LINK
ENGINE MANAGEMENT

ECU Catalogue 2017

EXHILARATION STARTS HERE

WELCOME TO LINK, OR AS WE LIKE TO SAY…
THE LABORATORY OF SPEED.

This is the place where exhilaration is made — the exhilaration of unleashing engines, of pushing new boundaries and of having power at your command.

We began 25 years ago, when a group of passionate engineers set out to develop the world's best race technology. Our vision was to put power, performance and reliability in the hands of drivers and teams, and to push ourselves and our technology as far as possible.

Since then, we've become a world leader in Engine Management Technology and our products are sold in 43 countries, by over 1,000 dealers and tuners. Drivers the world over now rely on our ECUs from Australia's top drag racers, to the Middle East's biggest drift kings, to Europe's favourite rally stars; speed freaks all over the world are turning to the race proven Link G4+.

We have a range of products to meet the demands of any driver. From the entry level Atom to the high end Thunder, there is a Link ECU designed for your needs.

SO COME JOIN THE TEAM… YOUR EXHILARATION STARTS HERE.

Link are redefining what an entry level ECU should be.

The **Atom** now comes in a brand new enclosure, beautifully crafted from glass filled nylon. The stylish new enclosure is designed to IP67 standards, making it dust and waterproof.

Running on the proven Link G4+ platform and being waterproof, Link are redefining what an entry level ECU should be.

The **Atom** is ideal for naturally aspirated engines with 4 cylinders or less that just need a repower and don't need all the extra sensors and features that come with our higher level ECUs.

SPEC OVERVIEW:

Inputs

2 x Digital inputs
2 x Temperature inputs
3 x Analog inputs
2 x Trigger inputs

Outputs

4 x Injection drives
4 x Ignition drivers
4 x Auxiliary outputs*
+5V Sensor power supply

* unused ignition drives can also
be used as auxiliary outputs

Communications

1x CAN bus
1 x thirty four pin, waterproof connectors
1x USB tuning connection

Misc.

Onboard barometric pressure sensor
32Mb (4 MByte) of logging memory
20 general purpose tables
Runs on PC Link software

The **Atom** comes supplied with waterproof connectors, a mounting bracket and a USB tuning cable.

If you like the value of the Atom, but are looking for a couple of extra features, then the Monsoon is the ECU for you.

With the **Monsoon** you have all the repower capabilities of the **Atom**, but you can also choose to run some of the following features: Gearshift Control, Launch Control, Anti-lag, VVT Control and Closed Loop Boost Control.

*Note: The **Monsoon** will run any of the above features, but it cannot run them all at once. The amount of features you can run is dependent on how many of the limited Inputs and Outputs each feature needs.*

The **Monsoon** is ideal for engines with 4 cylinders or less that just need a repower and one or two features, so you don't need to make the jump up to one of our higher level ECUs.

SPEC OVERVIEW:

Inputs

4 x Digital Inputs
2 x Temperature Inputs
4 x Analog Inputs
2 x Trigger Inputs

Outputs

4 x Injector Drivers
4 x Ignition Drivers
6 x Auxiliary Outputs*
+5V Sensor Power Supply
* unused ignition drives can also
be used as auxiliary outputs

Communications

1 x CAN bus
1 x Thirty four pin, waterproof connectors
1 x USB tuning connection

Misc.

Onboard 4 Bar MAP sensor
32Mb of logging memory
20 general purpose tables
Runs on PC Link software

The **Monsoon** comes supplied with waterproof connectors, a mounting bracket and a USB tuning cable.

KUROFUNE

The Kurofune is Link's first G4+ ECU built to run off adapter looms.

Meaning there is already a host of aftermarket adapter looms for all types of Japanese cars that will plug straight into your car and straight into the **Kurofune**.

This also means that the **Kurofune** is a ready made replacement for other aftermarket ECUs that share that same wiring set-up.

SPEC OVERVIEW:

Inputs

10 x Digital Inputs
3 x Temperature Inputs
9 x Analog Inputs
2 x Differential Trigger Inputs
2 x Knock Inputs

Outputs

8 x Injection Drives
8 x Ignition Drivers
10 x Auxiliary Outputs
4 Analog Outputs
+5V Sensor Power Supply

Connectors

1 x Sixty Four Pin Connector
1 x CAN Bus
1x USB Mini Tuning Connection

Misc.

