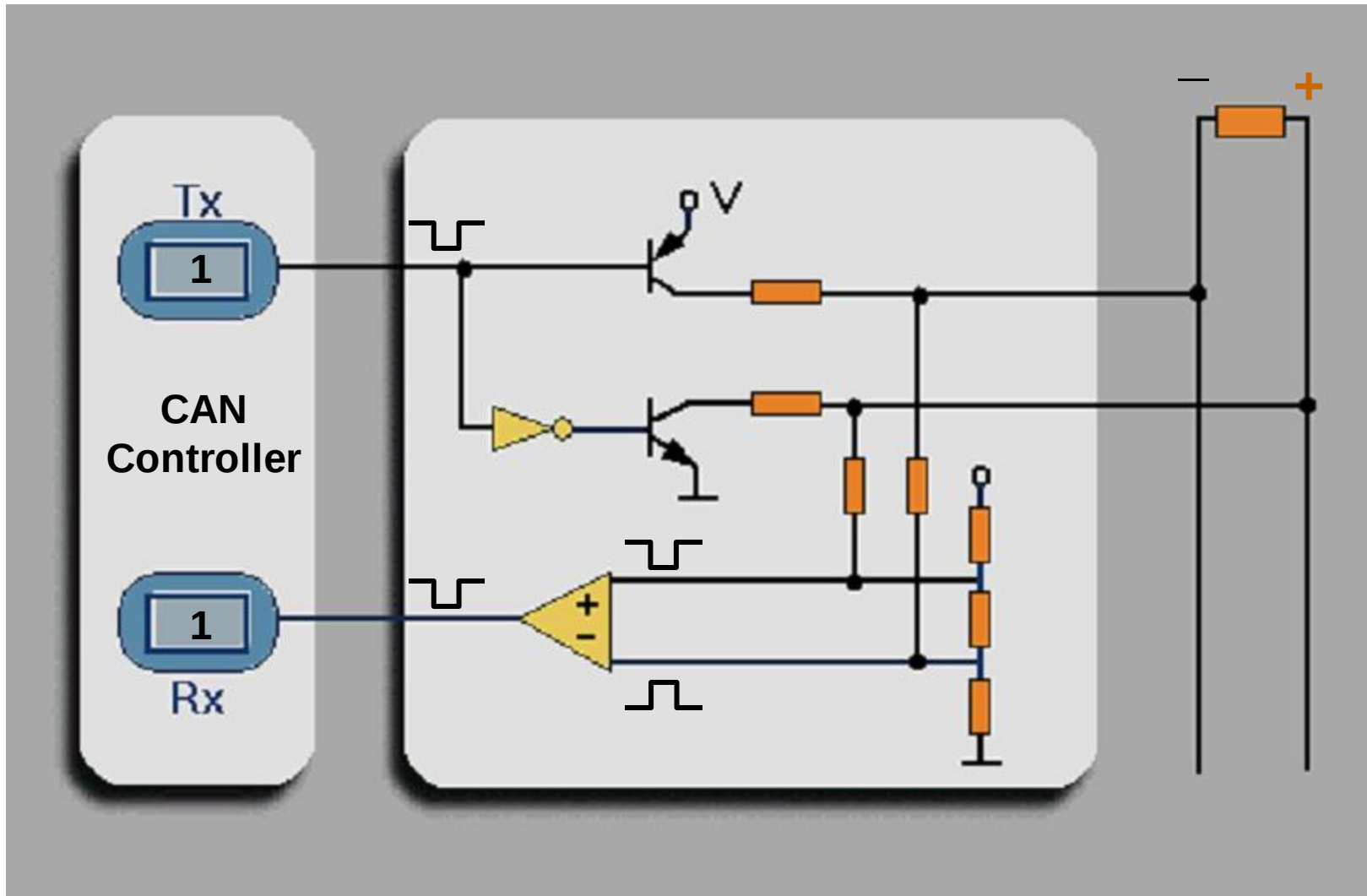




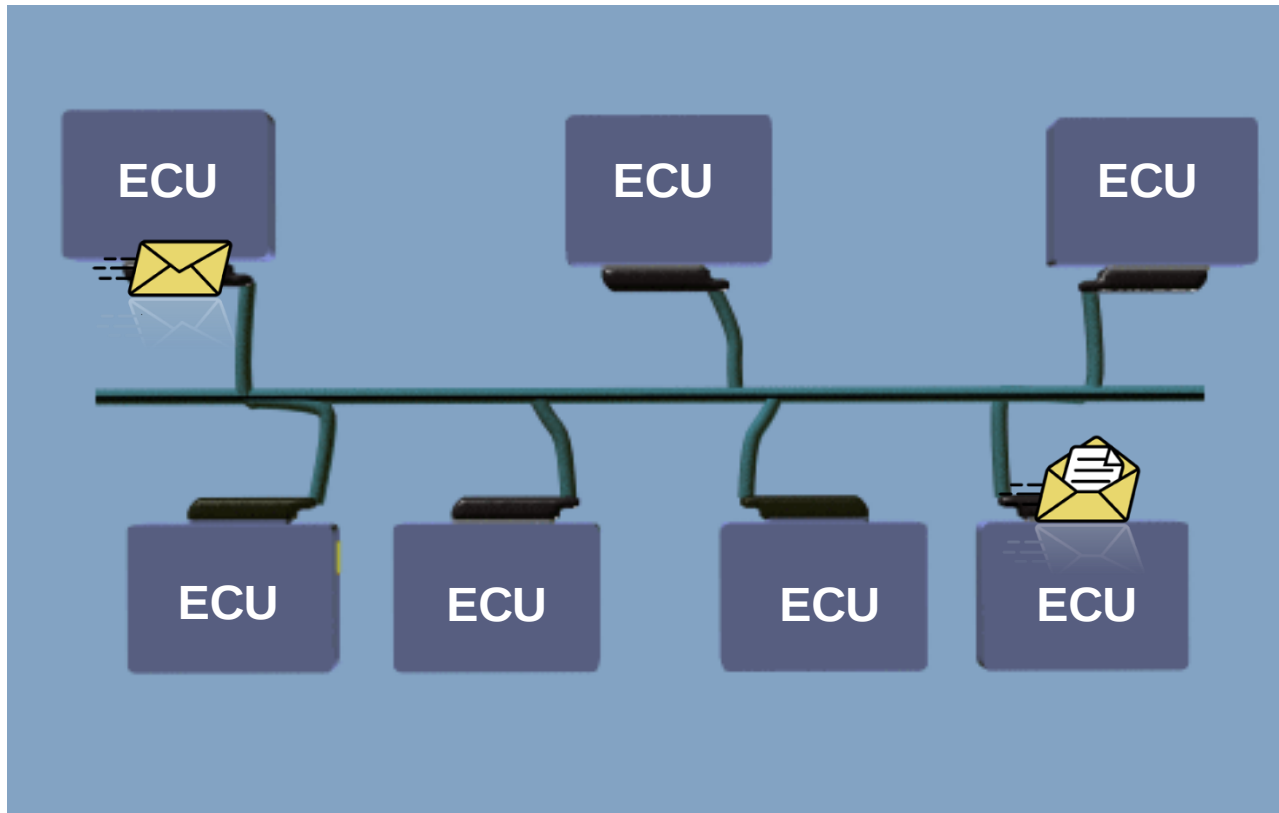
Transceiver function



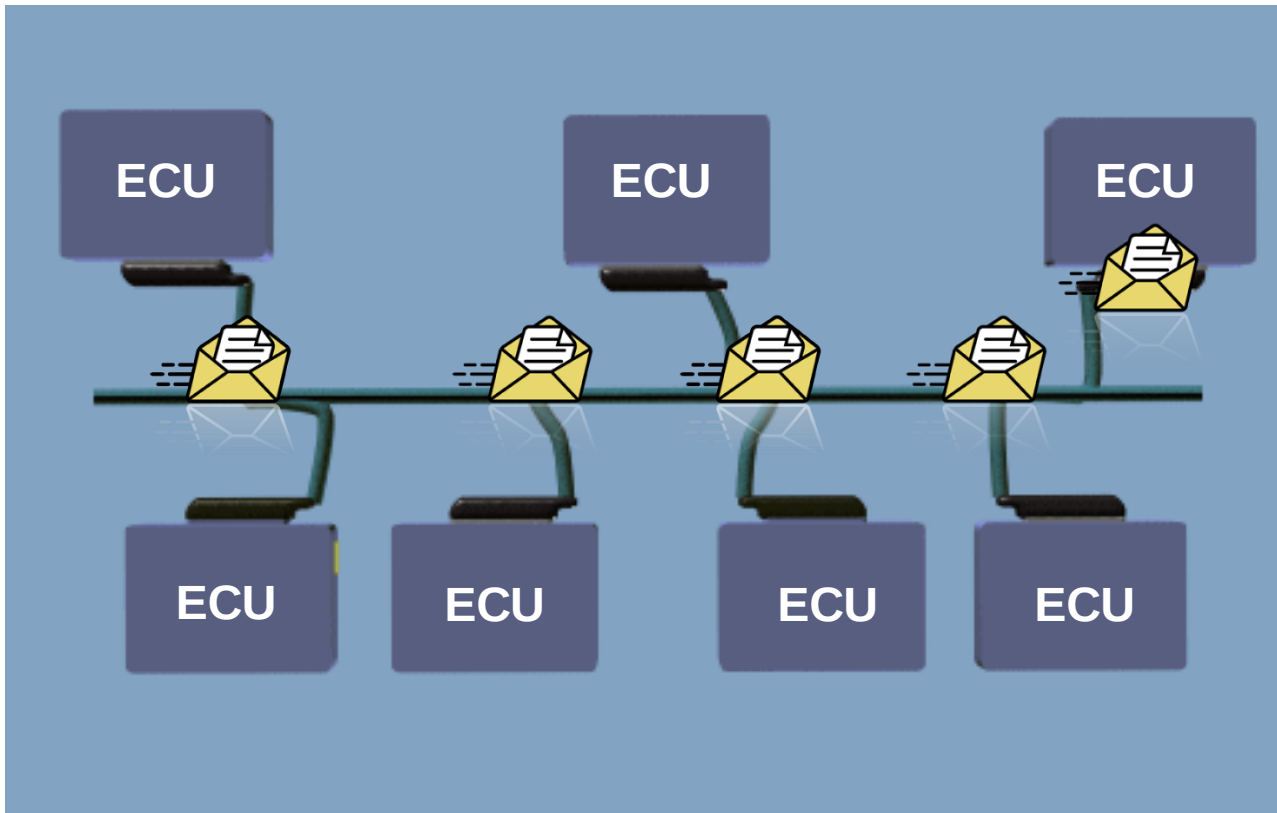
