

TOYOTA

Toyota Denso Diesel 1

Editing and tuning Denso 89661-xxxxx ECUs of diesel Toyota & Lexus cars with 2.0L and 2.2L engines. The following maps are available for editing: rail pressure, target fuel quantity, requested torque, torque limitation, boost pressure. For more efficient tuning also you can edit correction and limitation maps for main parameters, maps to control output circuits (injection quantity regulator, rail pressure regulator) etc.

Cars supported:

Toyota Auris 2.0 D-4D

Toyota Avensis 2.0 D-4D

Toyota Avensis 2.2 D-4D

Toyota Corolla 2.2 D-4D

Toyota Rav4 2.0 D-4D

Toyota Rav4 2.2 D-4D

Toyota Verso 2.0 D-4D

Lexus IS220 D-4D

etc.

Engines supported:

1ADFTV

1CDFTV

2ADFTV

2ADFHV

etc.

Toyota Denso Diesel 2

Editing and tuning Denso ECU 89661-xxxxx of diesel Toyota & Lexus cars 2.5L and 3.0 L engines. The following maps are available for editing: rail pressure, target fuel quantity, requested torque, torque limitation, boost pressure. For more efficient tuning also you can edit correction and limitation maps for main parameters, maps to control output circuits (injection quantity regulator, rail pressure regulator) etc.

Cars supported:

Toyota Dyna 3.0td

Toyota Fortuner 3.0td

Toyota HiAce 2.5td

Toyota HiLux 2.5td

Toyota HiLux 3.0td

Innova 2.5td

Toyota Land Cruiser 120 3.0td

Toyota Land Cruiser 150 Prado 3.0td

Toyota ToyoAce 3.0td

etc.

Engines supported:

1KDFTV

2KDFTV

etc.

Toyota Denso Diesel 3

Editing and tuning Denso 89661-xxxxx ECUs of diesel Toyota & Lexus cars with 4.5L engines.

The following maps are available for editing:

Air control: Airmass corrections by fuel temperature, additive; Desired airmass for low load, Desired airmass; Minimal desired airmass.

Boost pressure: Desired boost pressure; Boost pressure basic map: correction and to limit boost when EGR is active; Boost pressure limiter correction factors; Boost pressure regulation basis; Coolant temperature factor for boost pressure correction, Desired and Final boost pressure limitation(relative), Desired boost pressure monitoring.

Boost pressure: VNT Control: Boost pressure regulator to predict deviation; VNT Control temperature

and atmospheric pressure corrections; VNT Controls basis and corrections basis maps; Desired boost pressure limitation(relative), VNT Control maximal and minimal corrections; VNT Control minimal threshold.

EGR Control: EGR position corrections; EGR position limitations; Minimal and Maximal EGR positions requests; Target EGR position corrections; Target EGR Position.

Injection volume: Gear dependent injection volume limiter; Injection volume basis for minimal and maximal limitations; Injection volume corrections; Injection volume limitations; Minimal injection volumes.

Injection volume: conditional corrections.

Injection volume: smoke limitations.

Injector control: Injector opening time for main injection and Pilot injection time.

Limiters: Vehicle speed limitation.

Rail pressure: Rail pressure limitation, Rail pressure regulator basis, Target rail pressure.

Sensors scalings: Boost air temperature, Coolant temperature, Fuel temperature, Intake air temperature and MAF sensors scalings; Temperature correction for MAF sensor.

Start of injection calculation: Start of main and pilot injection.

Torque model: Drag loss torque correction, Fuel pump drag loss part from rail pressure, Fuel temperature drag loss part; Injection volume to Torque and Torque to injection volume conversions maps.

DTC mask

Cars supported:

Toyota Land Cruiser 200 4.5td

Toyota Land Cruiser 70 4.5td

Lexus LX450D

Engines supported:

1VDFTV

Toyota Denso Diesel 4

Editing and tuning Denso 89661-xxxxx ECUs (MCU 76F0040GD, 76F0039AGD, 76F0085) of turbo diesel Toyota Hino trucks with 4.0L, 4.7L, 4.9L engines.

The following maps are available for editing: rail pressure, target fuel quantity, requested torque, torque limitation, boost pressure. For more efficient tuning also you can edit correction and limitation maps for main parameters, maps to control output circuits (injection quantity regulator, rail pressure regulator) etc.

Vehicles supported:

Toyota Hino Dutro 4.0td

Toyota Dyna 4.0td

Toyota Dyna 4.7td

Toyota Dyna 4.9td

Toyota ToyoAce 4.0td

Engines supported:

N04CUV

N04CTJ

N04CUH

J05D

S05D

Toyota Denso Diesel 5

Editing calibrations of Denso newGen ECUs of diesel Toyota vehicles with 2.4 TD 2GDFTV and 2.8 TD 1GDFTV engines.

The following maps are available for editing: rail pressure, target fuel quantity, requested torque, torque limitation, boost pressure. For more efficient tuning also you can edit correction and limitation maps for main parameters, maps to control output circuits (injection quantity regulator, rail pressure regulator), DTC mask, etc.

This module supports files:

MCU D76F0196F1 1536Kb

MCU D76F0219F1 2048Kb

Vehicles supported:

Toyota HiLUX 2.4TD

Toyota HiLUX 2.8TD

Toyota LC150 2.8TD

Engines supported:

1GD-FTV

2GD-FTV

Toyota Denso Diesel 6

Denso Gen3 ECUs of diesel Toyota vehicles with 2.4TD 2GDFTV and 2.8TD 1GDFTV engines.

Supported filesize: 4Mb.

Available maps:

Air calculation: Air flow correction, Desired air calculation, Desired air calculation in additional mode

Boost Pressure: Base boost pressure in additional mode, Base boost pressure with active EGR

Boost Pressure Correction: Boost pressure correction from air temperature sensor, Boost pressure correction from atmospheric pressure, Boost pressure correction from coolant temperature Boost

Pressure Limitation: Boost limitation in emergency mode, Minimum boost pressure EGR: Basic position of EGR, Correction of base position of EGR, Lower threshold of the moment for operation EGR, Upper threshold of the moment for operation EGR

Fuel pressure: Fuel pressure at start-up, Fuel pressure correction from coolant temperature, Fuel pressure in regeneration mode, Maximum fuel pressure, Maximum fuel pressure during regeneration

Initial injection phase: Initial injection phase in additional mode

Injection end phase: Main injection end phase when the post-injection is not active, Main injection end phase with active post-injection

Injection volume limitation: Base injection volume, Border of the transition from cold to warm operation mode, Border of the transition from warm to hot mode, Correction of maximum permissible injection volume, Injection volume limitation, Injection volume Limitation from air flow rate, Injection volume limitation from atmospheric pressure, Maximum injection volume from atmospheric pressure

Limiters: Engine speed limitation in additional mode, Minimum speed limitation in additional mode, Vehicle speed limitation (Test)

Nozzle performance: Nozzle performance at the 1st and 2nd pilot injection, Nozzle performance at the main injection

Pilot injection: Phase of the second pilot injection with active zero and first pilot injection, Pilot injection phase in additional mode, Second pilot injection phase with the first pilot injection active, The phase of the first pilot injection with the active second pilot injection, Zero pilot injection phase, Second pilot injection phase

Post injection: Post-injection phase

Post-injection volume: Basic post-injection volume

Sensors: Coolant temperature sensor, Intake air temperature sensor, Intake manifold air temperature sensor, Exhaust Temperature Sensor Scaling, SCR Temperature Sensor Scaling

Torque: Inversion requested torque, Requested torque

Torque loss: Base loss torque, Torque loss by coolant temperature, Loss torque on fuel pump by fuel pressure, Torque loss on fuel pump by fuel volume increasing

VNT: Base position of the VNT when the EGR is active, Base position of the VNT when the EGR is not active, Maximum VNT position when EGR is active, Maximum VNT position when EGR is inactive , Proportional coefficient for inactive EGR is the negative derivative, Proportional coefficient for inactive EGR is the positive derivative, Proportional coefficient with active EGR is the negative derivative, Proportional coefficient with active EGR is the positive derivative, Proportional gain for VGT duty cycle control

VNT correction: Additional correction to the base position of the VNT, Correction of the VNT base position

Volume of Pilot Injection: Volume of the 0-th pilot injection map, Volume of the 1st pilot injection, Volume of the 1st pilot injection with the active 0-th pilot injection map, Volume of the 2nd pilot injection with the 1st pilot injection active

DTC mask is not supported. Please note that incorrect DTC modification will brick the ECU.

URGENT requests are not supported for this module.

Toyota Denso Petrol 1

Editing calibrations of Denso ECUs (Denso 89661-xxxxx and MCU NEC 76F0038, 76F0039, 76F0040, 76F0070, 76F0085) of petrol Toyota | Lexus | Scion vehicles with petrol normal aspirated 1.0L, 1.2L, 1.3L, 1.6L, 1.8L engines.

The following maps are available for editing: spark advance maps for high and low octane fuel, minimal spark advance, spark advance corrections, VVT camshaft position maps, injection enrichment control, injection corrections, throttle valve control, requested torque, and all main sensors conversion curves.

Supported engines:

1KRFE
1NRFE
1NZFE
1NZFXE
1ZRFE
2NZFE
2SZFE
2ZRFE
2ZRFXE
3NRFE

Toyota Denso Petrol 2

Editing calibrations of Denso ECUs (89661-xxxxx and MCU NEC 76F0038, 76F0039, 76F0040, 76F0070, 76F0085 inside) of petrol Toyota | Lexus | Scion vehicles with petrol 2.0L, 2.4L, 2.5L and 2.7L engines.

Air calculation: Calculated air load from requested torque, Mass air flow pulsations factor

Exhaust temperature model: Calculated exhaust temperature 1 in additional mode, Exhaust temperature offset for spark retardation Exhaust temperature offset for vehicle speed,

Maximal/Minimal exhaust temperature for engine protection

Fuel: enrichment: AFR value as stoichiometry, Coolant temperature to enable closed loop, Delay for enable closed loop, Enrichment for engine protection base, Enrichment for engine protection base, Enrichment for engine protection correction for full load, Enrichment for engine protection correction on retardation, Per cylinder enrichment multiplier, Throttle position threshold to enter full load, Throttle position threshold to exit from full load

Fuel: injector control: Injection time correction factor by load, Injector dead time, Minimal injection time, Minimal injection time when fault is stored, Minimal injection time when fault is stored

Limiters: Engine/Vehicle speed limitation

Sensors scaling: Intake air temperature correction factor for mass air flow, Mass air flow sensor scaling, Accelerator pedal sensor

Spark advance: Maximal/Minimal spark advance, Spark advance base, Spark advance high/low octane

Spark advance: corrections: Spark advance base correction by coolant temperature, Spark advance correction for VVT, Spark advance corrections high/low octane

Spark advance: knock: Coolant temperature threshold for retardation, Engine speed lower threshold for retardation, Engine speed lower threshold for retardation, Maximal spark advance retardation, Retardation recovery rate, Spark advance retardation amount

Spark advance: minimal: Coolant temperature threshold for minimal spark advance correction, Spark advance minimal base, Spark advance minimal temperature correction

Throttle valve control: Throttle valve maximal position, Throttle valve position limitation full load, Throttle valve position limitation low load, Accelerator pedal

Torque model: Optimal torque

VVT: Exhaust camshaft position base, Intake camshaft position at full load, Intake camshaft position at high throttle, Intake camshaft position at low throttle, Intake camshaft position base

DTC mask editor

Supported engines:

1ARFE
1AZFE

2ARFE
2AZFE
2TRFE
3ZRFE
3ZRFAE
4GRFSE
5GRFE etc

Toyota Denso Petrol 3

Editing calibrations of Denso ECUs (89661-xxxxx and MCU NEC 76F0038, 76F0039, 76F0040, 76F0070, 76F0085 inside) of petrol Toyota | Lexus | Scion vehicles with 3.0L, 3.3L and 3.5L engines.

Supported maps list:

Air calculation: Calculated air load from requested torque, Mass air flow pulsations factor

Automatic transmission downshift conditions: Output Speed vs Throttle in different mode

Automatic transmission: torque converter: Output Speed vs Throttle Normal in different mode apply, Output Speed vs Throttle Normal in different mode release, Torque converter in different mode apply, Torque converter in different mode release

Automatic transmission: torque converter flex: Output Speed vs Throttle Normal in different mode apply, Output Speed vs Throttle Normal in different mode release, Output Speed vs Throttle Sport in different mode apply, Output Speed vs Throttle Sport in different mode release, Toyota Temporary Curve

Automatic transmission: upshift conditions: Output Speed vs Throttle in different mode

Exhaust temperature model: Calculated exhaust temperature, Exhaust temperature offset for spark retardation, Exhaust temperature offset for vehicle speed, Maximal exhaust temperature for engine protection, Minimal exhaust temperature for engine protection

Fuel: enrichment: Injection time correction factor by load, Injector dead time, Minimal injection time, Minimal injection time when fault is stored

Idle speed: Desired idle speed at P/N, Desired idle speed in drive, Idle spark advance in gear, Idle spark advance P/N

Limiters: Engine speed limitation, Vehicle speed limitation

Sensor scaling: Intake air temperature correction factor for mass air flow, Mass air flow sensor scaling

Spark advance: Difference for idle spark advance from base, Minimal spark advance, Spark advance base, Spark advance delta for efficiency, Spark advance base efficiency, Spark advance base high/low octane, Spark advance base minimal temperature correction

Spark advance correction: Spark advance base correction by coolant temperature, Spark advance correction for VVT, Spark advance base correction high/low octane

Spark advance: knock: Coolant temperature threshold for minimal spark advance correction, Coolant temperature threshold for retardation, Engine speed lower (upper) threshold for retardation, Maximal spark advance retardation, Retardation recovery rate, Spark advance retardation amount, Total retardation limit

Spark advance: minimal: Coolant temperature threshold for minimal spark advance correction, Spark advance minimal base, Spark advance minimal temperature correction

Startup: Startup Time, Startup engine speed adder

Throttle valve: control Maximal throttle position on 1st gear, Maximal throttle position on reverse gear, Throttle valve maximal allowed position request, Throttle valve maximal position, Throttle valve position limitation at different gear, Throttle valve position limitation different load, Throttle valve position limitation on SAP fault

Throttle valve: request: Requested throttle position at different gear

Torque Converter — General: Coolant temperature to disable (enable) hot mode, Oil temperature to enable hot mode, Oil temperature threshold for high coolant temperature enable, Oil temperature threshold to disable hot mode, Oil temperature for high coolant disable

Torque model: Optimal torque, Optimal torque for transmission

VVT: Exhaust camshaft position at full load, Exhaust camshaft position at low throttle, Exhaust camshaft position at high throttle, Exhaust camshaft position base, Intake camshaft position at low throttle, Intake camshaft position at high throttle, Intake camshaft position at full load, Intake camshaft position base

Warm up: Coolant temperature threshold for cold engine, Warm up correction for drive/reverse,

Warm up correction for P/N
DTC mask editor

Supported engines:

2JZGE
2GRFE
2GRFSE
3MZFE etc.