30 General Purpose Tables and many dedicated tables.
100 channels of logging.
32Mb of logging memory.
All Motorsport features including antilag, traction and launch control.
Built in trigger oscilloscope.
Onboard Knock Control – support for two knock sensors wired directly to the ECU. No external amplifier required.
QuickTune – automated fuel tuning.
OBDII output stream – send engine data to your tablet or phone using an OBDII to wifi/bluetooth adaptor (not included).
Up to 6D fuel and ignition mapping.
5D boost control with three switchable tables.
Real time selectable dual fuel, ignition and boost maps.
Individual cylinder correction.

STORM

If it is value for money you are after, the Storm is the ECU for you. The Storm offers most of the advanced G4+ tuning features, at an extremely competitive price.

The **Storm** has more inputs (digital and analogue), as well as more outputs than the **Monsoon**, and runs more features like Knock Control, VVT Control, Launch Control and Anti-lag.

The **Storm** is optimised for naturally aspirated engines with 6 cylinders or less that only need some of the extra sensors and features that come with our higher level ECUs.

SPEC OVERVIEW:

Inputs

8 x Digital inputs
3 x Temperature inputs
8 x Analog inputs
2 x Trigger inputs
2 x Knock inputs

Outputs

8 x Injection drives
8 x Ignition drivers
8 x Auxiliary outputs
+5V Sensor power supply
+8V Sensor power supply

Communications

2 x Thirty four pin, waterproof connectors
1 x CAN bus
1x USB tuning connection

Misc.

32Mb (4 MByte) of logging memory.
Built in trigger oscilloscope.
Memo text file for the tuners notes stored within the ECU.
QuickTune – automated fuel tuning.
Up to 6D fuel and ignition mapping.
Precision closed loop cam control (four cam, independent control).
Sequential fuel and ignition delivery.
Digital triggering, most OEM patterns.
Some Motorsport features including antilag, and launch control
5D boost control with three switchable tables.
Continuous barometric correction (on board).
Resettable statistics recording into on-board memory.
Real time selectable dual fuel, ignition and boost maps.
Individual cylinder correction.
Odd-fire engines & two strokes.
Spare injection and ignition channels can be auxiliary outputs.
Boost control referenced to gear, speed or throttle position.
Sync and crank sensors can be a combination of Hall effect, variable reluctance or optical.
Staged injection.

The Xtreme is one of Link's premium ECU's with more inputs and outputs, Peak and Hold Injection, built in E-throttle and all the motorsport features including Anti-lag and Traction Control.

The **Xtreme** is optimised for all engines including V8s, 4 Rotors and turbos. If you want to gain an advantage over the competition, you'll want a premium ECU like the **Xtreme**.

SPEC OVERVIEW:

Inputs

8/10* x Digital inputs
4 x Temperature inputs
11 x Analog inputs
2 x Trigger inputs
2 x Knock inputs

*2 inputs required when using 2nd CAN Bus

Outputs

8 x Injection drives
8 x Ignition drivers
10 x Auxiliary outputs
+5V Sensor power supply
+8V Sensor power supply

Communications

2 x Thirty four pin, waterproof connectors
1 x CAN bus
1x Serial (RS232) connection
1x USB tuning connection

Misc.

8 Peak and Hold injection drives, user definable, 10 amp peak, 3 amp hold.
Fully programmable E-throttle control complete with gear shift control and throttle blips.
CAN is user defined and supports two independent CAN modules
Onboard Knock Control – support for two knock sensors wired directly to the ECU. No external amplifier required.
30 General Purpose Tables and many dedicated tables.
100 channels of logging.
32Mb (4 MByte) of logging memory.
Built in trigger oscilloscope.
Mixture map, closed loop fuel correction.
OBDII output stream – send engine data to your tablet or phone using an OBDII to wifi/bluetooth adaptor (not included).

If it is Onboard Digital Wideband you are after, then the Fury is the ECU for you.

Like the **Xtreme**, the **Fury** offers all the features you have come to expect from one of Link's world leading premium ECU's, but with Digital Wideband.

The **Fury** is optimised for engines with 6 cylinders or less and 3 rotor engines. If you want to gain an advantage over the competition, you'll want a premium ECU like the **Fury**.