Transceiver function



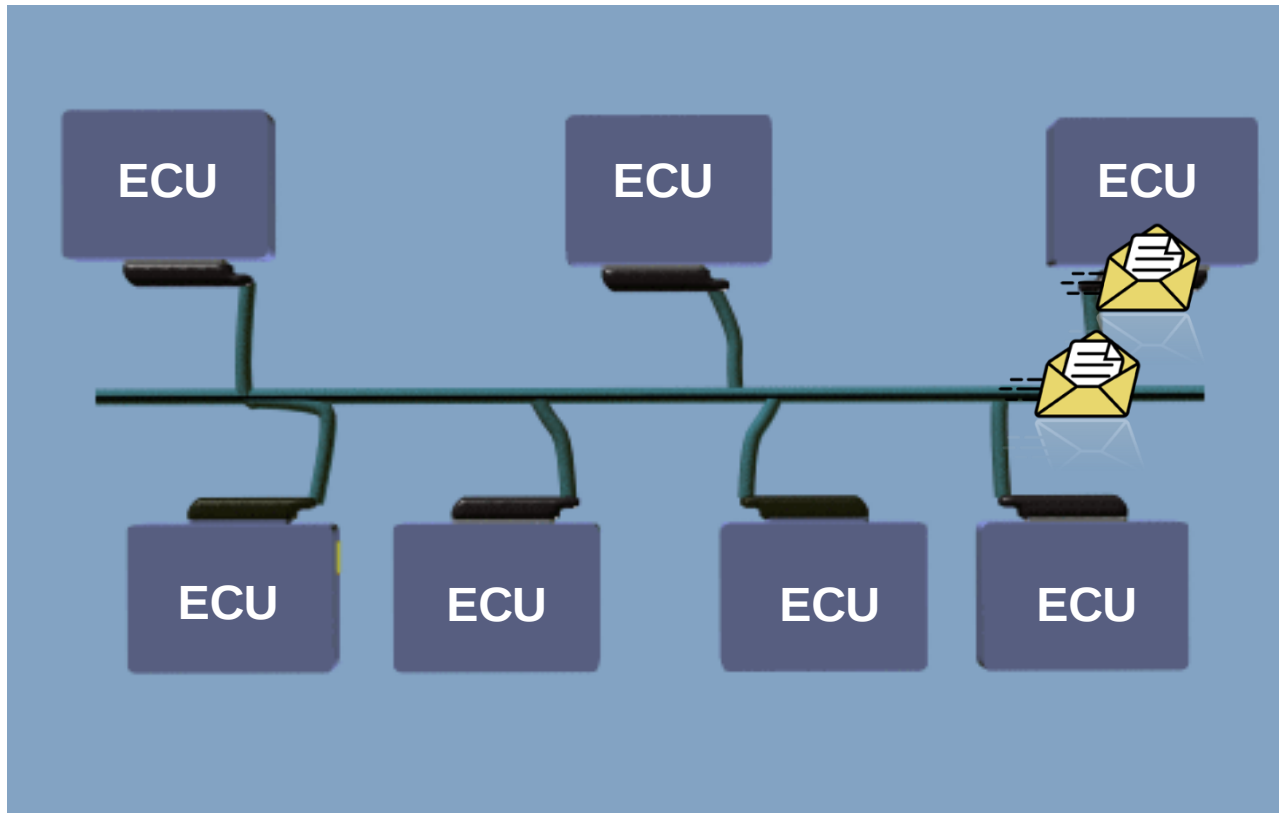
Messages types: point to point