Toyota Denso Petrol 4

Editing calibrations Denso ECUs (89661-xxxxx and MCU NEC 76F0038, 76F0039, 76F0040, 76F0070, 76F0085 inside) of petrol Toyota | Lexus vehicles with petrol normal aspirated 4.0L, 4.3L, 4.6L and 4.7L engines.

Supported maps list:

Air calculation: Calculated air load from requested torque, Mass air flow pulsations factor

Automatic transmission downshift conditions: Output Speed vs Throttle in different mode

Automatic transmission: torque converter: Output Speed vs Throttle Normal in different mode apply, Output Speed vs Throttle Normal in different mode release, Torque converter in different mode apply, Torque converter in different mode release

Automatic transmission: torque converter flex: Output Speed vs Throttle Normal in different mode apply, Output Speed vs Throttle Normal in different mode release, Output Speed vs Throttle Sport in different mode apply, Output Speed vs Throttle Sport in different mode release, Toyota Temporary Curve

Automatic transmission: upshift conditions: Output Speed vs Throttle in different mode

Exhaust temperature model: Calculated exhaust temperature, Exhaust temperature offset for spark retardation, Exhaust temperature offset for vehicle speed, Maximal exhaust temperature for engine protection, Minimal exhaust temperature for engine protection

Fuel: enrichment: Injection time correction factor by load, Injector dead time, Minimal injection time, Minimal injection time when fault is stored

Idle speed: Desired idle speed at P/N, Desired idle speed in drive, Idle spark advance in gear, Idle spark advance P/N

Limiters: Engine speed limitation, Vehicle speed limitation

Sensor scaling: Intake air temperature correction factor for mass air flow, Mass air flow sensor scaling

Spark advance: Difference for idle spark advance from base, Minimal spark advance, Spark advance base, Spark advance delta for efficiency, Spark advance base efficiency, Spark advance base high/low octane, Spark advance base minimal temperature correction

Spark advance correction: Spark advance base correction by coolant temperature, Spark advance correction for VVT, Spark advance base correction high/low octane

Spark advance: knock: Coolant temperature threshold for minimal spark advance correction, Coolant temperature threshold for retardation, Engine speed lower (upper) threshold for retardation, Maximal spark advance retardation, Retardation recovery rate, Spark advance retardation amount, Total retardation limit

Spark advance: minimal: Coolant temperature threshold for minimal spark advance correction, Spark advance minimal base, Spark advance minimal temperature correction

Startup: Startup Time, Startup engine speed adder

Throttle valve: control Maximal throttle position on 1st gear, Maximal throttle position on reverse gear, Throttle valve maximal allowed position request, Throttle valve maximal position, Throttle valve position limitation at different gear, Throttle valve position limitation different load, Throttle valve position limitation on SAP fault

Throttle valve: request: Requested throttle position at different gear

Torque Converter — General: Coolant temperature to disable (enable) hot mode, Oil temperature to enable hot mode, Oil temperature threshold for high coolant temperature enable, Oil temperature threshold to disable hot mode, Oil temperature for high coolant disable

Torque model: Optimal torque, Optimal torque for transmission

VVT: Exhaust camshaft position at full load, Exhaust camshaft position at low throttle, Exhaust camshaft position at high throttle, Exhaust camshaft position base, Intake camshaft position at low throttle, Intake camshaft position at high throttle, Intake camshaft position at full load, Intake

camshaft position base

Warm up: Coolant temperature threshold for cold engine, Warm up correction for drive/reverse,

Warm up correction for P/N

DTC mask editor

Supported engines:

1URFE

1URFSE

1GRFE

2GRFXE

2UZFE

3UZFE etc.

Toyota Denso Petrol 5

Editing calibrations of Denso ECUs (89661-xxxxx and MCU NEC 76F0038, 76F0039, 76F0040, 76F0070, 76F0085 inside) of petrol Toyota | Lexus vehicles with 5.0L and 5.7L engines.

Supported maps list:

Air calculation: Calculated air load from requested torque, Mass air flow pulsations factor

Automatic transmission downshift conditions: Output Speed vs Throttle in different mode

Automatic transmission: torque converter: Output Speed vs Throttle Normal in different mode apply,

Output Speed vs Throttle Normal in different mode release, Torque converter in different mode apply,

Torque converter in different mode release

Automatic transmission: torque converter flex: Output Speed vs Throttle Normal in different mode

apply, Output Speed vs Throttle Normal in different mode release, Output Speed vs Throttle Sport

in different mode apply, Output Speed vs Throttle Sport in different mode release, Toyota Temporary

Curve

Automatic transmission: upshift conditions: Output Speed vs Throttle in different mode

Exhaust temperature model: Calculated exhaust temperature, Exhaust temperature offset for spark

retardation, Exhaust temperature offset for vehicle speed, Maximal exhaust temperature for engine

protection, Minimal exhaust temperature for engine protection

Fuel: enrichment: Injection time correction factor by load, Injector dead time, Minimal injection time,

Minimal injection time when fault is stored

Idle speed: Desired idle speed at P/N, Desired idle speed in drive, Idle spark advance in gear, Idle

spark advance P/N

Limiters: Engine speed limitation, Vehicle speed limitation

Sensor scaling: Intake air temperature correction factor for mass air flow, Mass air flow sensor scaling

Spark advance: Difference for idle spark advance from base, Minimal spark advance, Spark advance

base, Spark advance delta for efficiency, Spark advance base efficiency, Spark advance base high/low

octane, Spark advance base minimal temperature correction

Spark advance correction: Spark advance base correction by coolant temperature, Spark advance

correction for VVT, Spark advance base correction high/low octane

Spark advance: knock: Coolant temperature threshold for minimal spark advance correction, Coolant

temperature threshold for retardation, Engine speed lower (upper) threshold for retardation,

Maximal spark advance retardation, Retardation recovery rate, Spark advance retardation amount,

Total retardation limit

Spark advance: minimal: Coolant temperature threshold for minimal spark advance correction, Spark

advance minimal base, Spark advance minimal temperature correction

Startup: Startup Time, Startup engine speed adder

Throttle valve: control Maximal throttle position on 1st gear, Maximal throttle position on reverse

gear, Throttle valve maximal allowed position request, Throttle valve maximal position, Throttle valve

position limitation at different gear, Throttle valve position limitation different load, Throttle valve

position limitation on SAP fault

Throttle valve: request: Requested throttle position at different gear

Torque Converter — General: Coolant temperature to disable (enable) hot mode, Oil temperature

to enable hot mode, Oil temperature threshold for high coolant temperature enable, Oil temperature

threshold to disable hot mode, Oil temperature for high coolant disable

Torque model: Optimal torque, Optimal torque for transmission

VVT: Exhaust camshaft position at full load, Exhaust camshaft position at low throttle, Exhaust

camshaft position at high throttle, Exhaust camshaft position base, Intake camshaft position at low throttle, Intake camshaft position at high throttle, Intake camshaft position at full load, Intake camshaft position base

Warm up: Coolant temperature threshold for cold engine, Warm up correction for drive/reverse,

Warm up correction for P/N

DTC mask editor

Supported engines:

2URGSE

2URFSE

3URFE

3URFBE

Toyota Denso Petrol 6

Editing calibrations of Denso newGen ECUs of normal aspirated petrol Toyota | Lexus. Supported files from MCUs D76F0xxx and filesize 1536Kb and 2048Kb.

The following maps are available for editing: spark advance maps for high and low octane fuel, minimal spark advance, spark advance corrections, VVT camshaft position maps, injection enrichment control, injection corrections, throttle valve control, requested torque, and all main sensors conversion curves.

Toyota Denso Petrol Turbo

Editing calibrations of Denso ECUs of petrol Toyota | Lexus vehicles with turbo petrol engines with new MCU NEC D76F0196F1.

Firmware filesize 1536/2048 Kb.

Following maps are supported:

Target air filling maps, maximum filling and boost limitation by airmass, torque limitation, boost limitation factors for intake air temperature and knocking, injection time control, closed loop and open loop target lambda, all known sensors scalings, minimal spark advance, spark advance at low/high octane fuel, minimal spark advance for engine protection, spark advance corrections, requested torque, throttle valve actuator position, VVT camshaft control.

Vehicles supported:

Lexus NX 200t

Lexus IS 200t

Lexus GS 200t

Lexus RX 200t

Lexus RC 200t

Toyota Crown 2.0t

Toyota Auris 1.2t etc

Engines supported:

8AR-FTS

8NR-FTS

9NR-FTS

Toyota Denso Petrol Old

Editing calibrations of old K-line Denso ECUs of petrol Toyota | Lexus vehicles with petrol engines.

MCU 76F0015 and 76F0021 is writing only. File sizes 320 and 384 Kb.

Supported engines: 1AZFE, 1AZFSE, 1GRFE, 1MZFE, 1ZZFE, 2AZFE, 2JZGE, 2UZFE, 3MZFE, 3UZFE, 5VZFE and others petrols with old MCUs inside.

Attention! This MCUs cannot be read or write in BSL more. They allow only OBD writing. Reading is only Virtual with Toyota Gen 2 Virtual Reader.

Toyota Denso Diesel Full

Package of 5 modules - Toyota Denso Diesel 1,2,3,4,5. Allows to edit all diesel Toyota vehicles with Denso ECUs and 76F00xx & D76F0xxx MCUs. 10% saving on purchase.

Toyota Denso Petrol Full

Package of 9 modules - Toyota Denso Petrol 1,2,3,4,5,6, Toyota Denso OLD, Petrol Turbo, Toyota GT86 / Subaru BRZ Denso SH72531. Allows to edit all petrol Toyota, Lexus, Scion vehicles with Denso ECUs. 10% saving on purchase.

Toyota Denso Gearbox

Remapping Transmission Modes in Denso ECUs of Toyota | Lexus vehicles where TCM control is in separate MCU 76F0040AGD.

We provide to tune following gearbox parameters:

Basic: gear ratios

Shift conditions: Output speed by throttle position for downshift, Output speed by throttle position for upshift

Torque converter: Output speed by throttle position for torque converter apply and release

Torque reduction: downshift torque reduction, upshift torque reduction

Shift pressure: base line pressure, solenoid 1,2 pressures, torque converter pressure!

DTC editor

Toyota Denso Full

Set of 15 available modules Toyota Denso Diesel 1, 2, 3, 4, 5, 6 + Petrol 1, 2, 3, 4, 5, 6 + Petrol turbo + OLD + Gearbox+ GT86. You'll get 15% saving on purchase.

Toyota Bosch Diesel

Editing all diesel Bosch ECUs: EDC15, EDC16, EDC17 series for 1.4 and 1.6 D-4D Toyota engines.

The following maps are available for editing: Airmass maps for EGR, thresholds for EGR, desired boost maps and boost limitation, boost pressure vnt control maps, injection time control, fuel quantity maps, conversion from torque to fuel, quantity limitation maps, target lambda for smoke limitations, rail pressure maps, rail pressure limitation, start of injection maps, and also torque limitation, requested torque, gearbox torque maps, and torque monitoring maps and values (for EDC17).

Toyota GT86 / Subaru BRZ Denso SH72531

Editing calibrations of Denso ECUs with Renesas SH72531 MCU used in petrol Toyota GT86, Scion FR-S, Subaru BRZ.

The following maps are available for editing: engine load limitation, mass air flow sensor scaling, fan switching temperature, desired idle speed, injection acceleration enrichment by throttle position and correction factors, open and closed loop injection, injector dead time, injector flow constant, injector pwm, knock retardation control, retardation limit, spark advance at idle, spark advance base, spark advance correction on knocking, spark advance corrections per cylinder, requested torque, throttle valve control limitation, engine speed limitation, vehicle speed limitation (if found)!

Toyota Delphi Petrol

Editing calibrations of Delphi ECUs used in normal aspirated petrol Toyota and Scion vehicles.

Supported all Delphi ECU types - MPC and SH72xx (1mb, 1.5mb, 2mb filesizes).

The following maps are available for editing: air efficiency, injection, injector control, sensor scalings, spark advance, throttle control, VVT, limiters, DTC mask editor.

MAZDA

Mazda Denso SkyActiv-G

Editing calibrations of Denso ECUs of petrol Mazda vehicles with SkyActiv-G engines.

Available maps: rail pressure base for direct injection, calculated EGT, intake/exhaust camshaft control maps, closed and open loop enrichment, accelerator pedal threshold to change enter open loop mode, throttle valve request map, engine load limitation, requested torque at part load and full load, desired idle speed, idle speed for SA enabled, maximal idle speed, minimal spark advance, base spark advance for high/low octane, injection timing main maps, engine speed limitation, vehicle

speed limitation(when found, FOR UPDATE ALWAYS SEND REAL SPEED LIMITATION CUT/RESTORE),
DTC mask.

Urgent requests are not allowed for this module.

Mazda Mitsubishi SkyActiv-G

Editing calibrations of Mitsubishi ECUs of petrol Mazda vehicles with SkyActiv-G 1.3L, 1.5L, 2.0L, 2.5L engines.

Available maps: Rail pressure base for direct injection, calculated EGT, intake/exhaust camshaft control maps, closed and open loop enrichment, accelerator pedal threshold to change enter open loop mode, throttle valve request map, engine load limitation, requested torque at part load and full load, desired idle speed, idle speed for SA enabled, maximal idle speed, minimal spark advance, base spark advance for high/low octane, injection timing main maps, engine speed limitation, vehicle speed limitation(when found, FOR UPDATE ALWAYS SEND REAL SPEED LIMITATION CUT/RESTORE), DTC mask.

Urgent requests are not allowed for this module.

Mazda Denso SkyActiv-D

Editing calibrations of Denso ECUs of diesel Mazda vehicles with SkyActiv-D engines.