SPEC OVERVIEW:

Inputs

8/10* x Digital inputs
4 x Temperature inputs
9 x Analog inputs
2 x Trigger inputs
2 x Knock inputs

*2 inputs required when using 2nd CAN Bus

Outputs

8 x Injection drives
6 x Ignition drivers
10 x Auxiliary outputs
+5V Sensor power supply
+8V Sensor power supply

Communications

2 x Thirty four pin, waterproof connectors
1 x CAN bus
1x Serial (RS232) connection
1x USB tuning connection

Misc.

Digital Wideband – superior onboard wideband control giving simple and accurate fuel tuning.
Optimised for Six Cylinder / 3 Rotor Engines – the G4+ Fury has 6 x ignition outputs and 8 x fuel outputs.
Fully programmable e-throttle control complete with gear shift control and throttle blips.
CAN is user defined and supports two independent CAN modules.
Onboard Knock Control – support for two knock sensors wired directly to the ECU. No external amplifier required.
30 General Purpose Tables and many dedicated tables.
100 channels of logging.
32Mb (4 MByte) of logging memory.
Built in trigger oscilloscope.
Mixture map, closed loop fuel correction.

THUNDER

The Thunder is our biggest, most advanced ECU yet.

The **Thunder** is optimised for high end applications requiring maximum performance, flexibility and tuning control. The **Thunder** has more inputs, more outputs and more features than any other Link ECU.
The **Thunder** isn't just serious about performance, it's obsessed.

Xtreme: 130mm (5.11″)

Thunder: 212mm (8.346″)

SPEC OVERVIEW:

Inputs

16 x Digital inputs
4 x Temperature inputs
16 x Analog inputs
2 x Trigger inputs
2 x Knock inputs

Outputs

8 x Injection drives
8 x Ignition drivers
18 x Auxiliary outputs
+5V Sensor power supply
+8V Sensor power supply

Communications

2 x Thirty four pin, waterproof connectors
2 x Twenty eight pin, waterproof connectors
2 x CAN bus
1x Serial (RS232) connection
1x USB tuning connection

Misc.

1 x 3 Axis Accelerometer – Lateral G (cornering), Longitudinal G (acceleration/braking), Vertical G.
2 x K–type Onboard Thermocouple Inputs meaning high accuracy for high temperature situations e.g. exhaust gas temperature sensing.
2 x Digital Wideband Onboard.
2 x E–throttle Controllers – for engines that have two electronic throttle bodies.
2 x Knock Control Inputs – monitor each bank on a V engine.
16 x Digital Inputs – six can be differential reluctor (speed sensor) – ABS wheel speed sensors
16 x Analogue Inputs – Temperature, Pressure, Position.
18 x Auxiliary Outputs – Lights, solenoids, gauges, switches, relays etc.
Plus all other G4+ features including all Motorsport, Logging and CAN features, Peak and Hold and Digital Wideband.

FORCE GDI

The Force GDI is our first ECU built specially to control Gasoline Direct Injection engines.

As well as full GDI control, the Force GDI offers on–board digital wideband, E–throttle control, high voltage injector and high pressure fuel pump management, plus all the other features you have come to expect from one of Link's world leading ECUs.

The **Force** GDI is running on our proven Link G4+ platform, so you know it is going to work right out of the box.

SPEC OVERVIEW:

Inputs

8/10* x Digital inputs
4 x Temperature inputs
11 x Analog inputs
2 x Trigger inputs
2 x Knock inputs

*2 inputs required when using 2nd CAN Bus

Outputs

4 x High voltage injector drivers (60V 10/5A Peak/Hold Current).
4 x Ignition drivers
10 x Auxiliary outputs
+5V Sensor power supply
+8V Sensor power supply

Communications

2 x Thirty four pin, waterproof connectors
1 x CAN bus
1 x Serial (RS232) connection
1 x USB tuning connection

Misc.

1 x E–throttle controller
Onboard wideband lambda controller
Onboard barometric pressure sensor
32Mb (4 MByte) of logging memory
Trigger scope hardware
Runs on PC Link software
Uses G4+ Motorsport, Logging and CAN features

PlugIn ECUs take the hassle out of aftermarket Engine Management. They are a plug in replacement for your factory ECU, with no wiring needed, and are shipped with base maps for a tuner head start.

All LINK PlugIn ECUs run the same powerful micro controller and firmware as the G4+ Thunder, giving you More Horsepower, Launch Control, Traction Control, Gear Shift Control, Anti-Lag, Boost Control and much more.

PLUGIN ECUS INSTALLATION:

Take your car into a qualified Tuner. They will...