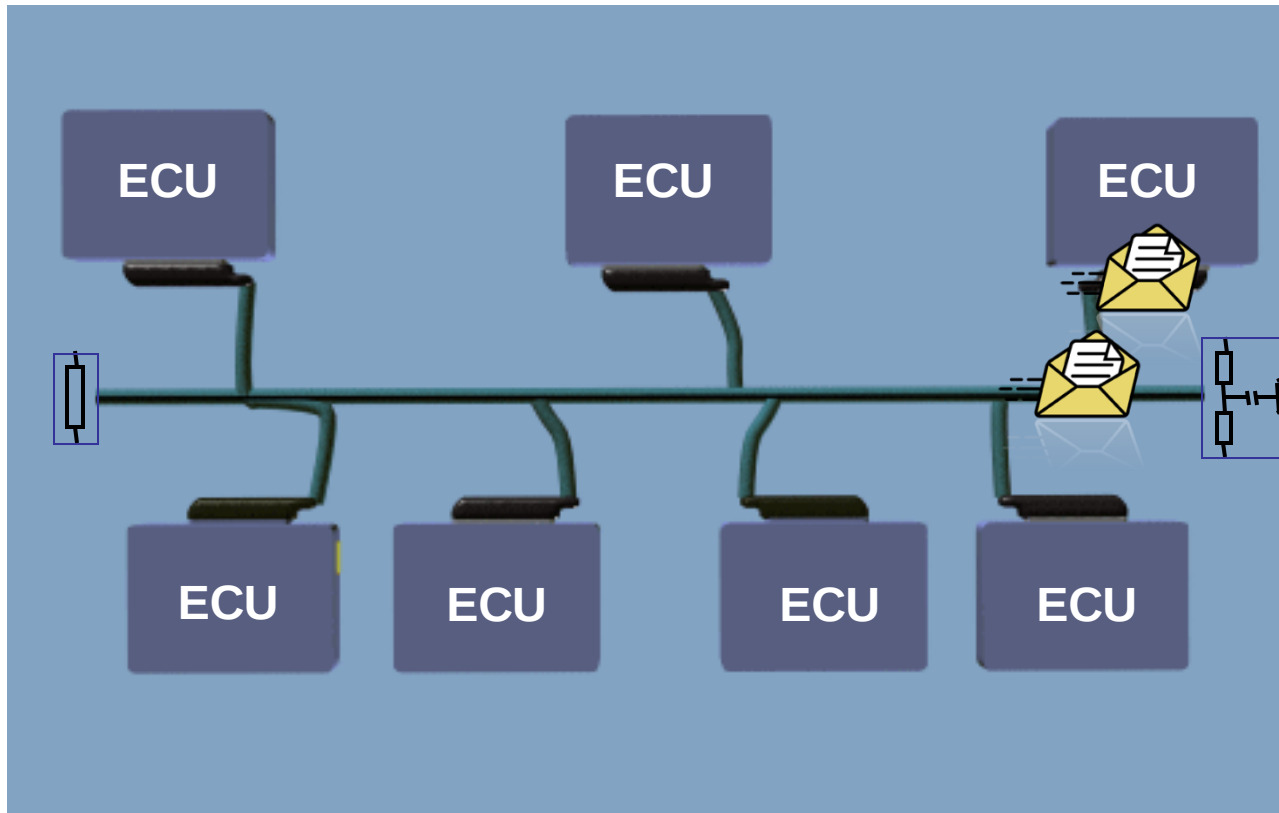
Messages types: broadcast



CAN bus without terminal resistors



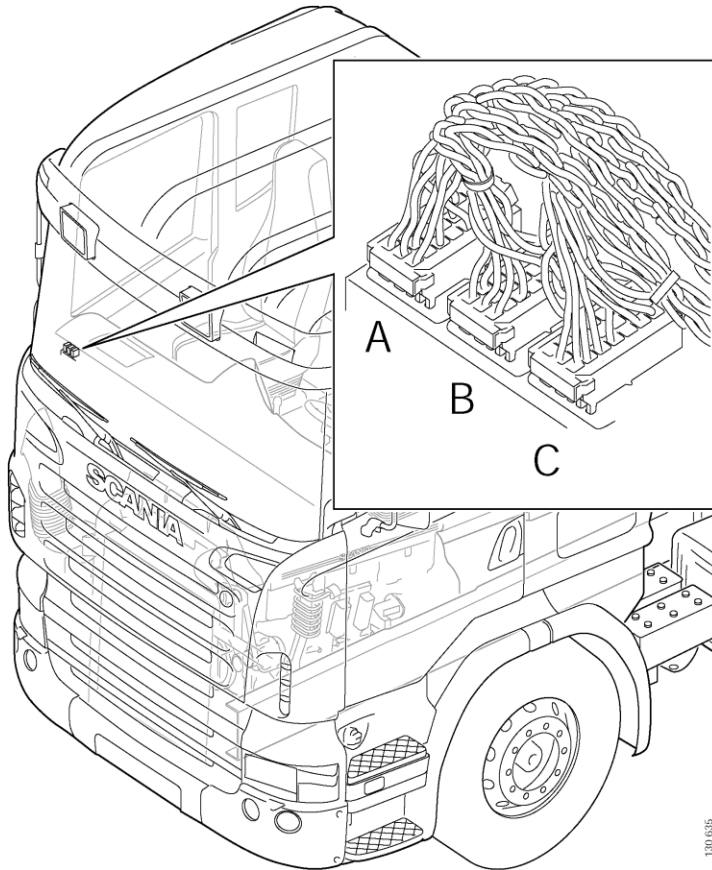