Available maps:

Boost control: boost pressure limitation from atmospheric pressure, boost pressure limitation, desired boost pressure, boost pressure correction, boost pressure actuator current

EGR Control: desired airmass flow, egr valve voltage

Injection volume: torque to injection volume conversion for different modes, injection volume limitation, smoke reducing limitation, injection volume limiters for system errors, power limitation

Rail pressure: desired rail pressure, rail pressure low load, limitation of rail pressure

Sensors scalings: exhaust temperature sensors, boost air temperature, intake air temperature, coolant temperature, mass air flow, oil temperature

Start of injection: start of main injection base and corrected

Torque management: injection volume to torque conversion, requested torque, maximal torque, power limitation by torque, torque limitation in case of system error

DTC mask editor

Mazda Mitsubishi 2.3 Turbo

Editing calibrations of Mitsubishi ECUs of petrol Mazda vehicles with 2.3 Turbo engines.

Available maps:

Boost pressure: boost limitation on closed throttle, boost pressure limitation, desired boost pressure, desired load, intake pressure limitation, maximal intake pressure, wastegate duty

Calculated EGT

Idle: desired idle speed in drive, desired idle speed in P/N, minimal idle speed in drive

Limiters: engine speed limitation, vehicle speed limitation(when found)

Spark advance: optimal spark advance, spark advance in closed loop, spark advance in open loop

Target lambda: target lambda in closed loop, target lambda in open loop

Torque: Accelerator pedal torque request, engine torque limitation, relative throttle valve position, requested torque

Mazda Denso Petrol SH705x

Editing calibrations of petrol Mazda vehicles with Denso ECUs based on Renesas SH7055, SH7058 MCU.

Supported map list:

Air load: engine load limitation, load correction for MAF

Configuration: engine volume, dwell time, MAF scaling

EGR: target EGR position

Idle: desired idle speed

Injection: target AFR at open loop, target AFR at closed loop, load thresholds to switch to open loop

Knock control: knock sensitivity, retardation limits and thresholds
Spark advance: maximal advance, spark advance at low loads and high loads, spark advance at idle, spark advance corrections
Torque model: requested torque
VVT: intake camshaft position
Limiters: engine speed limiters, vehicle speed limiters
DTC mask editor

HONDA

Honda Petrol Full

Package of 11 modules - Honda Keihin + Matsushita + Hitachi + Continental + Motorola + Panasonic + Keihin 1.5 Turbo + Keihin 2.0 Turbo + Keihin 2.3 Turbo + Hitachi 0.66 Turbo and Bosch Petrol Turbo. Allows to edit almost all petrol Honda vehicles of all markets. 10% saving on purchase.

Honda Keihin

Editing calibrations of the all normal aspirated Honda/Acura Petrol vehicles with Keihin ECUs with MCUs SH7058 1Mb, SH72543 2Mb, MPC5566 3Mb.
Available maps: Camshaft angle control (VTC), Closed loop lambda, injector opening time, WOT determining mode, fuel compensations for temperature, target lambda at High VTEC and Low VTEC, idle speed control, Knock limits, knock sensitivity, knock retardation, spark advance at High VTEC and Low VTEC, throttle valve control, VTEC control and also REV limiter!

Honda Matsushita

Editing calibrations of the all normal aspirated Honda Petrol vehicles with Matsushita ECUs with MCUs Renesas SH7055 512Kb, SH7058 1Mb, SH72543 2Mb.
Available maps: Camshaft angle control (VTC), Closed loop lambda, injector opening time, WOT determining mode, fuel compensations for temperature, target lambda at High VTEC and Low VTEC, idle speed control, Knock limits, knock sensitivity, knock retardation, spark advance at High VTEC and Low VTEC, throttle valve control, VTEC control and also REV limiter!

Honda Hitachi

Editing calibrations of the all normal aspirated Honda Petrol vehicles with Hitachi ECUs with MCUs Renesas SH7058 1Mb, SH7059 1.5Mb, SH72543 2Mb and Motorola MPC5554 2Mb.
Available maps: Camshaft angle control (VTC), Closed loop lambda, injector opening time, WOT determining mode, fuel compensations for temperature, target lambda at High VTEC and Low VTEC, idle speed control, Knock limits, knock sensitivity, knock retardation, spark advance at High VTEC and Low VTEC, throttle valve control, VTEC control.
No DTC mask available.

Honda Continental

Editing calibrations of all normal aspirated Honda Petrol vehicles with Continental ECUs with MCUs Motorola MPC5554 2Mb.
Available maps: Camshaft angle control (VTC), Closed loop lambda, injector opening time, WOT determining mode, fuel compensations for temperature, target lambda at High VTEC and Low VTEC, idle speed control, Knock limits, knock sensitivity, knock retardation, spark advance at High VTEC and Low VTEC, throttle valve control, VTEC control.
No DTC mask available.

Honda Bosch Petrol Turbo

Editing calibrations of the turbocharged Honda Petrol vehicles with Bosch MED17.9.3 ECUs.
Available maps: airmass calculation through throttle body, calculated nominal charge, optimal torque, and maximal indicated torque in normal and sport modes, boost controller calculating from efficiency and desired position for wastegate, boost limitation factors via temperature and knocking, engine speed limitation in different operation modes, exhaust gas temperature model, target fuel pressure

maps, functions monitoring base maps for torque, ignition, lambda, idle speed maps, injector corrections and open time calculation, nominal lambda and lambda efficiency, requested torque for all known operation modes, ignition efficiency, base spark advance, minimal spark advance, spark advance retardation thresholds, minimal spark advance, desired throttle position, and also intake and exhaust camshaft control, vehicle speed limitation(when found). DTC mask editor also available.

Honda Motorola

Editing calibrations of all normal aspirated Honda Petrol vehicles with Motorola ECUs with MCUs Renesas SH7055 512Kb and SH7058 1024Kb.

Available maps: Camshaft angle control (VTC), Closed loop lambda, injector opening time, WOT determining mode, fuel compensations for temperature, target lambda at High VTEC and Low VTEC, idle speed control, Knock limits, knock sensitivity, knock retardation, spark advance at High VTEC and Low VTEC, throttle valve control, VTEC control and also REV limiter!

Honda Panasonic

Editing calibrations of all normal aspirated Honda Petrol vehicles with Panasonic ECUs with MCUs Infineon Tricore TC179X with 4Mb internal memory.

Available maps: camshaft angle control (VTC), WOT determining mode, target lambda at High VTEC and Low VTEC, Knock limits, knock sensitivity, knock retardation, spark advance at High VTEC and Low VTEC, and also REV limiter!

Honda Hitachi 0.66 Turbo

Editing calibrations of Honda/Acura Petrol 0.66 Turbo (S07A Turbo) vehicles with Hitachi ECUs.

Supported vehicles Honda S660 (2014+), Honda N-One, Honda N-Box etc.

Available maps: Desired boost pressure, boost pressure limitation, wastegate position, target camshaft angle, injector control and MAP to determine WOT, MAF scaling, lambda scaling, main fuel maps, target lambda, idle speed control, knock limit for spark advance, spark advance, throttle valve control and engine speed limitation.

Honda Keihin 2.3 Turbo

Editing calibrations of Honda/Acura Petrol 2.3 Turbo vehicles with Keihin ECUs. ECU is based on MCU Renesas SH7058 with 1Mb of internal memory.

Available maps: desired boost pressure, camshaft angle control (VTC), Closed loop lambda, injector opening time, WOT determining mode, fuel compensations for temperature, target lambda at High VTEC and Low VTEC, idle speed control, Knock limits, knock sensitivity, knock retardation, spark advance at High VTEC and Low VTEC, throttle valve control, VTEC control and also REV limiter!

Honda Keihin 1.5 Turbo

Editing calibrations of the Honda/Acura Petrol 1.5 Turbo vehicles with Keihin ECUs.

Air calculation and boost: intake system efficiency, boost pressure threshold for wastegate operation, wastegate duty, boost limitation by EGT, load limitation, maximal boost by atmospheric pressure, maximal boost by intake temperature, maximal boost ratio, desired boost pressure, exhaust back pressure after catalyst

Camshaft control: intake camshaft position, exhaust camshaft position at part and full loads

EGT: Calculated EGT

Idle: desired idle speed, desired idle speed after start

Injector control: injector opening time from fuel pressure, injector scaling

Knock control: Air charge limitation for knocking, spark advance limitation on knocking, knock retardation

Limits: engine speed limitation, vehicle speed limitation

Modes switches: MAF threshold to enter full load, MAP threshold to enter full load, throttle position to enter full load (available maps depends on software)

Overrun cutoff: overrun cutoff MAP cut/restore, injector restart cut/restore

Sensors scaling: MAF sensor scaling, lambda scaling

Spark advance: minimal spark advance, spark advance EGR dependent, spark advance retardation,

spark advance correction EGR dependent, spark advance correction by ECT and IAT, spark advance correction from camshaft angle
Target lambda: Lean best torque, target lambda at full load, target lambda in closed loop
Throttle valve control: Airmass flow through throttle body, driving force, throttle position linearisation, throttle position limitation, throttle position request, base torque, torque limitation for AT
DTC table is not available, but we are adding some helpful switches: underboost error switch, rear O2 sensor switch

Honda Keihin 2.0 Turbo

Editing calibrations of the Honda/Acura Petrol 2.0 Turbo vehicles with Keihin ECUs.
Air calculation and boost: intake system efficiency, boost pressure threshold for wastegate operation, wastegate duty, boost limitation by EGT, load limitation, maximal boost by atmospheric pressure, maximal boost by intake temperature, maximal boost ratio, desired boost pressure, exhaust back pressure after catalyst
Camshaft control: intake camshaft position, exhaust camshaft position at part and full loads
EGT: Calculated EGT
Idle: desired idle speed, desired idle speed after start
Injector control: injector opening time from fuel pressure, injector scaling
Knock control: Air charge limitation for knocking, spark advance limitation on knocking, knock retardation
Limits: engine speed limitation, vehicle speed limitation
Modes switches: MAF threshold to enter full load, MAP threshold to enter full load, throttle position to enter full load (available maps depends on software)
Overrun cutoff: overrun cutoff MAP cut/restore, injector restart cut/restore
Sensors scaling: MAF sensor scaling, lambda scaling
Spark advance: minimal spark advance, spark advance EGR dependent, spark advance retardation, spark advance correction EGR dependent, spark advance correction by ECT and IAT, spark advance correction from camshaft angle
Target lambda: Lean best torque, target lambda at full load, target lambda in closed loop
Throttle valve control: Airmass flow through throttle body, driving force, throttle position linearisation, throttle position limitation, throttle position request, base torque, torque limitation for AT
DTC table is not available, but we are adding some helpful switches: underboost error switch, rear O2 sensor switch

Mitsubishi

Mitsubishi Denso Diesel SH7058

Editing calibrations Denso ECUs of diesel Mitsubishi vehicles. MCU SH7058.
Supported file size — 1Mb.
Available maps:
Airmass flow: desired airmass, desired airmass with disabled EGR
Boost control: boost pressure limitation f via boost air temperature, boost pressure limitation, desired boost pressure, boost pressure actuator duty cycle
Injection: Base injection time dynamic, injection time from rail pressure
Injection volume: torque to injection volume conversion for different modes, injection volume limitation, injection volume limiters for system errors, injection volume conditional limitation
Rail pressure: desired rail pressure, rail pressure in case of error, limitation of rail pressure
Start of injection: start of main injection base and corrected
Torque management: injection volume to torque conversion, requested torque, maximal torque, torque limitation, torque limitation in case of system error, inverse pedal map for torque and engine speed
DTC mask editor

Mitsubishi Denso Diesel SH7059

Editing calibrations of Denso ECUs of diesel Mitsubishi vehicles. MCU SH7059.
Supported file size — 1.5 Mb.

Available maps:

Airmass flow: desired airmass, desired airmass with disabled EGR

Boost control: boost pressure limitation f via boost air temperature, boost pressure limitation, desired boost pressure, boost pressure actuator duty cycle

Injection: Base injection time dynamic, injection time from rail pressure

Injection volume: torque to injection volume conversion for different modes, injection volume limitation, injection volume limiters for system errors, injection volume conditional limitation

Rail pressure: desired rail pressure, rail pressure in case of error, limitation of rail pressure

Start of injection: start of main injection base and corrected

Torque management: injection volume to torque conversion, requested torque, maximal torque, torque limitation, torque limitation in case of system error, inverse pedal map for torque and engine speed

DTC mask editor

Mitsubishi Denso Diesel SH72xxx

Calibrations editing of Denso ECU of diesel Mitsubishi vehicles. MCU supported is SH72xx.

Supported filesize — 2.0 Mb.

Available maps:

Airmass flow: Desired airmass flow at disabled EGR, Desired airmass flow base

Boost pressure: Boost limitation via boost air temperature, Boost pressure actuator duty cycle base, Boost pressure actuator duty cycle, Boost pressure limitation base, Desired boost pressure, Torque limitation by atmospheric pressure in additional mode

Injection: Injection time base from the rail pressure

Injection volume: Torque to injection volume conversion base in additional mode

Injection volume limitation: Base injection volume limiter by gear position, Injection volume limitation, Injection volume limitation by atmospheric pressure, Injection volume limitation by coolant temperature, Injection volume limitation by vehicle speed, Injection volume limitation for vehicle speed limitation in additional mode, Injection volume limitation in case of system error 1

Rail pressure: Target rail pressure, Target rail pressure base, Target rail pressure in case of error, Rail pressure limiter

Torque: Inverse pedal map for torque and engine speed in additional mode, Requested torque

Torque from injection volume: Torque check from injection volume

DTC

Renault

Renault Siemens EMS3150

Editing calibrations of Siemens EMS3150 ECUs of petrol turbocharged Renault / Dacia vehicles.

Available maps:

Boost control: wastegate duty cycle, maximal boost pressure and maximal airmass flow, also torque threshold to start control wastegate;

Engine speed limitation;

Idle speed: desired idle speed for drive and neutral modes, idle speed for A/C;

Injection timing: start of 1st injection for cold and warm engine, end of 2nd injection for both temperature modes;

Knock: knock detection factors and offsets Lambda: open/closed loop changing conditions, target closed loop and open loop enrichments for 4 engine states;

Torque: maximal indicated mean torque, maximal absolute effective torque, indicated torque for gearbox limitation, requested effective torque, indicated torque from manifold pressure, torque loss, correction factors for torque limitation, torque safety monitoring;

Ignition: Optimal spark advance for camshaft position, optimal spark advance, maximal spark advance, preventive knock correction, spark advance efficiency(advance degradation);

Rail pressure;

VVT: intake and exhaust camshaft position control;
DTC mask editor

Nissan

Nissan Hitachi Petrol Turbo Gen1

Editing calibrations Hitachi Gen1 ECU of petrol Turbo Nissan vehicles (Juke 1.6T, Tiida 1.6T, GTR). MCU Renesas SH7058.