1. Locate the original factory ECU, unplug the loom and remove the enclosure from the car.
2. There are two types of PlugIn ECUs – total replacement or replacement board (PCB).
   a. Total replacement: The enclosure will fit in the original ECU location.
   b. Replacement board: Open the enclosure and remove the original PCB. Install the G4+ PlugIn. It will fit beautifully. Re-install the enclosure into the car.
3. Plug in the loom.
4. Fit a MAP (Manifold Air Pressure) line from the ECU to the engine's inlet manifold.
5. Plug the supplied USB cable into a laptop PC and connect using PCLink.
6. Start the engine (it should start immediately and run smoothly) and drive the car onto the dyno.
7. Dyno tune the car to make it the best it can be, all in a minimum of time.
8. Enjoy your car now that it makes exciting power, idles beautifully, starts cleanly and drives smoothly.

G4+ PlugIn boards include an XS Connector that allows the addition of additional inputs/outputs over those included in the vehicles factory harness. The XS connector allows installer to add, for example, switches, boost control, oil pressure etc.

XS Connector Looms are sold separately.

PlugIn ECUs take the hassle out of aftermarket Engine Management. ECUs are shipped with base maps for a tuner head start.

MODEL	DESCRIPTION	PART #
Audi		
TTLink	VWAG 1.8l Turbo e-throttle (A3 1.8T; A4 1.8T)	TT+
BMW		
BMWLink	BMW E36 M50TUB25	E36+
MiniLink	BMW Mini R53	MINI+
Holden		
VLLink	Holden VL RB30	HVLC+
Honda		
CivicLink (95)	Honda Civic 1992 – 1995 Gen 5	HC92+
CivicLink (98)	Honda Civic 1996 – 1999 Gen 6,	HC96+
Mazda		
RX7Link (S6)	Mazda RX7 Series 6,	RX7S6+
RX7Link (S7)	Mazda RX7 Series 7-8	RX7S7+
MX5Link	Mazda MX5 1600-1800	MX5+
Mitsubishi		
EVOLink (I–III)	Mitsubishi EVO 1-3	EVO3+
EVOLink (IV–VIII)	Mitsubishi EVO 4-8	EVO8+
EVOLink (IX)	Mitsubishi EVO 9	EVO9+
VR4Link	Mitsubishi VR4 4G63T	VR4+

MODEL	DESCRIPTION	PART #
Nissan		
300ZLink	Nissan 300ZX Z32	N300+
350ZLink	Nissan 350Z VQ35DE, 2002-06	N350+
GTRLink	Nissan GTR R34 & GTS R32-R33	NGTR+
GTTLink	Nissan GTT R34 RB25DET "NEO"	NGTT+
S13Link	Nissan S13-14, 76 pin	NS13+
S15Link	Nissan S13-15, 64 pin	NS15+
Subaru		
WRXLink (1–2)	Subaru WRX & STI V1-2	WRX2+
WRXLink (3–4)	Subaru WRX & STI V3-4	WRX4+
WRXLink (5–6)	Subaru WRX & STI V5-6	WRX6+
WRXLink (7–9)	Subaru WRX & STI V7-9	WRX9+
WRXLink (04)	Subaru WRX & STI V10 04-06	WRX104+
WRXLink (07)	Subaru WRX & STI V10 06-07	WRX107+
Toyota		
AltezzaLink	Toyota Altezza 3SGE	TALT+
MR2Link V1	Toyota MR2 SW20 Rev 1 & Celica ST185	TST185+
MR2Link V3	Toyota MR2 SW20 Rev 2-3 & Celica ST205	TST205+
SupraLink	Toyota Supra 2JZ, non VVT	TS2JZ+
Volkswagen (AG)		
TTLink	VWAG 1.8l Turbo e-throttle (New Beetle 1.8T; Golf 1.8T; Passat 1.8T)	TT+

Link Engine Management have a range of accessories to help you truely unleash the potential of your engine.

- Looms from 400mm to 5m
- Driver Displays
- CAN Cables
- Inlet Air Temperature Sensors
- Exhaust Oxygen Sensors
- Exhaust Temperature Probes
- Three Channel Ignitors
- Trigger Wheels

- Plug Kits
- MAP Sensors 1.15, 2.5, 3, 4, 5 and 6.5 bar
- Ethanol Content Sensors
- Fluid Temperature Sensors
- Fluid Pressure Sensors
- Boost Control Solenoids
- Knock Sensors
- Tuning Tools

AND MORE!!!

