

PRODUCT GUIDE







INTRODUCING THE UNICHIP

Unichip intercepts the electrical signal from engine sensors and manipulates them before sending them on to your factory computer, giving us the abilty to control the ecu. This means we can live tune your vehicle on our in house 4WD rolling road, where we can monitor and see how your vehicle performs under a range of conditions and make the changes to best suit your vehicle and any modifications in terms of power, torque and overall performance.

OUR HISTORY



Unichip is one of the largest and most advanced performance tuning companies in the world. Manufactured in Pretoria, South Africa at the 18,000 sq ft computerised electronic asembly Unichip/Dastek facility.







WHAT IS UNICHIP?

The Unichip is a highly developed, re-programmable state-of-the-art performance upgrade that works in conjunction with the Engine Management System (EMS) already fitted to most modern vehicles. The result is improved engine efficiency.

"Power gains of over 70 BHP have been verified"



WHAT CAN UNICHIP DO?

- Variable valve timing control
- RPM & Turbo boost limits
- Electronic turbo level and limit control
- Variable induction control
- Road speed limiter
- Speedometer conversion
- Nitrous oxide injection

- Shift light
- Closed loop boost control on a 3D map
- 13 x 24 3D MAP. User configurable maps for fuel, ignition, throttle, boost, etc
- Bigger/supplementary injector handling
- Activate radiator fan
- Install & manipulate launch control

HOW DOES UNICHIP IMPROVE VEHICLE PERFORMANCE?



The Unichip intercepts the signals from the engine sensors and allows the ECU's original pre-set maps to be altered and enhanced. The result is an engine that reaches it's full potential in terms of power, fuel consumption and drivability.







"MORE THAN JUST MAXIMUM SAFE POWER"

HOW MUCH EXTRA POWER CAN I EXPECT?

Power gains of **14 BHP** to **40 BHP** are common, and whilst less common power gains of **70 BHP** have been verified. The exact gain depends on the design and condition of the engine and factory calibration of the engine control limit.

Unichip is a piggyback system that can be installed on any vehicle with an ECU

WILL UNICHIP IMPROVE MY VEHICLE'S ECONOMY?

Yes. In most driving conditions the Unichip will improve fuel economy. Many modern fuel injected vehicles waste fuel by running very rich air fuel ratios at part throttle openings. With Unichip it's a simple procedure to correctly adjust the air fuel ratio and maximise the fuel economy.





"Optimal tuning is not getting the most out of the engine, it's getting the best without compromising the engine's reliability."







SELECTING YOUR ECU

UNICHIP Q



Suited for 4 cylinder naturally aspirated and tubo diesel vehicles

- Allows tuning of turbo boost pressure
- Fuel tuning and ignition tuning via the 13x24 map sets
- Unit also has ability to store 5 user selectable map sets
- Also control Vtek, shift light, rev limits, road speed limits, intercooler spray, launch control

£550 (including VAT)

UNICHIP Q+



Suited for factory and aftermarket petrol turbo charged vehicles Same as Q with additional benefits of:

- 2 inbuilt drivers to allow use of boost control solenoid or additional fuel injector
- Aftermarket boost control not required

£660 (including VAT)

UNICHIP Q4



Suited for all vehicles

Same as Q and Q+ with additional benefits of:

Additional manipulation tables available, most commonly used for electronic fly by wire throttle control giving ability for anti-theft maps, aggressive throttle, smoother driving, and towing. Great for 4x4 by manipulating throttle to give much better fuel economy and control of power

£780 (including VAT)







SELECT YOUR MAP SWITCH

- Sleek design
- 5 position map
- Remote conection
- 2 programmable buttons
- Dirt and dust resistant
- Secure immobolizer option
- Connects to any Unichip kit
- Installs in under 60 seconds!
- **Key Fob Switch**

£165 (including VAT)

- Remote conection
- 5 position map
- Android or iPhone*
- Connects to any Unichip kit
- Installs in under 60 seconds!
 *Phone not included!