CAN bus with terminal resistors



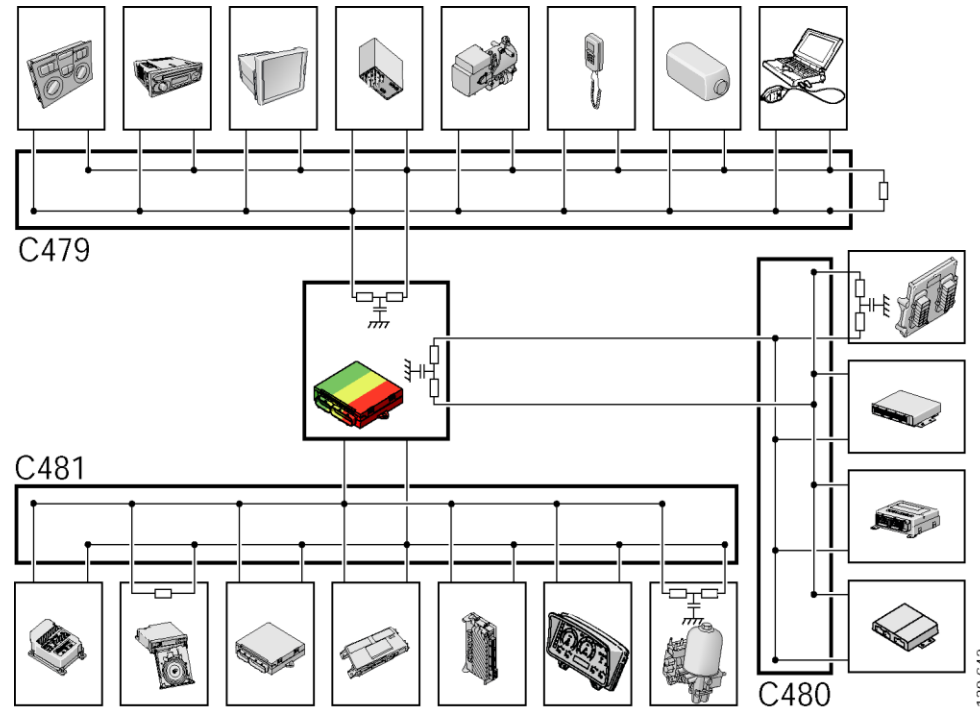
Type of resistor
mount it on
the CAN
connector
block

