

# LEM<sup>G3</sup> – 3S-GTE

## AdaptaLink

Board Version V1.0 07/10/07

This AdaptaLink is designed to reduce installation effort by allowing an almost direct plug-in of a Link LEM<sup>G3</sup> ECU to the following vehicles:

- Toyota SW20 MR2 Rev 1
- Toyota ST185 Celica

Note: This AdaptaLink is NOT recommended for automatic transmission models.

The AdaptaLink must be configured for each application by fitting the jumpers in the correct locations. To do this, remove one end plate from the AdaptaLink enclosure then slide out the top cover. Jumper fitting instructions are located inside the AdaptaLink. In some cases additional modifications are required.

## Disclaimer

All care has been taken to ensure the pin outs and interconnections of this ECU AdaptaLink board are correct. However due to variations between vehicle models it is the installers responsibility to check wiring connections BEFORE installing the AdaptaLink. Link ElectroSystems Ltd. will not be held responsible for any damage caused by the incorrect installation of this product.

# Warning

This AdaptaLink has been designed to be used with HIGH impedance (greater than 6 Ohms) injectors. Ballast resistors must be wired if low impedance injectors are to be used. Consult the ECU's Wiring and Installation manual for more information on injector wiring.

# Limitations

- This AdaptaLink has been designed for use with manual transmissions only. Use of this AdaptaLink with an automatic transmission may cause unexpected transmission operation.
- As the LEM<sup>G3</sup> has a limited number of inputs and outputs, not all of the sensors and actuators used by the factory ECU can be used. If a sensor/actuator is required that is not used wiring modification may be required.

# Pre-Installation

Before installation, make sure that the AdaptaLink's configuration jumpers are set in the appropriate location to suit your vehicle. To do this, remove one end plate from the AdaptaLink and slide the circuit board out. Instructions on where to fit jumpers are located on the circuit board.

# IO Connections

The following tables describe how the LEM<sup>G3</sup> is connected to the engines sensors and actuators. Note that all unused I/O is available for wiring to other accessories (As all I/O is configurable using PCLink).

MR2 Rev 1 and ST-185 Celica		
LEM <sup>G3</sup> Function	Sensor / Actuator	Configure As
Inj 1	Injectors 1 and 3	-
Inj 2	Injectors 2 and 4	-
Ign 1	Ignition Signal to Igniter	-
Ign 2	Circuit Opening Relay	Fuel Pump Relay
Ign 3	Check Engine Lamp	CE Lamp
Ign 4	A/C Out	A/C Clutch
Aux 1	Idle Speed Solenoid Close (ISCC)	ISC Slave
Aux 2	Idle Speed Open (ISCO)	ISC Solenoid
Aux 3	FP Speed Relay	FP Speed
DI 1 / Aux 4	Speed or AC In	Select DI 1 input using J1
Aux 5	Waste-gate Solenoid	Boost Solenoid
Aux 6	N/C – Spare for user output	-
Aux 7	TVIS Solenoid	GP Output
Aux 8	Oxygen Sensor Heater	GP Output
An Temp 1	Engine Coolant Temperature (ECT)	-
An Temp 2	Intake Air Temp (IAT)	Set sensor location with J2
An Volt 1	Oxygen Sensor	Voltage (0-5)
An Volt 2	N/C (Spare for user input)	-
An Load 3 (TPS)	Throttle Position	-