Available maps: Desired boost pressure, boost pressure limitation factor, boost pressure cutoff multiplier, wastegate duty from rpm and boost, target wastegate duty, wastegate multiplier, catalyst temperature map, closed map injection map, open loop enrichment map for part load and full load, target a/f gains, throttle valve injection compensation, scalings for: A/F sensor, MAF, Throttle valve opening angle, basis for QH0 calculation, spark advance trimming maps for low and high octane, base trimming, optimal spark advance for high and low octane fuel, unburned advance compensation, knock sensitivity curve per cylinder, engine torque map, QH0 to torque conversion maps, powertrain force map, maximal and minimal powertrain force, engine speed limitation, vehicle speed limitation (when found). Available DTC error mask to edit.

Nissan Hitachi Petrol Gen2

Editing calibrations of Hitachi Gen2 ECUs of petrol NA and Turbo Nissan vehicles. MCU Renesas SH72533 with filesize 2.0MB.

The following maps are available: PID gains for boost controller, boost ratio correction, target boost, boost limitation maps, injection alpha-n calibration map, a/f ratio conversion maps for normal and stratified injection modes, injection timing, fuel rail pressure, pedal to QH0 conversion maps, injector compensation, engine speed limitation and launch assist rev limiter for MT, spark advance base and optimal maps, retardation limit for spark advance, torque from QH0 conversion, target drive force map, and also camshaft (VVT) control for intake and exhaust VTC, and also vehicle speed limiter available (when found!).

Nissan Hitachi Petrol Gen1 SH7055

Editing calibrations of Hitachi Gen1 ECU of petrol normal aspirated Nissan/Infiniti vehicles. MCU Renesas SH7055.

Supported filesize 512KB.

Available maps: Fresh air rate maps basic and advanced for acceleration/deacceleration, closed and open loop enrichment, injection compensations factors and fuel mixture compensations, MAF scalings, QH0 basics and throttle opening map curve, knock sensitivity, spark advance trimming for low/high octane, engine torque map, engine torque conversion from QH0, powertrain force maps and slow driving mode adaptation for torque, and also engine speed limitation, and DTC table (if available).

Nissan Hitachi Petrol Gen1 SH7058

Editing calibrations of Hitachi Gen1 ECUs of petrol normal aspirated Nissan/Infiniti vehicles. MCU Renesas SH7058.

Supported filesize 1024 KB.

Available maps: Fresh air rate maps basic and advanced for acceleration/deacceleration, closed and open loop enrichment, injection compensations factors and fuel mixture compensations, MAF scalings, intake camshaft position, QH0 basics and throttle opening map curve, knock sensitivity, spark advance trimming for low/high octane, engine torque map, engine torque conversion from QH0, powertrain force maps and slow driving mode adaptation for torque, and also engine speed limitation, and DTC mask editor!

Nissan Hitachi Petrol Gen1 SH7059

Editing calibrations of Hitachi Gen1 ECUS of petrol normal aspirated Nissan/Infiniti vehicles. MCU Renesas SH7059.

Supported filesize 1.5 MB.

Available maps: Closed and open loop enrichment, injection compensations factors and fuel mixture compensations, MAF scalings, QH0 basics and throttle opening map curve, knock sensitivity, load

compensation, spark advance trimming for low/high octane, optimal spark advance for high/low octane fuel, intake camshaft position, engine torque map, engine torque conversion from QH0,A/F gain bank 1/2, powertrain force maps, and also engine speed limitation, and DTC editor!

Nissan Hitachi Petrol Gen1 SH72xx

Editing calibrations of Hitachi Gen1 ECUs of petrol normal aspirated Nissan/Infiniti vehicles. MCU Renesas SH72xx.

Supported filesize 1.25 & 2.0 MB.

Available maps: Closed and open loop enrichment, injection compensations factors and fuel mixture compensations, MAF scalings, QH0 basics and throttle opening map curve, knock sensitivity, load compensation, spark advance trimming for low/high octane, optimal spark advance for high/low octane fuel, intake camshaft position, engine torque map, engine torque conversion from QH0,A/F gain bank 1/2, powertrain force maps, and also engine speed limitation, and DTC editor!

Nissan Hitachi Petrol Gen1 SH7054

Editing calibrations of Hitachi Gen1 ECUs of petrol normal aspirated Nissan/Infiniti vehicles. MCU Renesas SH7054.

Supported filesize 384KB.

Available maps: Fresh air rate maps basic and advanced for acceleration/deacceleration, closed and open loop enrichment, injection compensations factors and fuel mixture compensations, MAF scalings, QH0 basics and throttle opening map curve, knock sensitivity, spark advance trimming for low/high octane, engine torque map, engine torque conversion from QH0, powertrain force maps and slow driving mode adaptation for torque, and also engine speed limitation, and DTC table!

Nissan Hitachi Petrol Full

Package of 7 modules to edit all petrol Nissan/Infiniti vehicles with Hitachi ECUs with Renesas SH7xxx MCUs. 15% saving on purchase.

Modules list:

- Nissan Hitachi Petrol Gen1 SH7054;
- Nissan Hitachi Petrol Gen1 SH7055;
- Nissan Hitachi Petrol Gen1 SH7058;
- Nissan Hitachi Petrol Gen1 SH7059;
- Nissan Hitachi Petrol Gen1 SH72xx;
- Nissan Hitachi Petrol Turbo Gen1;
- Nissan Hitachi Petrol Gen2.

Nissan Denso Diesel SH7058

Editing calibrations of Denso ECUs of diesel Nissan vehicles. MCU SH7058.

Supported filesize 1 MB.

Available maps: Desired airmass flow, desired boost pressure, boost limitation maps, injection quantity limitation for different conditions, smoke limitation, injection time from rail, injection time advanced, ECT, MAF scalings, EGT sensors scalings, rail pressure base, rail pressure limiter, regeneration quantity(if available), start of main injection, start of main injection during regeneration, relative torque request, torque request (for gearbox and monitoring). DCT mask.

Nissan Denso Diesel SH7059

Editing calibrations of Denso ECUs of diesel Nissan vehicles. MCU SH7059.

Supported filesize 1.5 MB.

Available maps: Desired airmass flow, desired boost pressure, boost limitation maps, injection quantity limitation for different conditions, smoke limitation, torque to injection quantity conversion, injection time, ECT, MAF scalings, EGT sensors scalings, rail pressure base, rail pressure limiter, rail pressure base, rail pressure limiter, start of main injection, relative torque request, torque limitation, torque reducing, torque request from injection quantity, smoke limitation by torque. DTC mask.

VAG group

Marelli IAW 7GV

Editing of Magneti Marelli IAW7GV ECU files.

Available maps:

Injection timing, injection correction depends on temperature and injection at start.

Idle engine speed in all available modes

Friction and drag torque control, indicated torque control, relative and requested torque at different conditions, full load torque limitation, slow down torque, power limit torque and more...

Knock control sensitivity, spark advance correction, maps to detect good/bad fuel

Rev limiter(engine speed limiter)

Exhaust gas model: temperature and pressure calculation and corrections

Calculation of airmass, compression ratio, air density values, correction of airmass

Spark advance, base, optimal, minimal angles, correction of advance

Target lambda in part load, full load, WOT mode, combustion efficiency by lambda

Speed limitation values

Throttle valve target position maps, mechanic law of throttle valve, maximal request of position

Attention! Due to big number of maps requests for adding new SW files will be processed up to 1 day.

Marelli IAW 9GV

Editing of Magneti Marelli IAW 9GV ECU files. ECUs used in VAG group vehicles with 1.6 CFZA engines.

Available maps:

Idle engine speed in all available modes

Friction and drag torque control, indicated torque control, relative and requested torque at different conditions, full load torque limitation, slow down torque, power limit torque and more...

Knock control sensitivity, spark advance correction, maps to detect good/bad fuel

Rev limiter(engine speed limiter)

Exhaust gas model: temperature and pressure calculation and corrections

Calculation of airmass, compression ratio, air density values, correction of airmass

Spark advance, base, optimal, minimal angles, correction of advance

Target lambda in part load, full load, WOT mode, combustion efficiency by lambda

Throttle valve target position maps, mechanic law of throttle valve, maximal request of position

Ford

Marelli IAW7GFR

Editing of Magneti Marelli IAW7GFR ECU files. ECU used in FoMoCo vehicles.

Available maps: idle speed control, revolutions limiter(engine speed limitation), airmass calculation and corrections, throttle valve control, lambda control at part load and full load, torque calculation: requested, indicated, relative torque, torque limitation, and also ignition advance angles with corrections.

Supported vehicles:

Ford EcoSport 1.6

Ford EcoSport 2.0

Delphi DCM6.1

Editing calibrations of the turbodiesel Ford vehicles with Delphi DCM6.1 ECUs.

Available maps: desired airmass flow and airmass flow for EGR control, target boost pressure and boost pressure limitation maps, vnt control maps for boost pressure regulation, egr activation modes, injection calculation from torque, target lambda for smoke limitation, target rail pressure and rail pressure limitation, start of main injection maps, conditional torque limitation for environment pressure, vehicle speed, overheating protection, nominal requested torque from pedal position for all gears and launch control, error case torque limitation, base torque for full load, maximum allowed torque, torque limiters for manual transmission, torque limitation for engine speed.

Korea

Kefico CPEGD2/CPGDSH2

Editing calibrations of Kefico CPEGD2/CPGDSH2 ECUs of petrol normal aspirated and turbocharged Kia/Hyundai.

Available maps:

Air charge control: Mass air flow pulsation correction, target air filling

Boost control: Turbine and compressor part efficiency, warm up isobar process

Exhaust gas: Ignition angle correction by EGT, static exhaust gas temperature

Injector control: Start of 1st injection, start of 1st injection during start, start of 1st injection in warm mode

Knock control: Knock sensitivity, detonation regulation window, spark advance retardation step, detonation measurement window

Limiters: Engine speed limitation from coolant, oil, intake temperatures

Rail pressure: Target rail pressure at part and full loads, rail pressure limiters and maximal value

Spark advance: Angle characteristic map for knock correction, delta ignition base, minimal spark advance, delta ignition for overboost protection, optimal spark advance, spark advance base

Throttle valve control: Airmass flow through throttle valve, throttle valve position, throttle position from pedal position direct law

Torque model: Drag loss torque, optimal indicated torque, full load detection threshold, ignition angle efficiencies, lambda efficiency, maximal indicated torque in normal and sport modes, minimal efficiency

Torque request: Requested torque on all gears and modes, inverse pedal position map for torque checkout

VVT: Intake camshaft position at catalyst heat, intake camshaft position base, intake camshaft position warm engine

Warm up: Warm up correction for combustion, weighing factor for combustion for both temperatures, temperature correction factor for throttle

DTC mask editor

Bosch ME(G)17.9.1x

Editing calibrations of Bosch ME(G)17.9.11/12/13 ECUs of petrol normal aspirated Kia/Hyundai vehicles.

Available maps:

Airmass calculation: airmass flow through throttle valve, calculated target filling, maximal airmass flow through throttle valve

Fan switching temperature

Idle: desired idle speed AT, MT, when moving

Injector control: injection end timing, injector dead time, injector flow constant, minimal injection time

Knock control: knock sensitivity per cylinder

Limiters: engine speed and vehicle speed limitation

Spark advance: minimal spark advance, optimal spark advance, base spark advance, optimal spark advance corrections, base spark advance corrections, spark advance temperature corrections, spark advance correction by target lambda

Target lambda: maximal rich lambda, target lambda at full load, at part load, target lambda for component protection

Torque control: spark advance efficiency, lambda efficiency, optimal torque, throttle valve position and limitation of throttle position, torque increasing and decreasing speed

VVT: intake camshaft position

DTC editor

Bosch ME(D)(G)17.9.8

Editing calibrations of Bosch ME(D)(G)17.9.8 ECUs of petrol normal aspirated and turbocharged Kia/Hyundai vehicles.

Available maps:

Air charge control: Mass air flow pulsation correction, target air filling

Boost control: Turbine and compressor part efficiency, warm up isobar process

Exhaust gas: Ignition angle correction by EGT, static exhaust gas temperature

Injector control: Start of 1st injection, start of 1st injection during start, start of 1st injection in warm mode

Knock control: Knock sensitivity, detonation regulation window, spark advance retardation step, detonation measurement window

Limiters: Engine speed limitation from coolant, oil, intake temperatures

Rail pressure: Target rail pressure at part and full loads, rail pressure limiters and maximal value

Spark advance: Angle characteristic map for knock correction, delta ignition base, minimal spark advance, delta ignition for overboost protection, optimal spark advance, spark advance base

Throttle valve control: Airmass flow through throttle valve, throttle valve position, throttle position from pedal position direct law

Torque model: Drag loss torque, optimal indicated torque, full load detection threshold, ignition angle efficiencies, lambda efficiency, maximal indicated torque in normal and sport modes, minimal efficiency

Torque request: Requested torque on all gears and modes, inverse pedal position map for torque checkout

VVT: Intake camshaft position at catalyst heat, intake camshaft position base, intake camshaft position warm engine

Warm up: Warm up correction for combustion, weighing factor for combustion for both temperatures, temperature correction factor for throttle

DTC mask editor

Continental SIM2K-24x

Editing calibrations of Continental SIM2K-24x ECUs of petrol normal aspirated and turbocharged Kia/Hyundai vehicles.

List of available maps:

Air calculation: correction of measured MAF, maximal airmass flow, target mass air flow from torque

Boost control: calculated charger speed, maximal boost pressure, minimal boost pressure, pressure ratio, wastegate duty cycle, wastegate pressure

Exhaust temperature model: basic EGT, basic/reference spark advance for EGT model

Idle speed: nominal idle speed AT/MT, with A/C, without A/C

Knock control: knock sensors gains

Rail pressure: target rail pressure, target rail pressure at start, rail pressure at catalyst heating

Spark advance: maximal spark advance correction, minimal spark advance, spark advance at part load, spark advance at start, spark advance base, spark advance retardation for torque correction, spark advance angle efficiency

Target lambda: base lambda, target lambda at full load, target lambda on throttle opening

Throttle valve control: airmass flow through throttle body, maximal throttle position for AT/MT,

Reduced area of throttle for MT/AT

Torque model: requested torque, factor for indicated torque limitation, indicated torque, requested torque threshold for full load mode

VVT: exhaust camshaft position, intake camshaft position

Injector control: injection time dynamic map

Limiters: engine speed limitation, vehicle speed limitation (when found)

DTC editor

Bosch ME(G)17.9.2x

Editing calibrations Bosch ME(G)17.9.21/22 and ME17.9.2 ECUs of petrol normal aspirated Kia/Hyundai vehicles.