Type of resistor-
capacitor
assy mount
it into an
ECU

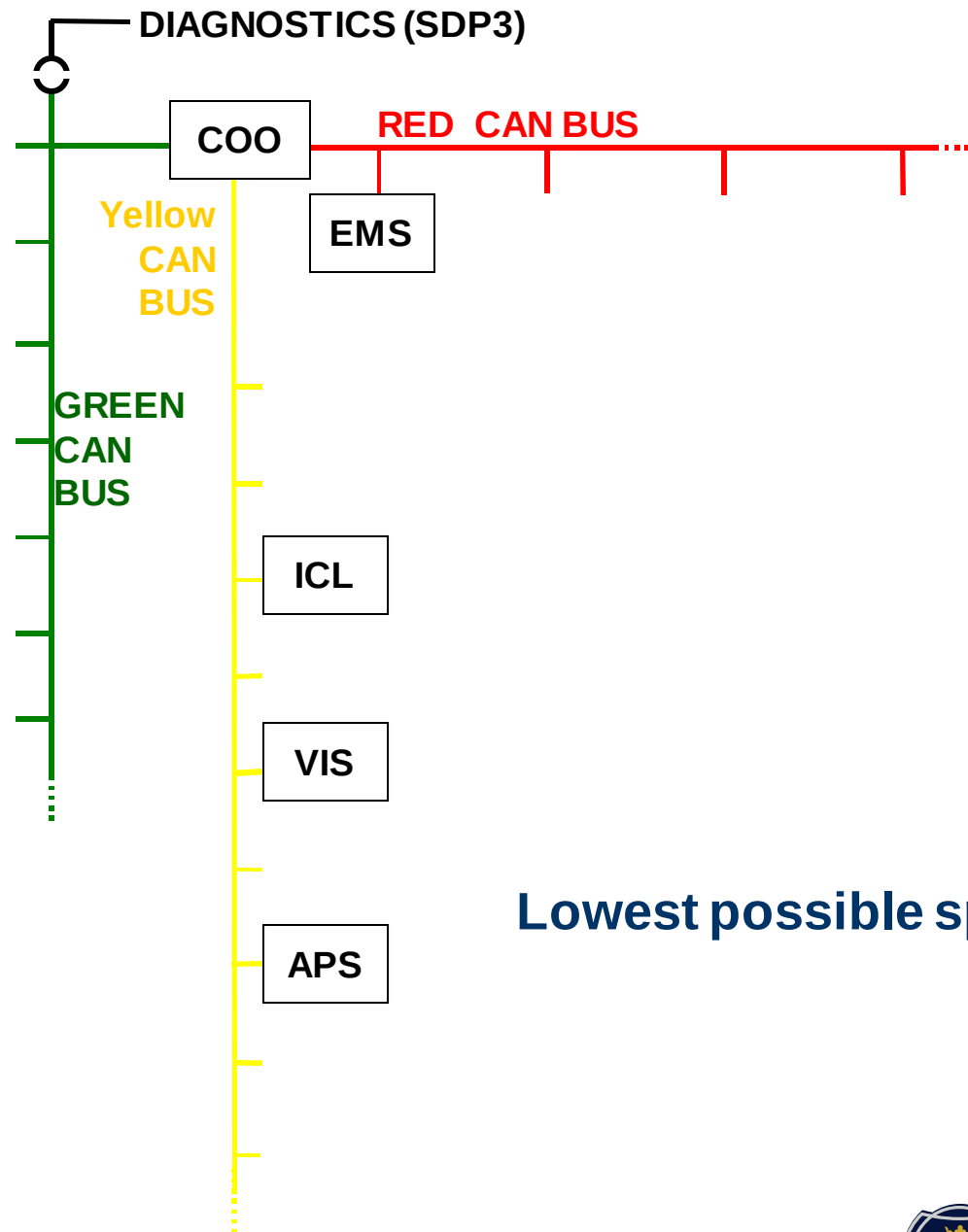
Red, Green and Yellow bus connector blocks