For full details, please visit: www.linkecu.com/products/accessories

Use in competition or road vehicles. The Dash's construction is of the highest quality with an aluminium frame and military spec connectors, so it is suitable for both open and closed top vehicles as well as motorcycles.

PLUG INTO LINK ECUS

- > Custom LCD panel dashboard display, clearly visible under any light condition
- > Water resistant for open top or motorcycle applications
- > Compact and slim, easy to fit
- > Suitable for any engine installation with a fully configurable RPM scale
- > Optimise your gear changes with the configurable ultra bright shift lights
- > Road legal, everything required for an MOT or SVA testing including tamper proof odometer, backlit display and mandatory warning lights
- > Lap and sector time display using a separate data logger

- > Stand alone operation. Connect up to 4 engine or gearbox sensors as well as RPM and wheel speed
- > Display information directly from your ECU using CAN or serial interface*
- > Monitor your engine and display high/ low alarms for any parameter
- > Gear position indicator. Calculated or using a gearbox sensor
- > User selectable units MPH/ miles or KPH/km
- > Display the information you want to see with 5 user defined screens
- > Control the Dash and a data logger with the external button set (optional)
- > Easy to use configuration software

*Link CAN cable required

ECUs are compatible with all leading after-market dashes via CAN or serial stream.

Link's new G4+ KnockBlock is an audio interface that lets you hear knock (detonation and pre-ignition).

The G4+ KnockBlock is an essential tool for tuning and can aid in the early detection of incorrect ignition timing, lean air / fuel mixtures and mechanical issues.

FEATURES

> Listen to one or two knock sensors

> Special filtering design improves signal to noise ratio

> Can be used with ear buds, ear phones and noise cancelling ear muffs

> Long life lithium rechargeable battery

> Can be used to interface directly to a laptop for recording of engine noise or knock sensor frequency analysis (using PCLink G4+)

> Rugged CNC aluminium enclosure

> Flying lead headphones connector

> Can be used with all OEM knock sensors

OPERATING

> Install the knock sensor/s in a suitable location on the engine (typically on a solid mounting point on the block near the cylinder head)

> If only using one sensor, leave the unused sensor cable disconnected

> Turn the volume control clockwise until it clicks. The LED indicator will turn blue when the KnockBlock is operating

> Turn the volume to the minimum setting (most anti-clockwise)

> Connect headphones to the 3.5mm audio jack

> Run the engine and carefully increase the volume (clockwise) until engine mechanical noise can be heard. Adjust to a comfortable listening volume

Charging

> Turn off the KnockBlock by turning the volume control anti-clockwise until it clicks

> Connect the USB charging cable to the KnockBlock's Mini USB connector. Can be charged from any standard USB charger PC, laptop, car or cell phone charger (2.1A at 5V max)

> The LED indicator will show red while charging. When the indicator turns off, the battery is fully charged

> Charge the G4+ KnockBlock after use and before storage

WHAT'S IN THE BOX?

> G4+ KnockBlock

> 2 sensor looms (attached)

> 1 headphone loom (attached)

> Quick Start Guide

> 1 USB cable mini

> 2 Bosch type doughnut OEM knock sensors

> 2 small Link Engine Management stickers

Link's new CAN-Lambda is an easy to use CAN-module that provides digital wideband sensor control via CAN bus and is compatible with all leading aftermarket ECUs.

The CAN-Lambda's ability to measure the proportion of oxygen in exhaust gases makes it an essential tool for accurately tuning fuel mixtures as well allowing your ECU to make tuning adjustments on the fly.

Being fully digital the CAN-Lambda's powerful LSU 4.9 sensor will eliminate any loss of signal, risk, delays and errors that analogue alternatives cause. The CAN-Lambda never requires free air calibration.
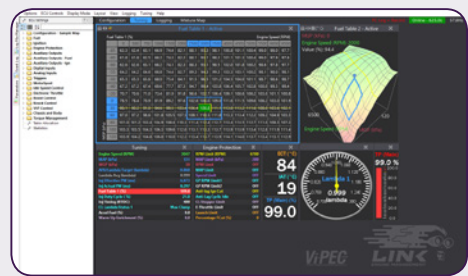
CONNECTORS

> 1 x 4 pin male DTM connector (power/CAN)

> 1 x 6 pin mating connector for LSU 4.9 Lambda sensor

The G4 KnockLink Digital Warning is designed for both street and race use and is the only self calibrating knock warning instrument on the market.