Available maps:

Air charge control: Mass air flow pulsation correction, target air filling
 Exhaust gas: Ignition angle correction by EGT, static exhaust gas temperature
 Injector control: Start of 1st injection, start of 1st injection during start, start of 1st injection in warm mode
 Knock control: Knock sensitivity, detonation regulation window, spark advance retardation step, detonation measurement window
 Limiters: Engine speed limitation from coolant, oil, intake temperatures
 Spark advance: Angle characteristic map for knock correction, delta ignition base, minimal spark advance, delta ignition for overboost protection, optimal spark advance, spark advance base
 Throttle valve control: Airmass flow through throttle valve, throttle valve position, throttle position from pedal position direct law
 Torque model: Drag loss torque, optimal indicated torque, full load detection threshold, ignition angle efficiencies, lambda efficiency, maximal indicated torque in normal and sport modes, minimal efficiency
 Torque request: Requested torque on all gears and modes, inverse pedal position map for torque checkout
 VVT: Intake camshaft position at catalyst heat, intake camshaft position base, intake camshaft position warm engine
 Warm up: Warm up correction for combustion, weighing factor for combustion for both temperatures, temperature correction factor for throttle
 DTC mask editor

Continental SIM2K-26x

Continental SIM2K-260 and SIM2K-261 ECUs of petrol normal aspirated and turbocharged Kia/Hyundai vehicles.

Available maps:

Air calculation: Air mass flow through the throttle body, Target air mass flow in additional mode
 Driver request: Driver interpretation map
 Exhaust camshaft position: Exhaust camshaft position setpoint
 Exhaust gas temperature model: Basic engine out exhaust gas temperature for reference conditions, Basic ignition angle for the exhaust gas temperature model, Engine out exhaust gas temperature in case of full cylinder shut off after very long PUC duration, Reference ignition angle for the exhaust gas temperature model
 Fuel pressure: Fuel pressure setpoint in additional mode
 Idle speed: Nominal idle speed in additional mode
 Ignition maps: Basic ignition angle, Basic minimum ignition angle difference value, Ignition correction via intake air temperature, Reference ignition angle
 Intake camshaft position: Intake camshaft position in additional mode
 Limiters [if found]: Maximum speed limiter (higher threshold), Maximum speed limiter (lower threshold)
 Target Lambda: Lambda for component protection, Lambda full load enrichment, Reference lambda value
 Throttle control: Manual throttle position setpoint, Maximum throttle position setpoint at ignition key on for non TCI and A/T
 Torque model: Coolant and oil temperature correction of friction torque, Frictional and pumping torque losses of the engine, Indicated engine torque at reference conditions
 Turbo system: Air Temperature increase factor through the turbocharger compressor, Basic wastegate EPC temperature, Limitation of PQ_SCHA, Map for boost pressure actuator setpoint, Maximum allowed pressure quotient at turbo charger compressor, Maximum charge air pressure quotient for charge air pressure too high (CAP_H) diagnosis, Maximum Pressure ratio at charger for activation of MAP_CTL plausibility diagnoses, Minimum charge air pressure quotient for charge air pressure too low (CAP_L) diagnosis, Open loop wastegate control signal, Pressure ratio at the wastegate actuator EPC, Pressure up throttle setpoint, Standardized turbocharger speed, Hysteresis value for end of surge definition — in idle, Maximum pressure up throttle at standard conditions, Surge line definition (component characteristic) for LV_SURGE detection
 DTC

Continental SIM2K-25x

Software module for editing calibrations Continental SIM2K-250/251/253/258/259 ECUs of petrol normal aspirated and turbocharged Kia/Hyundai vehicles.

Available maps:

Air Calculation: Basic air mass flow through the throttle body depend on TPS and engine speed, Setpoint mass air flow depending on slow torque setpoint in additional mode, Constant to define the maximum air temperature, Maximum air temperature setpoint that could be controlled using the torque setpoint reduction

Driver Request: Driver interpretation map in additional mode, Driver interpretation map for automatic transmission vehicle

Exhaust temperature model: Basic engine out exhaust gas temperature for reference conditions, Basic ignition angle for the exhaust gas temperature model, Reference ignition angle for the exhaust gas temperature model

Fuel pressure: Calculation of mass fuel flow, Fuel pressure setpoint in additional mode

Idle speed: Nominal idle speed with air conditioner switched on (A/T), Nominal idle speed with air conditioner switched on (M/T), Nominal idle speed with air conditioner switched on and vehicle rolling (M/T), Nominal idle speed with DRIVE (A/T) engaged, Nominal idle speed with DRIVE (A/T) engaged and air conditioner switched on

Ignition maps: Basic ignition angle, Basic minimum ignition angle difference value, Ignition correction, Ignition correction via coolant temperature, Ignition correction via intake air temperature, Reference ignition angle

Target lambda: Lambda for component protection, Lambda full load enrichment, Reference lambda value

Throttle valve control: Manual throttle position setpoint, Maximum throttle position setpoint at ignition key on for non TCI and A/T

Torque model: Coolant and oil temperature correction of friction torque, Frictional and pumping torque losses of the engine, Indicated engine torque at reference conditions, Maximum torque, Maximum torque due to coolant temperature, Maximum torque due to oil temperature, Minimum torque, Basic ignition angle efficiency, Lambda efficiency, The Torque setpoint that could be set as threshold when the turbocharger protection bit is active, Torque limitation for turbocharger protection based on boost pressure actuator, Torque limiter depended on fuel tank level

Turbo pressure: Ambient pressure based maximum turbocharger speed, Calculated turbo charger speed, Customer specific maximum turbocharger speed, Intake air temperature based maximum turbocharger speed, Boost pressure actuator setpoint, Maximum charge air pressure quotient for charge air pressure too high (CAP_H) diagnosis, Minimum charge air pressure quotient for charge air pressure too low (CAP_L) diagnosis, Open loop wastegate control signal, Pressure up throttle setpoint, Max. pressure up throttle at standard conditions

DTC

Kefico CPEGD3/CPEGP3

Software module for editing calibrations Kefico CPEGD3/CPEGP3 ECUs of petrol normal aspirated and turbocharged Kia/Hyundai.

Available maps for Kefico CPEGD3.20.1:

Air charge control: Pulsation correction for mass air flow, Target air charge

Boost control: Characteristic map pressure ratio over turbine, Turbo compressor efficiency, Warmup isobar process for charger

Exhaust gas corrections: Ignition angle correction by exhaust gas flow during homogenous mode, Static exhaust gas temperature in manifold, Static exhaust gas temperature in shift operation

Function monitoring: Optimum engine torque in function monitoring, Optimum ignition angle

Idle speed: Desired idle speed

Knock control: Detonation regulation window start, Knock sensitivity factor

Limiters: Engine speed limitation

Rail pressure: Target rail pressure

Spark Advance: Delta ignition angle base, Minimum spark advance, Spark advance base, Spark advance ignition angle correction, Spark advance retardation step

Target lambda: Full load enrichment, Full load enrichment in split mode, Lambda correction from exhaust gas flow, Minimal target lambda, Target lambda for component protection, Lambda efficiency
Throttle valve control: Airmass flow through throttle valve, Throttle valve position
Torque model: Drag loss torque, Optimal indicated air torque, Ignition angle delta efficiency, Ignition angle efficiency depending on angle delta, Ignition angle efficiency depending on angle delta in split mode, Indicated torque limitation, Minimal defined efficiency
Torque request: Inverse pedal position map, Requested torque by pedal position
VVT: Exhaust camshaft position
Warm up: Weighting factor for combustion for intake temperature and coolant temperature, Temperature factor for air throttle
DTC

Available maps for Kefico CPEGP3.20.2:

Air charge control: Pulsation correction for mass air flow, Target air charge
Exhaust gas corrections: Static exhaust gas temperature in manifold, Static exhaust gas temperature in shift operation
Function monitoring: Optimum engine torque in function monitoring, Optimum ignition angle
Idle speed: Desired idle speed
Knock control: Detonation regulation window start, Knock sensitivity factor, Spark advance retardation step
Limiters: Engine speed limitation
Spark Advance: Delta ignition angle base, Minimum spark advance, Spark advance base, Spark advance ignition angle correction
Target lambda: Full load enrichment, Full load enrichment in split mode, Lambda correction from exhaust gas flow, Minimal target lambda, Target lambda for component protection, Lambda efficiency
Throttle valve control: Airmass flow through throttle valve, Throttle valve position
Torque model: Drag loss torque, Optimal indicated air torque, Ignition angle delta efficiency, Ignition angle efficiency depending on angle delta
Torque request: Inverse pedal position map, Requested torque by pedal position
VVT: Exhaust camshaft position
Warm up: Weighting factor for combustion for intake temperature and coolant temperature, Temperature factor for air throttle
DTC

Attention! No URGENT requests are available for this module.

BMW Bosch EDC17CP45

Editing calibrations Bosch EDC17CP45 ECUs of diesel BMW vehicles.

Supported filesize 4MB.

Available maps:

Airmass: desired airmass flow with enabled and disabled EGR, maximal airmass flow, airmass correction

Boost control: boost controller duty cycle base, in regeneration, in double injection mode, with disabled EGR, maximal boost controller duty cycle

Boost pressure: boost pressure limitation, desired boost pressure base, in regeneration, in double injection mode, with disabled EGR, with closed bypass

DPF: Enable switches for DPF, regeneration lookup mask, exhaust sensor scaling and check conditions

EGR control: thresholds for enable/disable EGR

EGT Sensors: EGT sensors scalings, switches and check conditions

Injection: injection quantity from torque conversion maps, injector opening time, post injection quantity

Rail pressure: Rail pressure base, at idle, rail pressure limiters, P, I components for flow regulator, injection flow regulator map, rail pressure regulator maps

Start: engine speed after start, start torque, minimal engine speed

Start of injection: base start of injection angle for main injection, time component between Pi1 and Pi2

Target lambda for smoke limitation

Torque limitation: torque limitation inner/outer torque, powertrain torque, conditional torque limitation from EGT, exhaust pressure, fuel temperature, torque limitation in system errors.

Torque monitoring: torque limitation in monitoring mode, accelerator pedal for monitoring

Requested torque: requested torque from accelerator pedal base, requested torque correction factors from coolant and atmospheric pressure

DTC editor

Bosch EDC17CP09

Editing calibrations of Bosch EDC17CP09 ECUs of diesel BMW vehicles.

Supported filesize 4MB.

Available maps:

Airmass: desired airmass flow with enabled and disabled EGR, maximal airmass flow, airmass correction
 Boost control: boost controller duty cycle base, in regeneration, in double injection mode, with disabled EGR, maximal boost controller duty cycle
 Boost pressure: boost pressure limitation, desired boost pressure base, in regeneration, in double injection mode, with disabled EGR, with closed bypass
 DPF: Enable switches for DPF, regeneration lookup mask, exhaust sensor scaling and check conditions
 EGR control: thresholds for enable/disable EGR
 EGT Sensors: EGT sensors scalings, switches and check conditions
 Injection: injection quantity from torque conversion maps, injector opening time, post injection quantity
 Rail pressure: Rail pressure base, at idle, rail pressure limiters, P, I components for flow regulator, injection flow regulator map, rail pressure regulator maps
 Start: engine speed after start, start torque, minimal engine speed
 Start of injection: base start of injection angle for main injection, time component between Pi1 and Pi2
 Target lambda for smoke limitation
 Torque limitation: torque limitation inner/outer torque, powertrain torque, conditional torque limitation from EGT, exhaust pressure, fuel temperature, torque limitation in system errors.
 Torque monitoring: torque limitation in monitoring mode, accelerator pedal for monitoring
 Requested torque: requested torque from accelerator pedal base, requested torque correction factors from coolant and atmospheric pressure
 DTC editor

Bosch EDC17CP02

Editing calibrations of Bosch EDC17CP09 ECUs of diesel BMW vehicles.
 Supported filesize 1.46 Mb.
 Available maps:
 Airmass: desired airmass flow with enabled and disabled EGR, maximal airmass flow, airmass correction
 Boost control: boost controller duty cycle base, in regeneration, in double injection mode, with disabled EGR, maximal boost controller duty cycle
 Boost pressure: boost pressure limitation, desired boost pressure base, in regeneration, in double injection mode, with disabled EGR, with closed bypass
 DPF: Enable switches for DPF, regeneration lookup mask, exhaust sensor scaling and check conditions
 EGR control: thresholds for enable/disable EGR
 EGT Sensors: EGT sensors scalings, switches and check conditions
 Injection: injection quantity from torque conversion maps, injector opening time, post injection quantity
 Rail pressure: Rail pressure base, at idle, rail pressure limiters, P, I components for flow regulator, injection flow regulator map, rail pressure regulator maps
 Start: engine speed after start, start torque, minimal engine speed
 Start of injection: base start of injection angle for main injection, time component between Pi1 and Pi2
 Target lambda for smoke limitation
 Torque limitation: torque limitation inner/outer torque, powertrain torque, conditional torque limitation from EGT, exhaust pressure, fuel temperature, torque limitation in system errors.
 Torque monitoring: torque limitation in monitoring mode, accelerator pedal for monitoring
 Requested torque: requested torque from accelerator pedal base, requested torque correction factors from coolant and atmospheric pressure
 DTC editor

Bosch MD1

Editing calibrations of Bosch MD1 ECUs of diesel BMW vehicles. Supports all required maps for remapping, EGR, DPF removal, and also SCR (ADBlue) removal! DTC table also supported!
 Supported filesize 7.5 Mb.
 Available maps list:

