

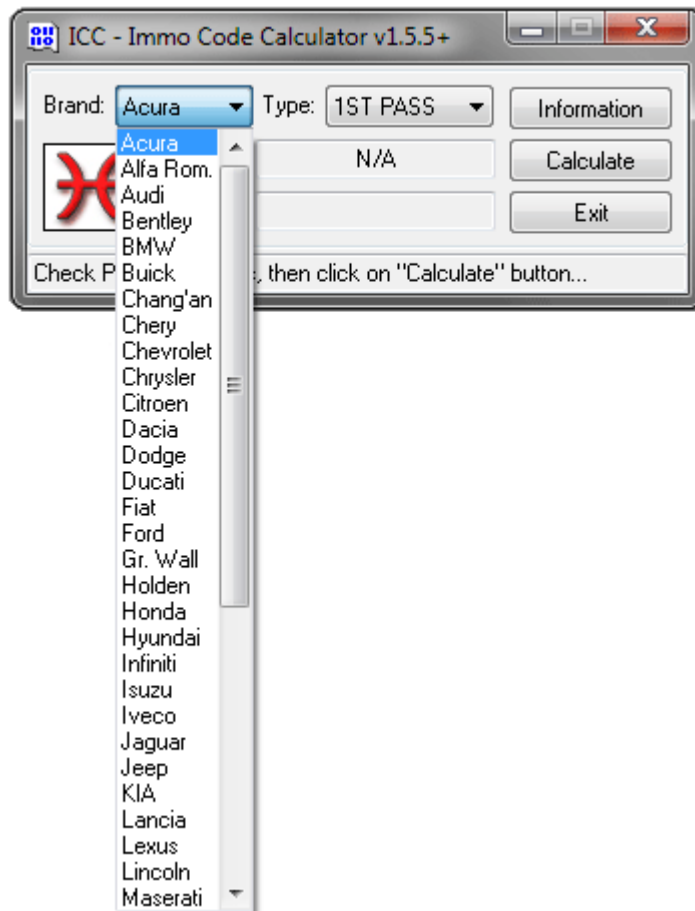
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## Introduction to Immo Code Calculator

Thank you for choosing ICC! We hope that you are satisfied using our unique and powerful tool. We will do the best to help you in immobilizer programming and key cutting solutions for wide range of vehicles and bikes from eighties to the present.



## Hardware management

ICC dongle like a additional computer. It's based on secure smart card chip and have CPU 16Mhz, 64Kb of memory for storing data and executable modules.

We are developed special program called ICC Dongle Tool for checking of installed modules, reading registration information, and uploading of new algorithms.



All of code calculation algorithms are stored in dongle and can be executed from your own software using simple API calls.



# Installing of drivers

In most cases you don't need to install a driver for ICC dongle. But if your dongle is switched to USB mode or OS doesn't have HID support - you need to install additional driver.

You can find driver on CD with software or **download from support area of web site**. Also you can download driver through Microsoft Update (Windows Update) system.

Installation procedure is simple and standard. We will not describe it here because it's same as for any other PC devices.

If you have any problems with drivers installation procedure - please ask your technical specialist for help.

Note for Windows 7 users: you need to run ICC software with administrative privileges if dongle was switched to USB mode. Right-click on the program and select "Run as administrator". Or select "Properties" then "Compatibility" tab and set checkbox "Run this program as an administrator".

## Updates and support

To download latest version of ICC software, hardware update package or additional files you need to logon to support area of <http://immo-code.com>

Enter dongle's serial number as your user name and your e-mail address as password.

Run ICC software and press "Information" button to see hardware serial number and registered e-mail address, example:

Login: "01234567-89ABCDEF"

Password: "bob@free-mail.com"

Login must be entered in upper case, without blanks and quotes. Password must be entered in lower case, without blanks and quotes.