> Compatible with all G4+ based ECUs

> The most comprehensive, integrated ECU tuning and logging software

> Windows [XP, Vista, 7 & 8]

> Mouse or Keyboard driven

> Fully configurable multi-page layout

> Large number of different "views" for displaying ECU and log data

> Advanced time saving tuning features and shortcuts

> Single key access to all critical runtime values
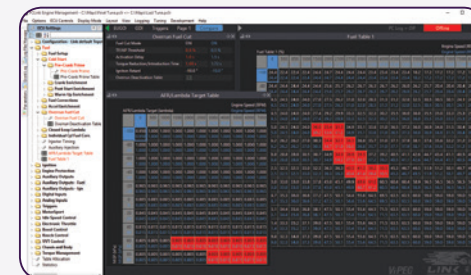
> Single key to convert metric-imperial

ECU CONFIGURATION

> Logically organised tree style navigation of ECU settings

> Comprehensive context that is sensitive help for all features

TUNING

> Pop-out settings menu that saves screen space

> Interactive 3D surface graph

> Multiple table display

> Configurable gauges, plotting and runtime values

> Warnings and Status Information

> All runtime displays automatically change based on selected table

GAUGES

> A variety of configurable gauge types

> Highly visible warnings

LOGGING

> Record, save, download and analyse data log files

> Customisable colour themes

> Log analysis views: Time Plot, Navigator, XY Plot, Statistics, Histogram, Value List, Parameter List

> Overlay and offset laps and files for comparison

> Global time and cursor linking

> Record, analyse and compare logs while tuning an ECU

PCLink has been updated and gained a really useful feature: compare two base maps and show exactly where the differences are and what has changed. Select a tune from some time ago and compare with today's tune. Be suspicious, compare the engine's tune with the tune you kept on file to see if the tune has changed since the car was last in your shop.

Simply open a compare file and it is automatically compared against the currently open file or connected ECU. Changes are highlighted in the settings tree so you can drill down to the exact setting that has been changed.

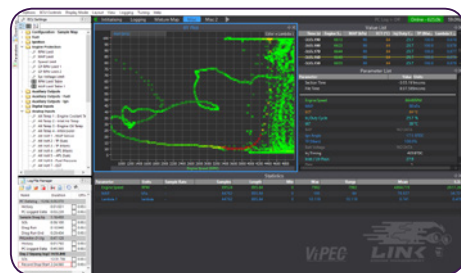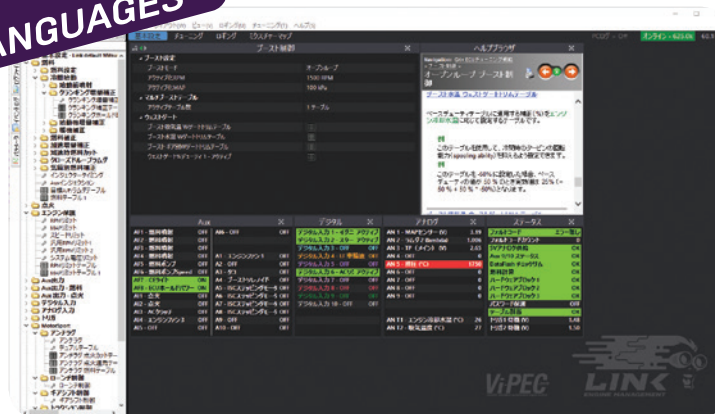Download the latest version of PCLink for free from linkecu.com

> *Alternate between English and Japanese*

> *Coming Soon... Spanish and Mandarin Chinese*

GLOSSARY

Below is a list of terms used in this catalogue and their meanings

Analog Inputs can be wired to any type of analog input such as a MAP sensor or Throttle Position Sensor. Analog sensors will output a signal in the range of 0v to 5v.

Antilag is a feature used on turbocharged engines to minimise turbo lag. It works by igniting fuel and air in the exhaust before the turbo to keep the turbo spinning when the engine is not delivering enough exhaust gas. When anti-lag is on, gunshot sounds and flames can come from the exhaust.

Auxiliary Outputs are general-purpose outputs that may be used to control various functions including a Relay, a Shift Light or a Boost Control Solenoid. Unused ignition and injection drives can also be used as auxiliary outputs.