Air control: desired airmass, airmass correction
 Boost pressure: desired boost pressure, boost pressure limitation by atmospheric pressure, boost controller duty cycle with limitations
 DPF: DPF regenerations masks, DPF switch, exhaust pressure sensor flags, scalings, error voltage thresholds
 EGR Control: EGR position corrections, lower/upper thresholds for enable EGR for all modes, maximal EGR position request
 EGT sensors: all EGT sensors scalings, flags and error voltage thresholds
 Injection: injector opening time, injection quantity from torque, post injection quantities, start of main injection angle, start of injection limiters
 Rail pressure: PID-controller components, target rail pressure, rail pressure limitation, minimal rail pressure for start, rail pressure regulator
 SCR (ADBlue): Catalyst load/unload factors, switches for NOx, ADBlue injection, lambda regulation, NSC, LamCtl
 Target lambda: Target lambda for smoke limitation
 Torque limitation: main inner and outer torque limiters, torque limitation in system errors, torque limitation by EGT, exhaust pressure, fuel temperature
 Requested torque: requested torque, accelerator pedal maps for ECO,Sport,Sport+ modes, requested torque reducing by ECT and atmospheric pressure
 DTC mask

China

Bosch ME17.8.8

Editing calibrations of Bosch ME17.8.8 and Bosch ME17.8.8.1 ECUs of petrol normal aspirated and turbocharged vehicles from Chinese market.
 Supported maps:
 Air control: airmass flow through throttle valve, throttle valve position, accelerator pedal map
 Boost: wastegate duty cycle target/linerisation, P-controller, regulation basis, boost limitations
 Exhaust gas temperature
 Idle: desired idle speed AT/MT, desired idle speed with A/C, minimal idle speed
 Knock control: knock sensor sensitivity per cylinder, retardation step, retardation recovery
 Limiters: engine speed limitation
 Spark advance: base spark advance, minimal spark advance, optimal spark advance, spark advance correction from lambda
 Switch operation modes: requested torque threshold to enter full load, throttle position for full load detection
 Target lambda: target lambda at part load, full load, acceleration, warm up, delay before entering acceleration, delta correction
 Torque limitation: monitoring torque limitation, offset tolerance for allowed torque, maximal torque
 Torque model: driver requested torque, optimal indicated torque, target air filling from torque, ignition angle efficiency, indicated torque limitation, lambda efficiency, minimal efficiency
 VVT: intake camshaft position
 Fan control: switching on/off coolant
 Injector control: injection end timing
 DTC mask editor

Bosch MED17.8.10

Software module for editing calibrations Bosch MED17.8.10 ECUs of petrol vehicles from China market.
 Supported maps:
 Air Control: Airmass flow through throttle valve base, Boost pressure limitation by intake temperature, Throttle valve position from accelerator pedal, Throttle valve position from airmass flow
 Boost control: Turbo compressor efficiency, Warmup isobar process for charger
 Exhaust temperature: Exhaust gas temperature, Lambda correction by exhaust temperature

Idle speed control: Desired idle speed in additional mode

Injector control: Injection timing correction

Knock control: Knock retardation step for spark advance, Knock sensor sensitivity factor, Retardation recovery

Spark advance: Angle characteristic map for knock correction, Optimal spark advance, Spark advance in additional mode, Spark advance correction from lambda

Target lambda: Enrichment for component protection, Minimal target lambda for component protection, Requested torque threshold to detect full load, Target lambda for component protection

Torque model: Drag loss torque, Ignition angle delta efficiency, Ignition angle efficiency depending on angle delta, Indicated torque limitation normal mode, Indicated torque limitation sport mode, Minimal defined efficiency, Optimal indicated torque, Target air filling calculated from indicated torque

Torque request: Inverse pedal position in additional mode

VVT: Exhaust camshaft position, Intake camshaft position

Warm up: Lambda efficiency, Temperature factor for air throttle, Warm up correction for combustion, Weighting factor for combustion for intake temperature and coolant temperature,

DTC

FCA Group Motorola NGC4

Editing calibrations of Chrysler/Dodge/Jeep vehicles with Motorola NGC4 ECUs. MCU Motorola MPC5554 with internal FLASH memory 2MB.

The following maps are available: Volumetric efficiency calculation with multipliers and corrections, desired airflow at startup, airflow limiters, closed loop control and delays, idle speed in different modes, injection compensations, injection PWM offset, PWM scalar, pedal power request, spark advance at part load, spark advance at WOT, optimal spark advance, spark advance adjustments for coolant and intake air temperature, spark advance during VVT launch, spark advance limitation, knock retardation control, throttle valve control, VVT intake and exhaust camshaft angles, engine speed limitation in drive and P/N, vehicle speed limitation (when found). DTC mask available.

No URGENT requests allowed for this module.

Motorola NGC4A

Editing calibrations of Chrysler/Dodge/Jeep vehicles with Motorola NGC4A ECUs. MCU Motorola MPC5554 with internal FLASH memory 2MB.

The following maps are available: Volumetric efficiency calculation with multipliers and corrections, desired airflow at startup, airflow limiters, closed loop control and delays, idle speed in different modes, injection compensations, injection PWM offset, PWM scalar, pedal power request, spark advance at part load, spark advance at WOT, optimal spark advance, spark advance adjustments for coolant and intake air temperature, spark advance during VVT launch, spark advance limitation, knock retardation control, throttle valve control, VVT intake and exhaust camshaft angles, engine speed limitation in drive and P/N, vehicle speed limitation (when found). DTC mask available.

No URGENT requests allowed for this module.

Continental GPEC (SIM90)

Editing calibrations of Chrysler/Dodge/Jeep vehicles with Continental GPEC (SIM90) ECUs. MCU Motorola MPC561 with external FLASH memory 2MB.

The following maps are supported: Volumetric efficiency maps, airmass flow limiters, airmass flow through throttle body, maximal engine power and corrections of power, idle speed rpm in different modes, fuel flow, target lambda, power enrichment and warm up correction of lambda, injection timing control, injectors dead time, flow rate, and injector pressure correction, pedal requested power, throttle valve position management, spark advance with corrections for different operation modes, knock retardation, knock sensor sensitivity, gain, and also engine speed and vehicle speed limitation (when found). DTC mask also available.

No URGENT requests allowed for this module.

Continental GPEC2

Editing calibrations of Chrysler/Dodge/Jeep and Fiat vehicles with Continental GPEC2 ECUs based on MCU MPC5566 with internal flash memory 3MB.

The following maps are available: Volumetric efficiency calculation with multipliers and corrections, desired airflow at startup, airflow limiters, closed loop control and delays, idle speed in different modes, injection compensations, injection PWM offset, PWM scalar, pedal power request, spark advance at part load, spark advance at WOT, optimal spark advance, spark advance adjustments for coolant and intake air temperature, spark advance during VVT launch, spark advance limitation, knock retardation control, throttle valve control, VVT intake and exhaust camshaft angles, engine speed limitation in drive and P/N, vehicle speed limitation (when found). DTC mask available.

No URGENT requests allowed for this module.

Continental GPEC2A

Editing calibrations of Chrysler/Dodge/Jeep and Fiat vehicles with Continental GPEC2A ECUs with MCU MPC5764 with internal flash memory 4MB.

The following maps are available: Volumetric efficiency calculation with multipliers and corrections, desired airflow at startup, airflow limiters, closed loop control and delays, idle speed in different modes, injection compensations, injection PWM offset, PWM scalar, pedal power request, spark advance at part load, spark advance at WOT, optimal spark advance, spark advance adjustments for coolant and intake air temperature, spark advance during VVT launch, spark advance limitation, knock retardation control, throttle valve control, VVT intake and exhaust camshaft angles, engine speed limitation in drive and P/N, vehicle speed limitation (when found). DTC mask available.

Marelli 8Gx Petrol Turbo

Editing calibrations of 1.4 T-Jet Dodge, Jeep, Fiat and Abbarth vehicles with Continental Magneti Marelli 8Gx ECUs.

Available maps: Power and torque limitation maps, relative power request and power tables for different operation mode, idle speed control, phase of injection, engine speed limitation, target manifold pressure, manifold pressure recovery maps, compressor pressure ratio for overspeed protection, manifold pressure limitation maps, throttle pressure reduction maps for limitation boost, wastegate operation maps, base spark advance, spark advance for maximal torque, minimal spark advance, spark advance for maximal torque with corrections, target lambda for hot and cold engine, target lambda at WOT, throttle valve position calculation maps and DTC mask.

No URGENT requests allowed.

Extreme vehicles

Bosch MSE 3.0

Editing calibrations of Bosch MSE3.0 ECUs used in different types of extreme vehicles like motobikes, quads etc.

Maps available:

Airmass calculation: airmass flow through throttle valve, manifold pressure in case of sensor error, throttle valve position, calculated filling, volumetric efficiency, and gas pressure to correct airmass;
Fan switching temperature and latency;

Idle: desired idle speed, spark advance at idle;

Injector control: injector end timing at part and full load, injector flow constant and battery voltage correction;

Lambda control: Enable lambda thresholds, battery voltage to disable lambda and lambda sensors configuration;

Limiters: engine speed limitation;

Mode switch: throttle valve threshold to exit idle speed, threshold to full load;

Spark advance: base spark advance, spark advance offset, temperature corrections;

Start: cold and warm start enrichments, correction factors to reduce enrichments after start, spark advance at start;

Target lambda: target lambda at part load, at full load, at warm up, target lambda on acceleration, pulsations correction, minimal and maximal lambda.

Delphi MT05.x Edit

Editing calibrations of Delphi MT05, MT05.2 and MT05.3 ECUs.

The following maps are available for editing: Base air filling, volumetric efficiency, volumetric efficiency correction, throttle valve position to enter full mode, idle speed, spark advance at idle, correction for idle and after start modes, target lambda at part load and full load, engine speed limitation, main sensor scalings, injector scaling, spark advance at part load and full load, base spark advance, spark advance correction via coolant and intake temperature, dwell time, spark advance and lambda at engine start, vehicle speed limitation (IF FOUND!).

Arctic Cat Denso

Editing files of normal aspirated and turbocharged Arctic Cat snowmobiles with Denso ECUs 32920-49Xxx based on MCU Renesas SH7052.

Available maps: Boost pressure limitation, boost pressure reduction for overheating protection, boost limitation factor via throttle position, atmospheric pressure compensation for boost, fuel speed density, desired spark advance, ignition dwell time, injection enrichment, injection time, injector latency via battery voltage, ECT, IAT, MAF sensors scalings, engine speed limitation.

Bosch ME17.8.5

Editing files of normal aspirated and turbocharged BRP Can-Am, Ski-Doo, Sea-Doo, Spyder vehicles with Bosch ME17.8.5 ECUs.

The following maps are available:

- airmass flow calculation over throttle valve
- idle speed control
- enrichment and enleanment at acceleration and deacceleration
- injection timing control
- mixture control
- target lambda for knock protection
- spark advance optimal and base, advance correction
- ignition efficiency
- lambda efficiency
- optimal torque

Bosch M17.8.7/ME17.9.74

Editing of KTM and Polaris vehicles with Bosch M17.8.7 and and ME17.9.74 ECUs with Infineon TC1762 MCU and internal flash memory 1.5MB.

Available maps: Air filling calculation for load and throttle valve position, enrichment/enleanment factors during acceleration/deacceleration, target lambda, warm up factors, desired idle speed via engine temperature, spark advance optimal, base spark advance, spark advance retardation limit, spark advance efficiency, lambda efficiency, engine speed limitation (needs testing).

Continental M3C

Editing files of normal aspirated BRP, Arctic Cat, Ducati, Stels, Dinli and other vehicles with ECU Continental M3C.

Available maps: Desired airmass flow from throttle valve position, desired airmass flow corrections, volumetric efficiency correction, airmass correction factor from environment pressure, injector dead time correction, base spark advance, spark advance during knocking, spark advance for each cylinder, spark advance correction, spark advance recovery, spark advance retardation, target lambda from throttle position, target lambda in closed loop mode, manual lambda, lambda correction CO factor, warm up corrections, engine speed limitation.

Attention! URGENT requests are not allowed in this module.

Siemens MSE 3.7

Editing files of normal aspirated BRP, Aprilia vehicles with ECU Siemens MSE 3.7/3.71.

Available maps: Desired idle speed, thresholds to exit idle speed, injection time calculation, efficiency for injection time calculation, fuel mass from throttle position, warm up corrections, atmospheric

pressure compensation for injection, injector dead time correction, engine speed limitation, spark advance at part load, spark advance at full load, spark advance correction, throttle position sensor basis to load calculation.

Honda Moto Keihin

Editing files from Honda bikes, scooters and ATVs with Keihin ECUs.

Due to the big difference between Keihin ECU types for extreme vehicles, the set of maps available for editing can be different for every file. Indicative sets of maps is grouped by types:

R8C/H8C 32.128Kb

Axis conversion curves: engine load, engine speed, throttle position

Engine speed limitation (ON REQUEST)

Desired idle speed, idle speed regulator parameters

Injection time in closed/open loop, injection time correction, lambda to switch between open/closed loop

Lambda regulation maps

Spark advance base maps, spark advance at idle, spark advance in limp mode

Start engine speed

Warm up factors for injection time

DTC TABLE IS NOT SUPPORTED ON THIS TYPE

Map list can be not full for some files!

M32R 256Kb

All maps are divided by 2 operation modes (Normal, Sport).

Axis conversion curves: engine load, engine speed, throttle position

Engine speed limitation

Flaps close/open engine speed

Injection time by engine load, injection time by throttle position

Modes switch for engine load or TPS injection maps switch by throttle position

Scalings for sensors

Spark advance base, spark advance at full load, spark advance at idle, spark advance correction by in coolant temperature, spark advance at neutral gear/clutch

Steering damper control

Vehicle speed limitation (ON REQUEST OR IF FOUND)

Flags (ADDING ON REQUEST): O2 sensor enabled flags, O2 heater enabled flags, immobilizer enabled flag, flaps operation enabled flags

DTC TABLE IS NOT SUPPORTED ON THIS TYPE

SH7058 1Mb

Axis conversion curves: engine load, engine speed, throttle position

Engine speed limitation

Injection time by engine load, injection time by throttle position

Spark advance at idle, spark advance in limp mode, spark advance base by gear

Desired throttle position in normal, sport, sport+ modes

Vehicle speed limitation

Flags (ON REQUEST): O2 sensor enabled flags, O2 heater enabled flags, immobilizer enabled flag

DTC TABLE IS PRESENT

SPC 256/512Kb

Axis conversion curves: engine load, engine speed, throttle position

Engine speed limitation

Injection time by engine load, injection time by throttle position

Spark advance at idle, spark advance in limp mode, spark advance base by gear, gear switches to select maps

Desired idle speed
Modes switch by throttle position for injection time maps selection
Vehicle speed limitation
FLAGS are in development
DTC TABLE IS PRESENT

Attention! URGENT requests are not allowed for this module.

