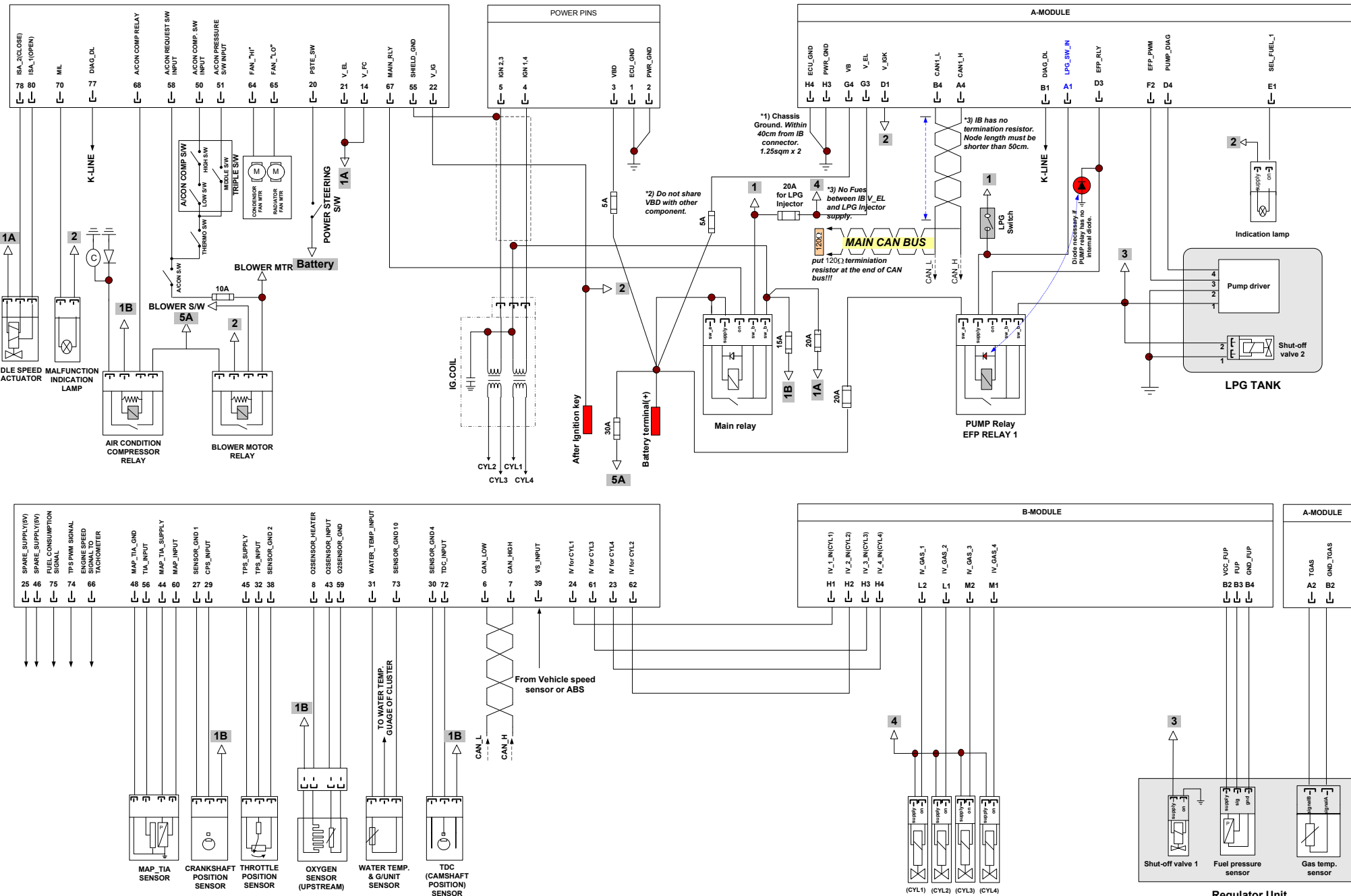


EMS ECU SIDE

LPG interface box SIDE



| EMS ECU (SIMK-43) | LPG INTERFACEBOX(SIM2K-IB GEN-II) |
|---|---|
| Pin-header, 81-pin (Connector of SIMK- 43 ECU side) | Pin-header, 112-pin (Connector of LPG interface Box side) |
| | |
| PIN DESCRIPTION | PIN DESCRIPTION |
| 01 ECU GROUND | A-Module |
| 02 POWER STAGE GROUND | H4 ECU GROUND |
| 03 DIRECT BATTERY VOLTAGE SUPPLY | H3 PWRER STAGE GROUND |
| 04 IGNITION COIL OUTPUT 1,4 | G4 DIRECT BATTERY VOLTAGE SUPPLY |
| 05 IGNITION COIL OUTPUT 2,3 | G3 BATTERY VOLTAGE SUPPLY AFTER MAIN RELAY |
| 06 CAN_LOW | F2 ELECTRIC FUEL PUMP PWM OUTPUT |
| 07 CAN_HIGH | E1 INDICATION LAMP |
| 08 OXYGEN SENSOR HEATER(UPSTREAM) | D4 FUEL PUMP DIAGNOSTIC INPUT |
| 14 BATTERY VOLTAGE AFTER MAIN RELAY / FREE-WHEEL SUPPLY | D3 ELECTRIC FUEL PUMP RELAY |
| 20 POWER STEERING SWITCH INPUT | D1 BATTERY VOLTAGE SUPPLY AFTER IGNITION KEY |
| 21 BATTERY VOLTAGE AFTER MAIN RELAY | A1 LPG SWITCH INPUT |
| 22 BATTERY VOLTAGE AFTER IGNITION KEY | B4 CAN_LOW |
| 23 INJECTOR FOR CYL. 4 | B1 K-LINE |
| 24 INJECTOR FOR CYL. 1 | B2 TEMPERATURE SENSOR GROUND |
| 25 SPARE SENSOR SUPPLY1 | A4 CAN_HIGH |
| 27 SENSOR GROUND1 | A2 TEMPERATURE SENSOR SIGNAL |
| 29 CRANKSHAFT POSITION SENSOR | |
| 30 SENSOR GROUND4 | B-Module |
| 31 WATER TEMPERATURE SENSOR | B2 FUEL PRESSURE SENSOR VCC SUPPLY |
| 32 THROTTLE POSITION SENSOR | B3 FUEL PRESSURE SENSOR SIGNAL |