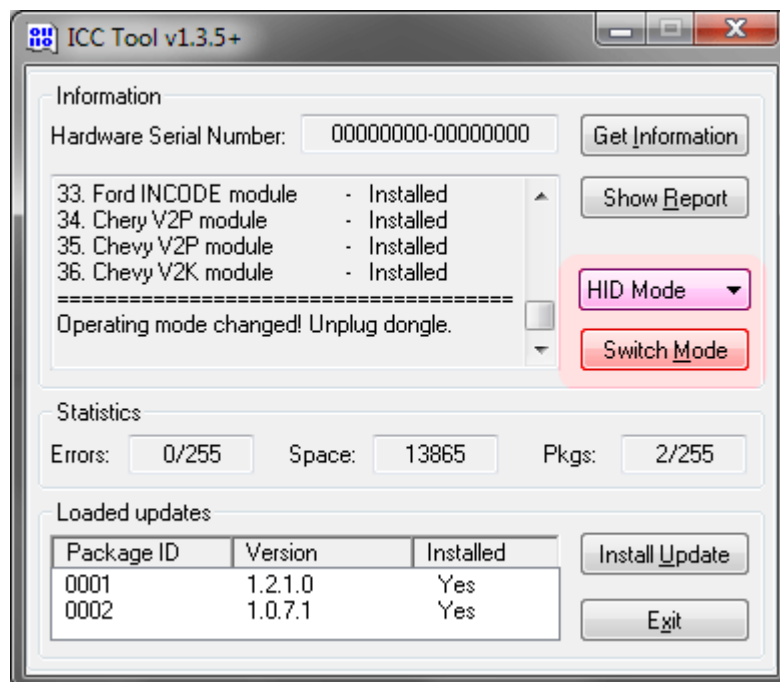
Please use direct link - <http://immo-code.com/updates> if you have problems accessing support area.

# Switching USB mode

To switch operational mode of a dongle you need to use ICC Dongle Tool. You can find it on CD or download from support area of web site.

Connect ICC dongle to USB port, install drivers if require, and run ICC Tool. If dongle is recognized - you will see a hardware ID of dongle. Click on "Get Information" button.

Select "HID mode" if you want to use dongle without additional drivers or "USB Mode" if you will use dongle with drivers, then press "Switch Mode" button.



After that you need to remove ICC dongle, wait 5 seconds and plug it back.

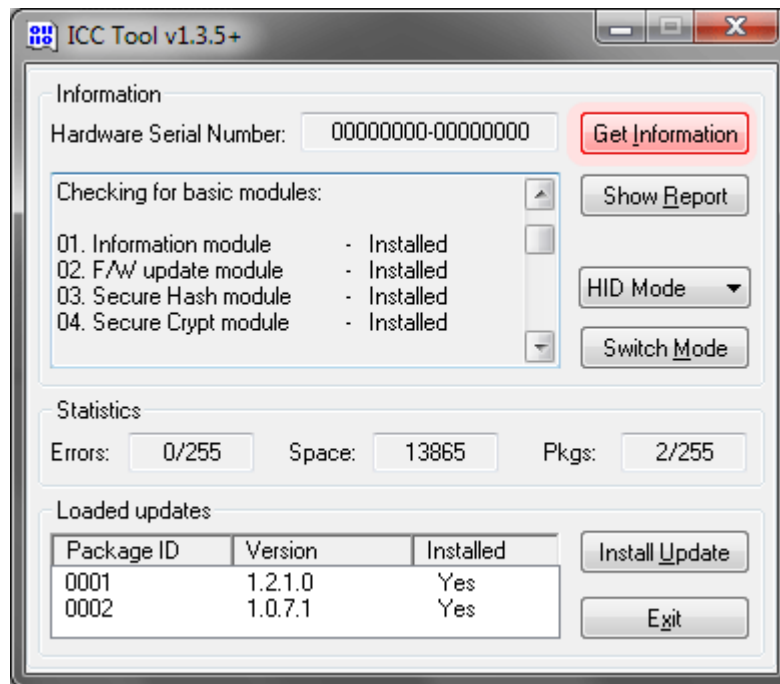
Please note: If your computer have poorly powered USB ports - you need to switch dongle to USB mode or insert dongle in self powered USB hub (with external power). Do not use passive - bus powered USB hubs with dongle switched to HID mode because they can not provide enough power.

Note for Windows 7 users: you need to run ICC software with administrative privileges if dongle was switched to USB mode. Right-click on the program and select "Run as administrator". Or select "Properties" then "Compatibility" tab and set checkbox "Run this program as an administrator".