Base-map is the data inside the ECU that contains information and settings used to run the engine, also known as a tune file. To get the most out of your engine a custom map should be created.

CAN (Controller Area Network) is a central networking system that allows the ECU to communicate with other controllers in the vehicle.

Cruise Control is a feature that automatically controls the speed of a motor vehicle. The ECU takes over the throttle of the car to maintain a steady speed as set by the driver.

Digital Inputs may be connected to switches, controllers or sensors to provide information and control various functions including launch control, anti-lag, high/low boost, water spray, dual fuel/ignition maps, nitrous oxide and variable valve timing.

Digital Wideband uses a CAN bus to monitor a lambda sensor which measures the proportion of oxygen in exhaust gases allowing you to accurately tune fuel mixtures. Being fully digital eliminates any delays and errors that analog alternatives cause. The wideband O2 sensor used by the Link CAN-Lambda never requires free air calibration.

E-throttle (aka Drive by Wire) electronically connects the accelerator pedal to the throttle valve using an electronic system that replace a mechanical linkage.

Fuel Equations are methods of calculating the fuel requirements of the engine.

Gear Shift Control is a feature that allows the driver to change gear without taking their foot off the accelerator. The ECU cuts ignition or fuel during gear shifts and blips the throttle during downshifts.

GDI (Gasoline Direct Injection) is a type of fuel injection where the fuel is highly pressurised, and injected directly into the combustion chamber of each cylinder leading to more power while using less fuel.

Knock (aka detonation) occurs due to excessive pressure and temperature in the combustion chamber. Knock is one of the greatest causes of damage to an engine.

Ignition Drives are used to drive a wide range of ignition systems from a basic distributor set-up through to more complex multi-coil arrangements. Each ignition coil will need an inbuilt igniter or an external igniter.

Injection Drives are used to control injectors in sequential, group and group staged fuel injection systems.

Launch Control is a feature that controls engine speed to reduce wheel spin allowing a vehicle to accelerate as fast as possible. Often used in drag racing.

Motorsport Features are special features designed for motor sport use and include Antilag, Gearshift Control, Launch Control and Traction Control.

OBDII (On Board Diagnostics) allows you to send engine data from your ECU over a CAN bus to the vehicle's OBDII port. You can see and use this data on your tablet or phone using an OBDII to a wifi/bluetooth adapter.

PCLink is an advanced tuning package designed to be simple to use yet deliver the flexibility and advanced features required by professional tuners. PCLink incorporates data log analysis features to further reduce tuning time and provide after event feedback.

Peak and hold injection is a two stage system for driving low impedance fuel injectors. The Peak signal is used to quickly open the injector then it switches to a low power consumption Hold signal to keep the injectors open.

PlugIn ECUs are direct plug-in replacements for the factory ECU. They use the vehicle's factory sensors, but can benefit from additional sensors.

Quick Tune is an interactive tuning tool in PCLink that assists in time efficient fuel tuning.

Temperature Inputs are designed to receive information from PTC or NTC thermistor sensors such as Engine Coolant Temperature or Inlet Air Temperature.

Traction Control is a feature that reduces wheelspin during acceleration. The ECU reduces power when your tires begin to spin.

Trigger inputs are connected to crankshaft or camshaft position sensors to calculate engine speed as well as engine position.

Trigger scope is a tool built into most G4+ ECUs, it is used to visually display the voltages the ECUs trigger inputs are measuring, similar to an oscilloscope.

VVT Control (Variable Valve Timing) is the process of altering the timing of the intake and exhaust cams to improve performance, fuel economy or emissions. An ECU can control this by continuously advancing or retarding the camshaft timing.

+5V Sensor Power Supply supplies a regulated and over current protected +5V to be used by sensors that operate from a 5V supply.

+8V Sensor Power Supply supplies a regulated and over current protected +8V to be used by sensors that operate from a 8V supply.

WARRANTY

LIMITED LIFETIME WARRANTY

WE STAND BEHIND WHAT WE SELL!

LINK ENGINE MANAGEMENT LTD – LIMITED LIFETIME WARRANTY

All Engine Control Units (ECUs) manufactured by Link Engine Management Ltd are subject to the following LIMITED LIFETIME WARRANTIES, and no others.

Link Engine Management Ltd warrants only to the original purchaser of the ECU, for the lifetime of the ECU, (subject to the limitations set out below), that the ECU shall be free from defects of materials and workmanship in the manufacturing process. This warranty ceases to apply and does not apply to ECUs that have not been manufactured by Link Engine Management Ltd for a period of greater than one year.