| 39 VEHICLE SPEED SENSOR INPUT | B4 FUEL PRESSURE SENSOR GROUND |
| 43 OXYGEN SENSOR(UPSTREAM) | H1 INJECTION SIGNAL 1 |
| 44 MAP_TIA SENSOR SUPPLY | H2 INJECTION SIGNAL 2 |
| 45 THROTTLE POSITION SENSOR SUPPLY | H3 INJECTION SIGNAL 3 |
| 46 SPARE SENSOR SUPPLY2 | H4 INJECTION SIGNAL 4 |
| 48 MAP_TIA SENSOR GROUND | L1 LPG INJECTOR 2 |
| 50 A/CON COMPRESSOR SWITCH INPUT | L2 LPG INJECTOR 1 |
| 51 A/CON PRESSURE SWITCH INPUT | M1 LPG INJECTOR 4 |
| 55 IGNITION SHIELD GROUND | M2 LPG INJECTOR 3 |
| 56 INTAKE AIR TEMP SENSOR INPUT | |
| 58 A/CON REQUEST SWITCH INPUT | |
| 59 BINARY O2 SENSOR UPSTREAM GROUND | |
| 60 MANIFOLD ABSOLUTE PRESSURE | |
| 61 INJECTOR FOR CYL. 3 | |
| 62 INJECTOR FOR CYL. 2 | |
| 64 FAN-"HIGH" | |
| 65 FAN-"LOW" | |
| 66 ENGINE SPEED SIGNAL | |
| 67 MAIN RELAY CONTROL OUTPUT | |
| 68 A/CON COMP RELAY CONTROL OUTPUT | |
| 70 MALFUNCTION INDICATION LAMP | |
| 72 TDC SENSOR(CAMSHAFT POSITION) | |
| 73 SENSOR GROUND 10 | |
| 74 TPS PWM SIGNAL | |
| 75 FUEL CONSUMPTION SIGNAL | |
| 77 DIAGNOSTIC DATA LINE | |
| 78 IDLE SPEED ACTUATOR2(CLOSE) | |
| 80 IDLE SPEED ACTUATOR1(OPEN) | |

NOTES

- Both paths of the main relay primary and secondary have to be connected to Battery voltage
- The power supply lines and earth lines for sensors are exclusive lines for ECU, so those should not be branched off for other devices
- There should be no