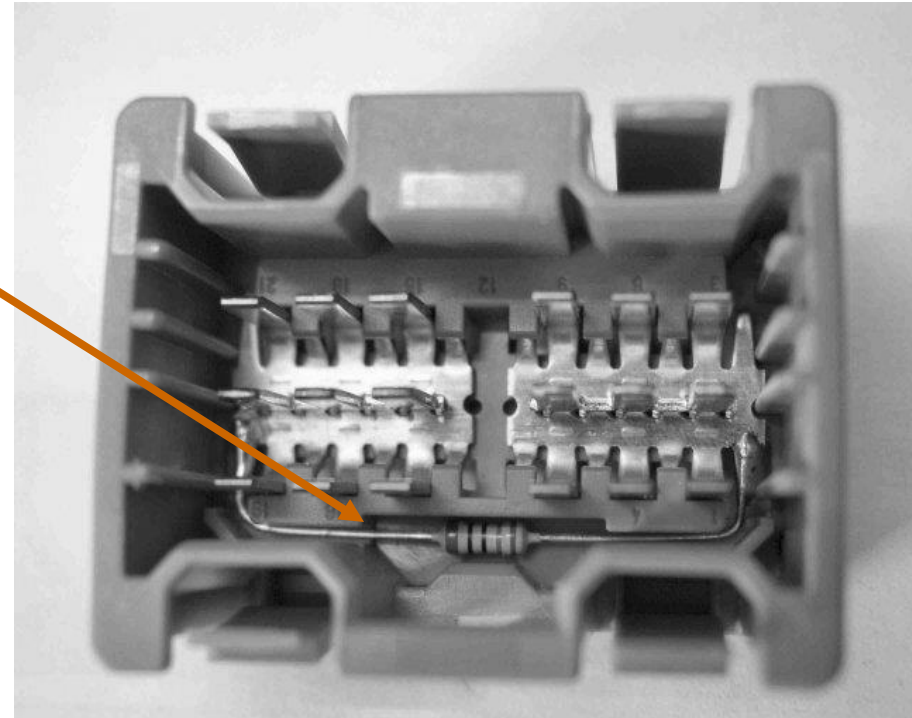
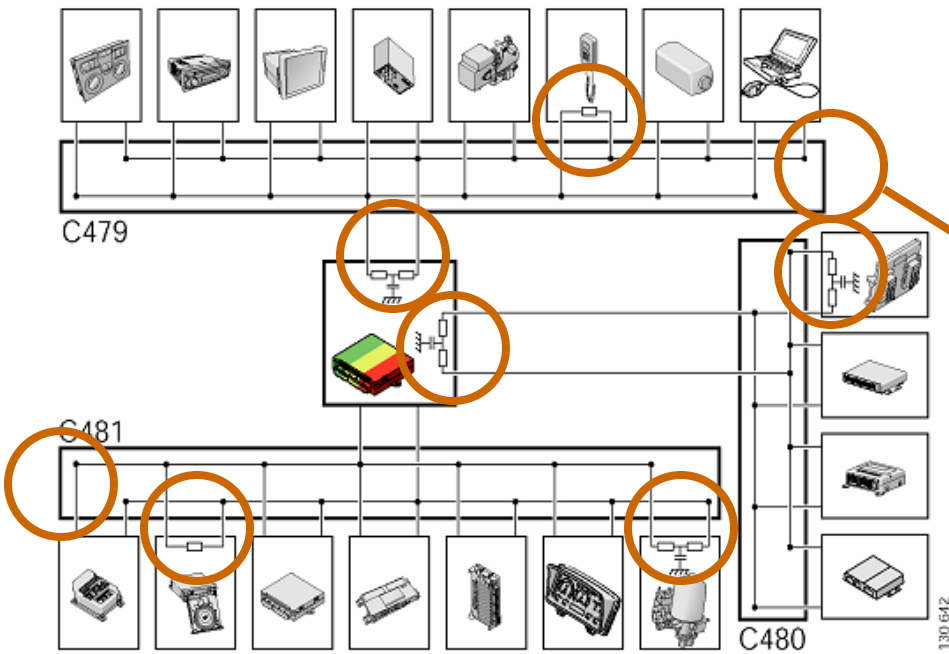
130 635