Bosch MSE6.0/US6.0

Calibrations editing of Bosch MSE6.0/US6.0 ECUs

Available maps:

Air control: Pulsation correction for mass air flow in additional mode
Airmass calculation: Airmass flow through throttle valve, Manifold absolute pressure in case of sensor error, Target air filling calculated, Throttle valve position from airmass flow
Airmass calculation: efficiency: Exhaust gas rest pressure, Volumetric efficiency
Exhaust gas model: Exhaust gas temperature in additional mode
Idle speed control: Desired idle speed, Desired idle speed in warm up, Elevated idle speed from battery voltage
Injector control: Injection end timing, Injection end timing full load, Injection end timing at start, Injection end timing at start by engine speed, Injection end timing cold engine, Injector dead time, Injector flow constant
Limiters: Engine speed limitation, Vehicle Speed Limitation (Test if found, not guaranteed)
Spark advance: Spark advance optimal, Spark advance base, Spark advance correction by coolant temperature
Start: Cold start enrichment, Injection correction factor for reducing enrichment on cold start, Injection correction factor for reducing enrichment on warm start, Warm start enrichment
Target lambda: Lambda configuration bitmask (0 — no lambda, 1 — front, 3 — both), Lambda Limit for combustion, Lean lambda threshold by coolant temperature, Pulsations correction factor, Target lambda at full load, Target Lambda at Partial Load, Target lambda at warm up, Target lambda on acceleration hot engine
DTC

CFMoto Bosch ME(D)17.8.10

Software module for editing calibrations of CFMoto Bosch ME(D)17.8.10 ECUs

Air Control: Accelerator pedal map
Boost limiters: Boost limitation by coolant temperature, Boost limitation from engine speed, Boost limiter to prevent overspeed
Exhaust gas model: Exhaust gas temperature, Exhaust gas temperature 2
Idle speed: Desired idle speed, Desired idle speed MT, Desired idle speed with A/C, Desired idle speed with A/C in drive
Injector control: Injection end timing 1, Injection end timing 2, Injector dead time, Injector flow constant
Knock control: ignition advance angle, Knock retardation step for spark advance, Knock sensor sensitivity factor cyl 1, Knock sensor sensitivity factor cyl 2, Knock sensor sensitivity factor cyl 3, Knock sensor sensitivity factor cyl 4, Minimal ignition angle, Retardation recovery
Limiters: Engine speed limitation 1, Engine speed limitation 2, Engine speed limitation 3, Engine speed limitation by oil temperature, Vehicle speed limiter (if found, not guaranteed)
Spark advance: Optimal spark advance
Switch operating modes: Requested torque threshold to detect full load
Target lambda: Delta correction for lambda adaptation, Target lambda at part load, Target lambda at warm-up in closed-loop, Target lambda for component protection, Target lambda in acceleration request
Throttle: Air mass flow through throttle valve, Desired throttle angle
Torque limitation: Allowed torque from accelerator pedal cold engine in monitoring, Allowed torque from accelerator pedal in monitoring, Offset tolerance for allowed torque 1, Offset tolerance for allowed torque 2, Engine speed-dependent torque 1, Engine speed-dependent torque 2, Maximal

allowed torque 1, Maximal allowed torque 2

Torque model: Driver requested torque base sport 1, Driver requested torque base sport 2, Driver requested torque base sport 3, Driver requested torque base sport 4, Driver requested torque base sport 5, Driver requested torque reverse, Optimal indicated torque, Relative drive desire torque from driving pedal — ECO, Target air filling calculated from indicated torque, Ignition angle efficiency, Lambda efficiency, Minimal defined efficiency

DTC mask

China Bosch MSE8.0

Software module for editing calibrations of Bosch MSE8.0 ECUs used in different moto/extreme vehicles (CFMoto, Sinnis, Dayang, Kove, Zontes, etc).

Available maps list:

Air Calculation: Inversed pedal characteristic map, Mass air flow through throttle valve at idle, Target air filling, Mass air flow intake temperature correction factor

Dwell: Dwell Time (Charge Coil)

Engine speed limitation: Engine speed limitation in additional mode

Fan control: Fan control sensor, Fan control temperature

Fuel: Acceleration enrichment factor, Deceleration enrichment factor Fuel enrichment at warm up 1, Post start enrichment factor, Share factor for acceleration enrichment, Share factor for deceleration enrichment, Temperature factor for air throttle valve

Lambda: Lambda for component protection, Lambda efficiency, Target lambda at full load

Spark Advance: Minimum spark advance, Optimal spark advance, Spark advance angle, Spark advance efficiency by delta ignition angle

Temperature: Exhaust gas temperature

Throttle Control: Mass air flow through throttle valve control, Maximum throttle position

Torque: Engine drag loss torque, Optimum torque, Torque limitation

Vehicle speed (if found, not guaranteed): Vehicle speed limiters

DTC

Bosch MSE9.0

Software module for editing calibrations of Bosch MSE9.0 ECUs.

Supported filesize: 6Mb.

Available maps:

Air Calculation [Flash 0 & Flash 1]: Inversed pedal characteristic map, Mass air flow through throttle valve at idle, Target air filling, Mass air flow intake temperature correction factor

Dwell [Flash 0 & Flash 1]: Dwell Time (Charge Coil)

Engine speed limitation [Flash 0 & Flash 1]: Engine speed limitation in additional mode

Fan control [Flash 0 & Flash 1]: Fan control sensor, Fan control temperature

Fuel [Flash 0 & Flash 1]: Acceleration enrichment factor, Deceleration enrichment factor Fuel enrichment at warm up 1, Post start enrichment factor, Share factor for acceleration enrichment, Share factor for deceleration enrichment, Temperature factor for air throttle valve

Lambda [Flash 0 & Flash 1]: Lambda for component protection, Lambda efficiency, Target lambda at full load

Spark Advance [Flash 0 & Flash 1]: Minimum spark advance, Optimal spark advance, Spark advance angle, Spark advance efficiency by delta ignition angle

Temperature [Flash 0 & Flash 1]: Exhaust gas temperature

Throttle Control [Flash 0 & Flash 1]: Mass air flow through throttle valve control, Maximum throttle position

Torque [Flash 0 & Flash 1]: Engine drag loss torque , Optimum torque, Torque limitation

Vehicle speed (if found, not guaranteed) [Flash 0 & Flash 1]: Vehicle speed limiters

DTC

CFMoto Bosch MG1UA008

Software module for editing calibrations of CFMoto Bosch MG1UA008 ECUs

Supported filesize: 2.5Mb

Supported maps:

Air calculation: Air mass through throttle body, Calculation of nominal charge

Engine speed limitation: Engine speed limitation during high temperature, Engine speed limitation from gear, Maximal engine speed at high oil temperature, Engine speed limitation in case of vehicle speed detection error, Maximal engine speed, Maximal engine speed in manual mode, Maximal engine speed in sport mode, Stationary engine speed limit, Stationary engine speed limit at high engine temperature, Stationary engine speed limit in manual mode, Stationary engine speed limit in sport mode

Fan Control (Test)

Function monitoring: Map of optimum engine torque in function monitoring, Optimum ignition angle, Ignition efficiency depending on delta ignition angle in monitoring, Lambda dependency of optimum

ignition angle in function monitoring, Lambda efficiency in function monitoring, Maximal inner torque in monitoring, Overrun air charge factor in monitoring

Idle speed: Desired idle speed

Knock control: Knock detection factor characteristic map cylinder counter

Lambda: Delta nominal Lambda for component protection, Lambda component protection, Lambda component protection in case of detected camshaft error, Lambda correction for exhaust temperature at valve bank, Lambda engine during after start, Lambda engine nominal at warming up with active A/F control, Lambda engine nominal at warming up with active A/F control during dynamic conditions, Lambda enrichment for component protection, Target lambda for preventing pre-ignition, Minimum lambda value for component protection, Nominal Lambda for component protection, Lambda efficiency

Limiters: Vehicle speed limitation depending on gear, Maximum vehicle speed for Cruise Control, Minimum vehicle speed for Cruise Control

Requested torque: Accelerator pedal in sport mode, Driver command torque limitation, Engine drag torque, Inverse pedal position, Load torque for low idle, Load torque for reverse gear, Maximum indicated torque for overpower protection, Maximum indicated torque limitation factor for overpower protection, Optimum engine torque, Requested torque in additional mode, Maximum indicated torque for overpower protection, Parameter maximum torque, Parameter minimum torque

Spark advance: Spark advance in additional mode, Spark advance angle characteristic, Delta ignition angle from efficiency

Temperature correction: Compensation for intake air temperature for determination of environmental air temperature, Exhaust gas temperature calculated, Exhaust temperature valve homogeneous mode, Exhaust temperature correction based on intake air temperature, Exhaust temperature valve with offset correction based on air temperature in manifold, Exhaust temperature valve with offset correction based on environment temperature, Temperature factor for air at throttle valve Throttle valve control: Desired throttle angle, Throttle angle at maximum mass flow, Full load recognition threshold, Throttle angle dependent on accelerator pedal position

VVT: Exhaust camshaft position, Intake camshaft position

DTC

Credits

2 credits pack

2 Credits pack for requesting URGENT firmware definition and for ORI files purchasing in the base.

10 credits pack

10 Credits pack for requesting URGENT firmware definition and for ORI files purchasing in the base.

100 credits pack

100 Credits pack with 15% discount for requesting URGENT firmware definition and for ORI files purchasing in the base

GM

GM ACDelco E92

Editing calibrations of ACDelco E92 ECUs of petrol normal aspirated GM vehicles (Chevrolet, Cadillac, etc).

Available maps:

Fan Control: Desired FAN control, Desired FAN control via coolant temperature

Fuel: AFR target value as stoichiometry, Dynamic Airflow High RPM, Dynamic Airflow High RPM, Mass air flow sensor scaling

Fuel:Injector: Injector Flow Rate, Injector Flow Rate Density Multiplier, Injector Flow Rate Fuel Pressure multiplier

Fuel:Open Loop: Injection enrichment ratio open loop (alcohol), Injection enrichment ratio open loop (gasoline)

Fuel:Power Enrich: Engine speed for enable power enrichment, Power enrichment, Pedal position for

enable power enrichment, Power Enrich EQ Ratio vs. RPM, Torque threshold for enable power enrichment

Idle: Idle speed in motion, Startup idle speed in drive position, Startup idle speed in P/N, Target Idle Speed vs. Coolant Temp

Knock Control: Knock sensor threshold, Knocking fast attack rate, Maximal knock retardation, Maximal retardation step

Limiters: Vehicle speed limitation, Vehicle speed limitation minimum reverse, Vehicle speed limitation minimum

Requested torque: Requested torque normal mode, Requested torque reduced power mode

RPM Limits: Engine speed limitation, Engine speed limitation fuel cut off, Engine speed limitation extreme cut, Engine speed limitation extreme restore

Spark: Main spark advance high octane, Main spark advance low octane, Minimal final spark advance, Minimal spark advance, Minimal spark advance long, Optimal spark advance, Optimal spark advance (alcohol), Spark advance cranking, Spark advance flex fuel

Torque Control: Maximal engine torque reverse gear, Maximal engine torque limitation, Peak engine torque, Torque limitation overboost

VVT: Exhaust camshaft correction by coolant temperature, Exhaust camshaft position by coolant temperature, Intake camshaft position full load, Exhaust camshaft position full load, Exhaust camshaft position high, Exhaust camshaft position high atmospheric pressure, Exhaust camshaft position low, Exhaust camshaft position medium, Intake camshaft position by coolant temperature, Intake camshaft position correction by coolant temperature, Intake camshaft position high, Intake camshaft position high atmospheric pressure, Intake camshaft position low, Intake camshaft position medium

DTC mask editor

Isuzu

Isuzu Transtron SH7058/SH7059

Editing and tuning calibrations for Transtron ECUs of diesel Isuzu vehicles. MCU supported SH7058 and SH7059. Supported filesize — 1Mb and 1.5Mb.

Supported maps:

Boost Pressure: Target Boost atmospheric pressure correction, Target Boost Base, Target Boost Coolant, Target Boost Intake Air Temperature Compensation, Target Boost Max/ Target Turbo Boost
DPF: DPF Target Rail Pressure, DPF Target Rail Pressure High, ITH Target Position DPF, Target Boost DPF Intake Air Temperature in additional Mode, Turbo Boost DPF, Injection Volume Limiter Default, Injection Volume Limiter of Overheat

EGR: EGR cut off injection threshold, EGR cut off injection threshold Hi lookup, EGR ITH Integration Base Position, EGR ITH Integration Base Position Boost Difference Compensation, EGR ITH MAF, EGR ITH MAF Target Filter, EGR ITH MAF Term Coefficient Look Up, EGR ITH Position Max Limit Base Look Up, EGR Target Position DPF in additional mode, ITH Target Position DPF in additional mode
Exhaust Temperature: Exhaust Temperature DOC, Exhaust Temperature Entrance

Injection: Injector opening time in additional mode

Rail Pressure: Target Rail Pressure Atmospheric Pressure Correction, Target Rail Pressure BASE, Target Rail Pressure Base Rate, Target Rail Pressure Coolant Temperature, Target Rail Pressure Increase, Target Rail Pressure maximum Limit, Target Rail Pressure Minimum Limit

Start Of Injection: Base Start Of Injection in additional mode, Base Start Of Injection Baro Pressure Compensation, Start Of Injection Coolant Temperature Compensation, Start Of Injection FA Compensation, Start of Injection Intake Air Temperature, Start Of Injection Maximum Limit

Target Base: Turbo Target Atmospheric Pressure Correction Ratio Base Limit, Turbo Target Atmospheric Pressure Correction Ratio to Position, Turbo Target Dlt Q Coefficient ACC, Turbo Target Position Atmospheric Pressure Correction, Turbo Target Position Base, Turbo Target Position Base at EGR, Turbo Target Position Coolant, Turbo Target Position Intake Air Temperature, Turbo Target Position MAX Limit Base, Turbo Target Position Maximum Limit Atmospheric Pressure Correction, Turbo Target Position Minimum Limit Atmospheric Pressure Correction, Turbo Target Position Minimum Limit Base

Target MAF: Desired airmass without EGR in additional mode, Target MAF per Cylinder Atmospheric Pressure Correction, Target MAF per Cylinder Coolant Compensation, Target MAF per Cylinder Intake Air Temperature, Target MAF per Cylinder, MAF Air Flow Sensor Scaling

Temperature: Coolant Temp. Sensor Performance Enable Quantity Threshold, Coolant Temp. Sensor Performance, Fuel Temperature Sensor

Torque: Torque Base, Torque Loss Base, Torque to injection volume conversion

DTC

Isuzu Transtron SH72533/SH72544

Editing and tuning calibrations for Transtron ECUs of diesel Isuzu vehicles. MCU supported SH72533 and SH72544. Supported filesize — 2Mb and 2.5Mb.