An ECU claimed to be defective must be returned to the place of purchase. Link Engine Management Ltd, at its sole option, may replace the defective ECU with a comparable new ECU or repair the defective ECU.

This limited lifetime warranty is not transferrable and does not apply to any ECU not properly installed or properly used by the purchaser or end user, or to any ECU damaged or impaired by external forces. The above warranties are the full extent of the warranties available on the ECU. Link Engine Management Ltd has no liability to the original purchaser or any other person for any loss, injury or damage to persons or property resulting from the use of the ECU or any failure of or defect in the ECU whether by general, special, direct, indirect, incidental, consequential, exemplary, punitive, or any other damages of any kind or nature whatsoever. Link Engine Management Ltd specifically disclaims and disavows all other warranties, express or implied, including, without limitation, all warranties of fitness for a particular purpose, warranties of description, warranties of merchantability, trade usage or warranties of trade usage.

For off-road use only, not intended for highway vehicles. This ECU contains a user-configurable software programme, which is updated by Link Engine Management Ltd from time to time. The user must ensure the current correct version of this programme is downloaded from the website of Link Engine Management Ltd and installed in the ECU prior to use. This limited lifetime warranty does not apply where the ECU has been installed with the incorrect version of the software programme. The user is solely responsible for the setup and testing of all user-configurable features.

Link Engine Management Ltd License Agreement

The software programme in this ECU is licensed not sold. Link Engine Management Ltd grants the user a license for the programme only in the country where the programme was acquired. No other rights are granted under this license and the programme may only be used on one machine at a time. If the programme is transferred a copy of this license and all other documentation must be transferred at the same time. The license may be terminated by the user at any time. Link Engine Management Ltd may terminate the licence if the user fails to comply with the terms and conditions of this license. In either event the copy of the programme must be destroyed.

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	ATOM	MONSOON	KUROFUNE	STORM	XTREME	FURY	THUNDER	FORCE GDI	PLUGIN
Fuel/Ignition Drives	4/4	4/4	8/8	8/8	8/8	8/6	8/8	4	8/8
Digital Inputs	2	4	10	8	8 / 10*	8 / 10*	16	8 / 10*	11
Peak & Hold Injection	No	No	No	No	10/3A	10/3A	10/3A	10/5A	No
Analog/Temp Inputs	3/2	4/2	9/3	8/3	11/4	9/4	16/4	11/4	12/4
Auxiliary	4	6	10	8	10	10	20	8	16
E−Throttle Control	No	No	No	No	Yes	Yes	Yes – Dual	Yes	Yes
Knock Control	No	No	2 Channel	2 Channel	2 Channel	2 Channel	2 Channel	2 Channel	2 Channel
OBD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
+8 Volt Out	No	No	No	Yes	Yes	Yes	Yes	Yes	No
Trigger Scope	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Logging Parameters	100	100	100	100	100	100	100	100	100
Logging Memory	32 Mbit (4 MByte)	32 Mbit (4 MByte)	32 Mbit (4 MByte)	32 Mbit (4 MByte)	32 Mbit (4 MByte)	32 Mbit (4 MByte)	32 Mbit (4 MByte)	32 Mbit (4 MByte)	32 Mbit (4 MByte)
CAN	1 Channel	1 Channel	1 Channel	1 Channel	1 / 2 Channel*	1 / 2 Channel*	2 Channel	1 / 2 Channel*	2 Channel
Gen Purpose Tables	20	20	30	20	30	30	30	30	30
RS232 Comms	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Aux Output on unused Fuel & Ignition	Ignition Only	Ignition Only	Yes	Yes	Yes	Yes	Yes	Ignition Only	Yes
Lambda Sensor Control	0	0	0	0	0	1	2	1	0
Closed Loop Lambda Auto Mode	No	No	Yes	No	Yes	Yes	Yes	Yes	No
Dual Closed Loop Lambda (Stoich)	No	No	Yes	No	Yes	Yes	Yes	Yes	No
VVT Control	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Selectable Temp Input Pullups	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Launch / AntiLag	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cruise Control	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Traction Control	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Diff. Reluctor Interface	No	No	No	No	No	No	6	No	No
Thermocouple	No	No	No	No	No	No	2	No	No

*2 inputs required when using 2nd CAN Bus

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