130 642



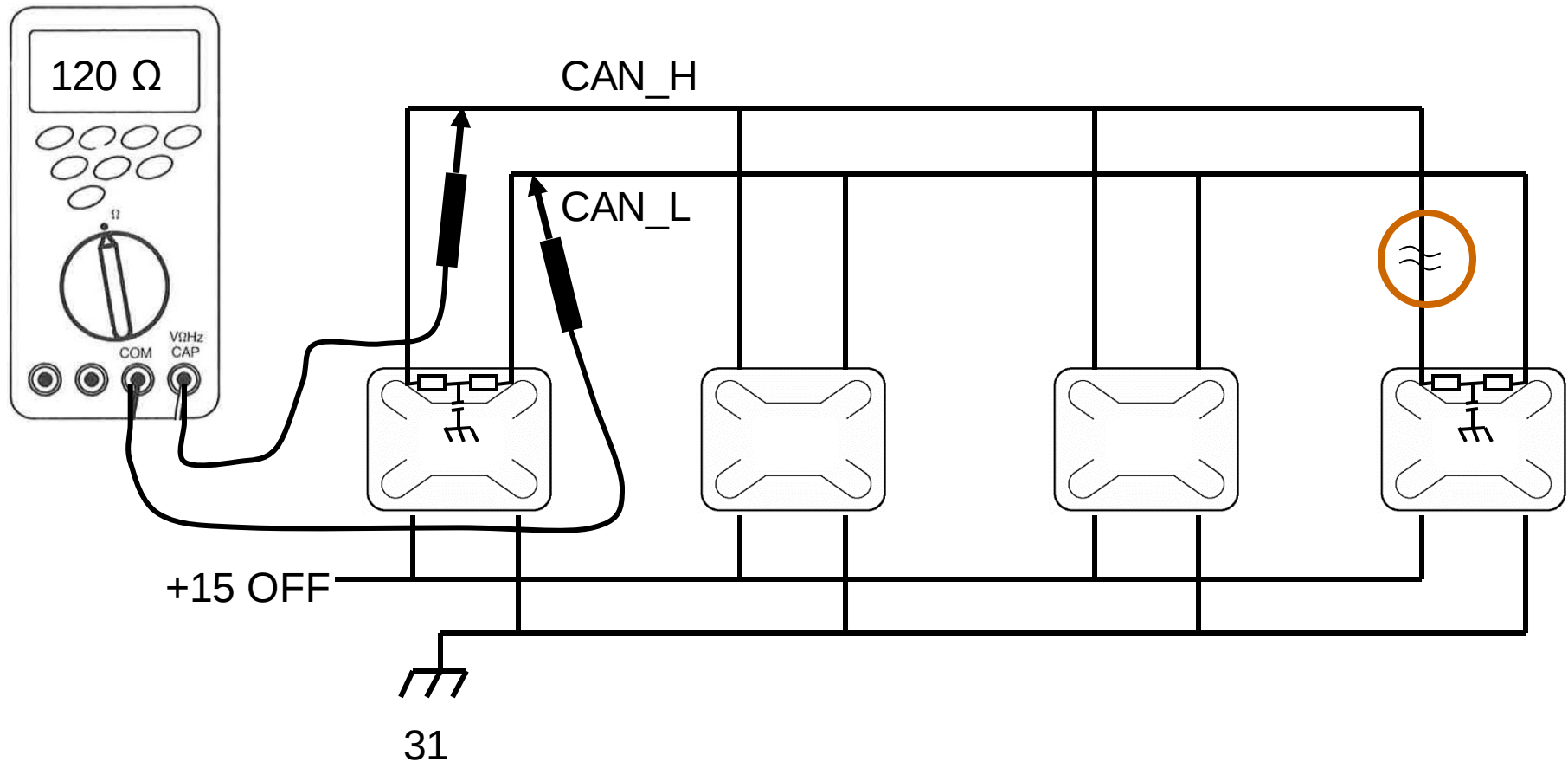
Termination resistors



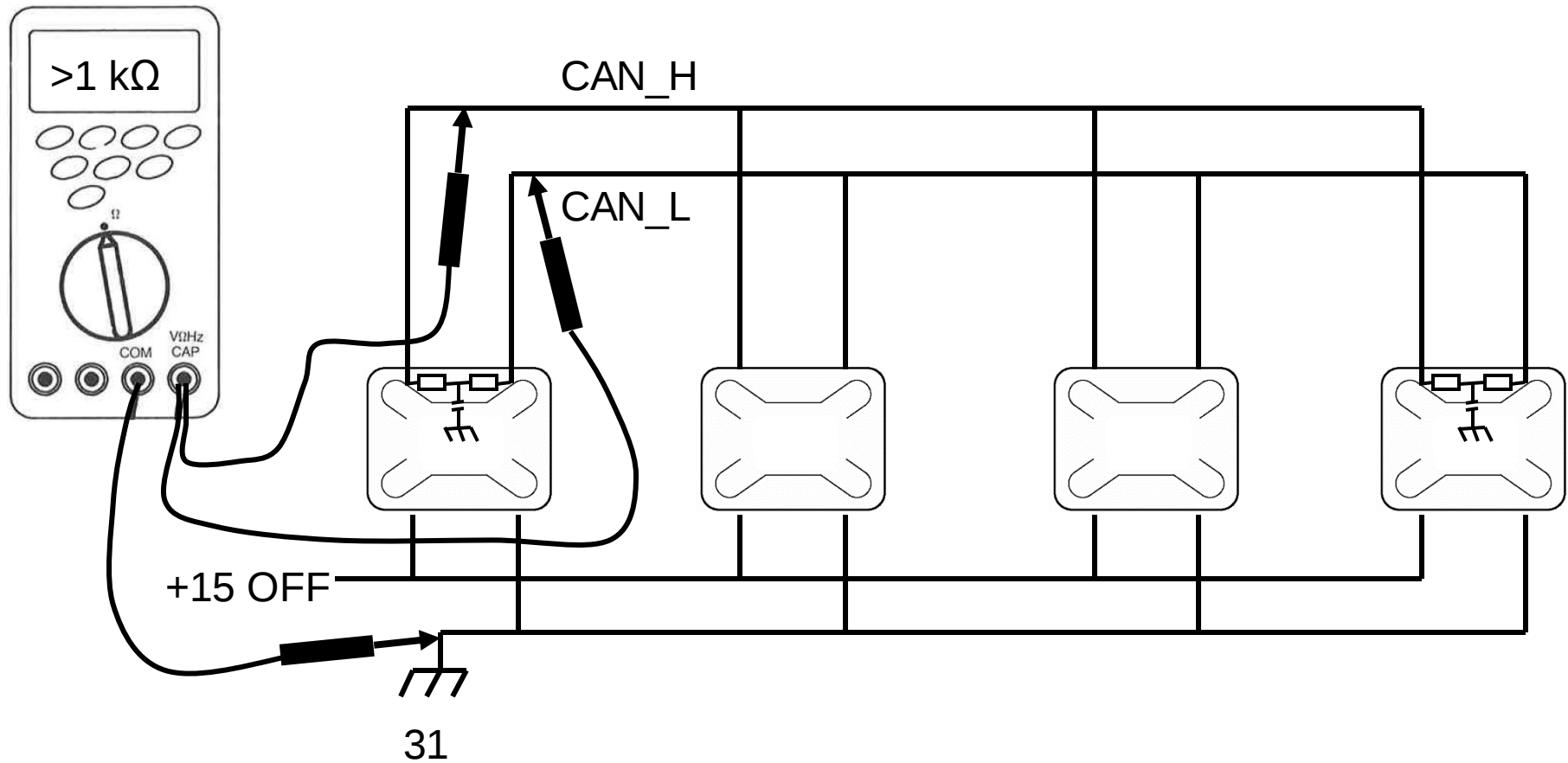
Troubleshooting CAN buses

- Scania multimeter 588 094 measure the integrity of the CAN wires and the CAN voltage levels:
 - Measuring CAN bus resistance: able to trace wire and termination resistors faults; able to trace open circuits or short circuit to ground or ECU's internal supply (internal converter supplies with 5V).
 - Measuring CAN bus voltage: able to trace ECU's internal faults or wire and termination resistors faults.
- CAN messages can not be checked with a multimeter; instead the diagnose software is used to check the systems functionalities.
- WSM 16:07-02 “Communication problems” shows measuring methods

Measuring resistance



Measuring resistance



Measuring voltage