Supported maps:

Boost Pressure: Target Boost atmospheric pressure correction, Target Boost Base, Target Boost Coolant, Target Boost Intake Air Temperature Compensation, Target Boost Max/ Target Turbo Boost
DPF: DPF Target Rail Pressure, DPF Target Rail Pressure High, ITH Target Position DPF, Target Boost DPF Intake Air Temperature in additional Mode, Turbo Boost DPF, Injection Volume Limiter Default, Injection Volume Limiter of Overheat

EGR: EGR cut off injection threshold, EGR cut off injection threshold Hi lookup, EGR ITH Integration Base Position, EGR ITH Integration Base Position Boost Difference Compensation, EGR ITH MAF, EGR ITH MAF Target Filter, EGR ITH MAF Term Coefficient Look Up, EGR ITH Position Max Limit Base Look Up, EGR Target Position DPF in additional mode, ITH Target Position DPF in additional mode

Exhaust Temperature: Exhaust Temperature DOC, Exhaust Temperature Entrance

Injection: Injector opening time in additional mode

Rail Pressure: Target Rail Pressure Atmospheric Pressure Correction, Target Rail Pressure BASE, Target Rail Pressure Base Rate, Target Rail Pressure Coolant Temperature, Target Rail Pressure Increase, Target Rail Pressure maximum Limit, Target Rail Pressure Minimum Limit

Start Of Injection: Base Start Of Injection in additional mode, Base Start Of Injection Baro Pressure

Compensation, Start Of Injection Coolant Temperature Compensation, Start Of Injection
 FA Compensation, Start of Injection Intake Air Temperature, Start Of Injection Maximum Limit
 Target Base: Turbo Target Atmospheric Pressure Correction Ratio Base Limit, Turbo Target
 Atmospheric Pressure Correction Ratio to Position, Turbo Target Dlt Q Coefficient ACC, Turbo Target
 Position Atmospheric Pressure Correction, Turbo Target Position Base, Turbo Target Position Base
 at EGR, Turbo Target Position Coolant, Turbo Target Position Intake Air Temperature, Turbo Target
 Position MAX Limit Base, Turbo Target Position Maximum Limit Atmospheric Pressure Correction,
 Turbo Target Position Minimum Limit Atmospheric Pressure Correction, Turbo Target Position
 Minimum Limit Base
 Target MAF: Desired airmass without EGR in additional mode, Target MAF per Cylinder Atmospheric
 Pressure Correction, Target MAF per Cylinder Coolant Compensation, Target MAF per Cylinder Intake
 Air Temperature, Target MAF per Cylinder, MAF Air Flow Sensor Scaling
 Temperature: Coolant Temp. Sensor Performance Enable Quantity Threshold, Coolant Temp. Sensor
 Performance, Fuel Temperature Sensor
 Torque: Torque Base, Torque Loss Base, Torque to injection volume conversion
 DTC

Isuzu Transtron Aurix

Software module for editing calibrations Transtron ECUs of diesel Isuzu vehicles with 3.0TD 4JJ3 engine. Infineon Aurix MCU supported.

Available maps:

Boost Pressure: Boost limit per Atmospheric Pressure Correction, Boost limit per intake air
 temperature, Boost Pressure in additional mode, Maximum Boost Limit, Maximum Turbo Position
 Limit, Turbo position in additional mode
 DPF: DPF Boost Pressure in additional mode, Turbo position DPF in additional mode
 EGR: EGR position in additional mode, Egr target position. Intake throttle position in additional mode,
 Maximum EGR Position, Position per Quantity injection
 Injection: Injector time lift, Injector time lift Conversion
 Limiters: Conversion to Torque limit, Quantity injection limit boost, Quantity injection limit intake air
 temperature, Quantity injection limit per mass air flow, Quantity injection Low limit, Torque limit per
 Atmospheric Pressure Correction, Torque limit per clutch stoke, Torque limit per coolant temperature,
 Torque limit per coolant temperature, Maximum torque limit per coolant temperature, Torque limit
 per exhaust temperature, Torque limit per fuel temperature, Torque limit per gear, Torque limit per
 intake air temperature, Torque limit per Intercooler temperature in, Torque limit per Intercooler
 temperature out, Torque limit per Quantity, Torque limit per Speed, Vehicle Speed Limitation
 Mass Air Flow Temperature: Coolant Temperature Sensor Voltage, Fuel Temperature Sensor Voltage,
 Intake Air Temperature Sensor Voltage, Mass air flow in additional mode, Mass Air Flow Sensor
 Voltage
 Rail Pressure: Fuel rail pressure, Maximum rail pressure limit, Rail pressure start
 Start of Injection: Start of injection in additional mode
 Torque Control: Acceleration Pedal Position Conversion, Accelerator Torque Position
 DTC

Isuzu Delphi

Software module for editing calibrations of Delphi ECUs for diesel Isuzu vehicles.

Available maps:

Boost Pressure: Target Boost atmospheric pressure correction, Target Boost Base, Target Boost
 Coolant Temperature, Target Boost Intake Air Temperature Compensation, Target Boost Maximum,
 Target Turbo Boost, Turbo Boost
 DPF: DPF Target Rail Pressure, ITH Target Position DPF, Target Boost DPF Mode (if found)
 EGR: EGR cut off injection threshold, EGR cut off injection threshold Hi lookup, EGR ITH Integration
 Base Position, EGR Target Position Look Up, EGR Target Position DPF Mode, EGR ITH Position Max
 Limit Base Look Up, ITH Target Position DPF

Injection: Injection Volume Limiter Default, Injection Volume Limiter of Overheat, Injector opening time Rail Pressure: Target Rail Pressure Atmospheric Pressure Correction, Target Rail Pressure, Target Rail Pressure Coolant Temperature, Target Rail Pressure Increase, Target Rail Pressure maximum Limit, Target Rail Pressure Minimum Limit

Start Of Injection: Base Start Of Injection, Start Of Injection Coolant Temperature Compensation, Start Of Injection FA Compensation, Start of Injection by Intake Air Temperature, Start Of Injection Maximum Limit

Target Base: Turbo Target Atmospheric Pressure Correction Ratio Base Limit, Turbo Target Position Base, Turbo Target Position MAX Limit Base, Turbo Target Position Maximum Limit Atmospheric Pressure Correction, Turbo Target Position Minimum Limit Atmospheric Pressure Correction, Turbo Target Position Minimum Limit Base

Target MAF: Desired airmass without EGR, Target MAF per Cylinder, Target MAF per Cylinder, Target MAF per Cylinder Atmospheric Pressure Correction, Target MAF per Cylinder Coolant Compensation, Target MAF per Cylinder Intake Air Temperature

Torque: Torque to injection volume conversion DTC

Isuzu Transtron Aurix RZ4F

Software module for editing calibrations Transtron ECUs of diesel Isuzu and Mazda vehicles with 2.2TD RZ4F engine. Infineon Aurix TC275T MCUs supported. Filesize acceptable is 4.0 Mb.

Available maps:

Boost Pressure: Boost limit per Atmospheric Pressure Correction, Boost limit per intake air temperature, Boost Pressure in additional mode, Maximum Boost Limit, Maximum Turbo Position Limit, Turbo position in additional mode

DPF: DPF Boost Pressure in additional mode, Turbo position DPF in additional mode

EGR: EGR position in additional mode, Egr target position. Intake throttle position in additional mode, Maximum EGR Position, Position per Quantity injection

Injection: Injector time lift, Injector time lift Conversion

Limits: Conversion to Torque limit, Quantity injection limit boost, Quantity injection limit intake air temperature, Quantity injection limit per mass air flow, Quantity injection Low limit, Torque limit per Atmospheric Pressure Correction, Torque limit per clutch stroke, Torque limit per coolant temperature, Torque limit per coolant temperature, Maximum torque limit per coolant temperature, Torque limit per exhaust temperature, Torque limit per fuel temperature, Torque limit per gear, Torque limit per intake air temperature, Torque limit per Intercooler temperature in, Torque limit per Intercooler temperature out, Torque limit per Quantity, Torque limit per Speed, Vehicle Speed Limitation

Mass Air Flow Temperature: Coolant Temperature Sensor Voltage, Fuel Temperature Sensor Voltage, Intake Air Temperature Sensor Voltage, Mass air flow in additional mode, Mass Air Flow Sensor Voltage

Rail Pressure: Fuel rail pressure, Maximum rail pressure limit, Rail pressure start

Start of Injection: Start of injection in additional mode

Torque Control: Acceleration Pedal Position Conversion, Accelerator Torque Position DTC

Trucks/Industrial

Trucks/Industrial Delphi ETC3

Software module for editing calibrations Delphi ETC3 ECUs of diesel trucks and industrial vehicles.

Supported vehicles — DAF, Kenworth, Peterbilt, Tatra.

Hyundai vehicles/engines are not supported!

Available maps:

Air Calculation: Desired air mass flow, Expected air mass flow, Maximum desired airmass flow, Minimum desired airmass flow

Boost Pressure: Air pressure, Boost limitation, Pressure loss adjustment, Reference value for air boost temperature, Boost pressure sensor, Pressure injection correction factor, Correction factor for air mass flow threshold in overflow based, Correction factor for air mass flow model on idle based

DPF: Cold engine factor on DPF regeneration state, Maximum fuel value of DPF regeneration state, Fuel limit for DPF fault, Reference engine speed setpoint for standstill DPF regeneration

EGR Control: Ambient pressure correction for maximum EGR position, Discharge offset based on EGR position, Maximum EGR position, Minimum EGR position, Open loop control EGR position, Fuel limit for active EGR, Maximum/Minimum allowed voltage for EGR actuator driver

Exhaust temperature sensors: Exhaust Temperature upper/lower limit, Maximum/Minimum exhaust

temperature

Fan Control (for test): Fuel: Fuel limitation, Fuel value for enabling condition in ignition mode, Smoke fuel limit under cold engine conditions, Threshold fuel value and engine speed map for AMF governor deviation, Maximum/Minimum fuel limitation

Injection: Injection rate, Injection timing efficiency loss

Lambda: High/Low threshold input lambda variation, Lambda reference data at cold/hot temperature, Learn operation area of lambda, Maximum/Minimum value calculation factor for lambda limiter

Limiters (for test): Engine speed limitation, Vehicle speed limitation

NOx: NO2 NOx ratio, Power function for virtual NOX calculation, Reference value of NOx for cold/hot conditions, Variable exponent for power function for virtual NOX calculation

Rail pressure: Base rail pressure, Maximum rail pressure demand compensation

SCR (ADBlue): Maximum permissible temperature limit after SCR, Minimum SCR inlet temperature to disable SCR high efficiency modes, Reference value of O2 for cold conditions

Torque: Base primary retarder torque, Electric fan torque contribution, Maximum achievable torque data, Mechanical fan torque contribution

Volumetric efficiency: Volumetric efficiency reference

DTC

China Trucks Continental SIDFA08/SIDFA10

Software module for editing calibrations Continental SIDFA08 and SIDFA10 ECUs used in diesel trucks and industrial vehicles from chinese market.

This ECU types can be readed with BitBox module China Trucks Continental

Supported file size - 8Mb.

Available maps:

Air calculation: Maximum Mass Flow Injection Limit for EGR

EGR: EGR Cooler Upstream Offset for Lambda, Estimated Target Position of EGR, Factor Engine Operation Correction for EGR, Mass Fraction of Soot with EGR, Maximum EGR Position with Throttle Valve Closed, Maximum Position EGR, Minimum EGR Position with Throttle Valve Closed, Minimum Position EGR, Minimum Position of EGR Valve, Position EGR Valve Minimum, Rate EGR Reference, Temperature EGR Cooler Baseline Upstream

Exhaust Gas Flow: Ventilation Map Factor for Exhaust Flow Weighting

Fuel: Fuel Quantity Limit Map for Turbocharger, Fuel Quantity Limit Map of Coolant Temperature

Protection: Fuel Quantity Protection, Fuel Quantity Protection Map of High Temperature, Maximum Fuel Quantity Protection Map, Minimum Main Fuel Injection of Post-Injection Offset

Injection: Correction Injection, Main Injection at Start, Main Injection Start Angle Base

Lambda: Lambda Demand Base, Lambda Reference

Limiters: Vehicle Speed (Test)

MAP Sensor: Air Intake Manifold Absolute Pressure

NOx: Concentration NOx With EGR, Concentration NOx Without EGR

Rail Pressure: Rail Pressure Control

Throttle Position: Maximum Throttle Position Baseline, Position Throttle Demand Baseline

Torque: Base Maximum Torque Calibration Map, Engine Map Torque, Fuel Drive Map Torque Performance Limit, Torque for Idle Driving Mode, Torque Model Loss External, Torque Request

Turbo System: Position Turbo High Pressure, Pressure Intake Demand Baseline, Pressure Turbo Calculated Offset Baseline for Overboost, Pressure Turbo Calculated Offset Baseline for Underboost, Turbocharger High Pressure Maximum Position, Turbocharger High Pressure Minimum Position

DTC

Full Packages

Mazda Full

Set of 5 available modules:

Mazda Denso SkyActiv-G

Mazda Mitsubishi SkyActiv-G

Mazda Denso SkyActiv-D

Mazda Mitsubishi 2.3 Turbo

Mazda Denso Petrol SH705x

FCA Full

Set of 8 available modules:

Motorola NGC4
Motorola NGC4A
Continental GPEC (SIM90)
Continental GPEC2
Continental GPEC2A
Marelli 8Gx Petrol Turbo
Continental GPEC3
Continental GPEC4

Mitsubishi Full

Set of 3 available modules:

Mitsubishi Denso Diesel SH7058
Mitsubishi Denso Diesel SH7059
Mitsubishi Denso Diesel SH72xxx

Isuzu Full

Set of 4 available modules:

Isuzu Transtron SH7058/SH7059
Isuzu Transtron SH72533/SH72544
Isuzu Transtron Aurix
Isuzu Delphi