Bluetooth Module + App

£95 (including VAT)

- Sleek design
- 5 position map
- On the fly changes
- Dirt and dust resistant
- Mounted inside vehicle
- Connects to any Unichip kit
- Installs in under 60 seconds!

Membrane Map Switch

£105 (including VAT)

- 5 position map
- Ideal for motorsports
- On the fly changes
- Dirt and dust resistant
- Mounted inside vehicle
- Connects to any Unichip kit
- Installs in under 60 seconds!

Rotary Switch

£85 (including VAT)









"NO NEED TO BUY AN ADDITIONAL BOOST CONTROLLER."

UNICHIP BOOST CONTROL



The Unichip Boost Control is far superior to the majority of aftermarket boost controllers allowing for closed loop boost control base on a 3D map of 13 x 24. Your boost can be controlled dependant of throttle pedal input giving a more refined and controlable engine output.

"You can also have 5 different maps of varying boost pressure."









UNICHIP CASE STUDY 1

MODIFIED CASE STUDY



INFO

The customer had purchased the vehicle and wanted to get the full potential out of the modifications he had done, the car was to be used for track use and he wanted to get the vtec to come in earlier, as well as the Unichip we installed a vtec driver which enables us to tune the vtec.

- Increase in power and torque
- Custom tune for modifications on vehicle
- Vtec driver enabling vtec tuning, removing power dip.

Once installed and on the dyno we were very impressed with the results from bolt on modifications, custom exhaust manifold and full exhaust system, and air intake now tuned taking it to nearly 227 bhp and removing the usual power dip.



Vehicle: Honda Civic Type R

Year: 2002

Chip Type: Unichip Q

Mods: Exhaust manifold, cold air intake

BHP BEFORE UNICHIP **202 BHP**

BHP AFTER UNICHIP **226.7 BHP**

TORQUE BEFORE UNICHIP 141 FT LB

TORQUE AFTER UNICHIP **162 FT LB**







UNICHIP CASE STUDY 2

TURBO CASE STUDY





INFO

Using the latest Unichip Q4 we take control of boost pressure, ignition timing, fuel mixtures and throttle control system, making a very unique and fully customisable tuning product. The Unichip is the perfect ECU control system to grow with your chosen modification route. The Unichip can be custom remapped for any mods you make.

Impressive gains over a standard car. By utilising a 3 port boost control valve we can get the turbo on much earlier, making the car feel much more eager and sporty.

- Anti theftEconomy/valet mode
 - Medium boost
 - Sport
 - Sport plus

Vehicle: Subaru WRX Hawkeye

Year: 2007

Chip Type: Unichip Q4

Mods: Air filter, back box

BHP BEFORE UNICHIP **223.8 BHP**

BHP AFTER UNICHIP **258.2 BHP**

TORQUE BEFORE UNICHIP **260 FT LB**

TORQUE AFTER UNICHIP **300 FT LB**







UNICHIP CASE STUDY 3

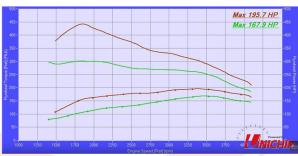
DIESEL CASE STUDY



INFO

100 series Toyota Land Cruiser fitted with the 4.2td HD-FTE with 5 user selectable maps, high/low boost, throttle booster, towing, off road and anti theft/immobiliser map, also available in the U fit application.

- 5 User selectable maps
- High power map with throttle boosterTowing map
 - Off Road map with dulled throttleAnti theft map
 - Remote key fob map switching.



Vehicle: Toyota Landcruiser 100 Series

Year: 2006

Chip Type: Unichip Q+

Mods: None

BHP BEFORE UNICHIP **167.9 BHP**

BHP AFTER UNICHIP **195.7 BHP**

TORQUE BEFORE UNICHIP **300 FT LB**

TORQUE AFTER UNICHIP **445 FT LB**