## Checking of installed modules

If you see warning message while using ICC software like "Update your dongle" or "Module is not installed" - probably executable file with required algorithm is not stored in dongle or outdated.

You can check installed algorithms with ICC Dongle Tool. Click on "Get Information" button and scroll down information area.



"Installed" beside algorithm name means that executable or data module is loaded in to dongle.

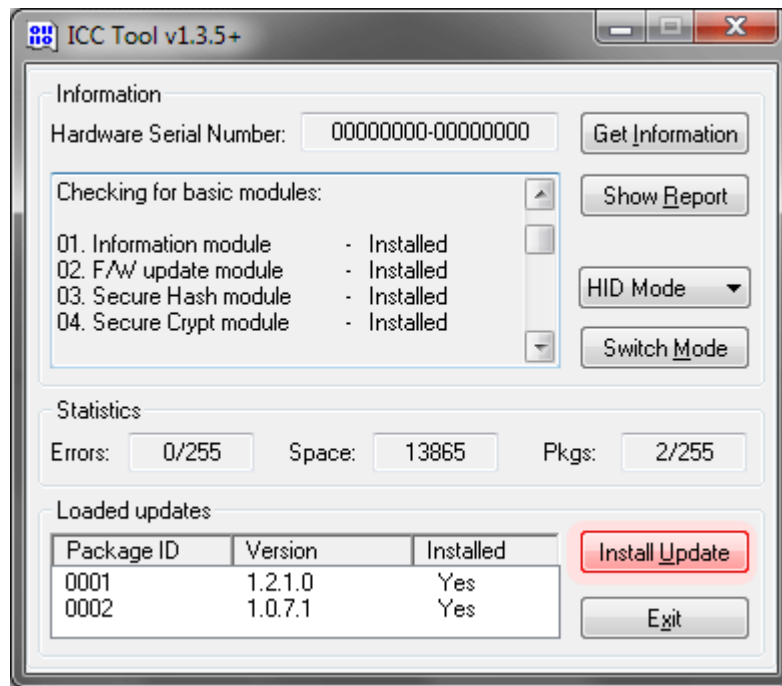
"Absent" or "Outdated" means what module is not installed or outdated.

## Adding of new modules

To update ICC Dongle you need to download latest version of ICC Dongle Tool and hardware update package from support area of web site.

Connect dongle to USB port, run ICC Tool and click on "Get Information" button. Then click on "Install Update" and select update file with extension ".pkg".

You will be asked before, select "Yes" if you want to install update.



Update process can take from few seconds up to several minutes depend of hardware update file size. Please be patient and do not interrupt update process.

After loading of update file into dongle you will see a confirmation message or error message if update was unsuccessful.

Please note, when errors counter will be equal maximum errors (255/255), update process will not be available anymore.

## Supported Cars & Bike models

Methods of PIN / KEY code calculation

ICC supports many of secret algorithms used in car / bike immobilizers made by Siemens, Bosch, Sagem, Delphi, Melco, Denso, Calsonic Kansei, TRW, Valeo, Magneti Marelli, Megamos, Temic, Lucas and others.

Most popular brands, such as Nissan, Infiniti, Kia, Hyundai, Toyota, Lexus, Scion, Smart, Honda, Acura, Renault, Dacia, Ford, Mazda, Lincoln, Mercury, Citroen, Peugeot, Fiat, Alfa Romeo, Maserati, Lancia, Iveco, Volkswagen, Audi, Seat Skoda, Bentley, Mitsubishi, Opel, GMC, Vauxhall, Chevrolet, Holden, Buick, BMW, Chrysler, Dodge, Jeep, Plymouth, Isuzu, Rover, Land Rover, Suzuki, Volvo, Jaguar, Porsche, Chery, Chang'an, Ducati, Great Wall, Samand, Saab are supported.

ICC can calculate PIN code from VIN, serial number of immobilizer or related electronic module, outcode, seed code, crypted code or eeprom dump for many of the car models.

As option, ICC can calculate a KEY code by VIN for electronic key cutting machines to make a new car key in cases when all car keys was lost. Supported brands are Nissan, Infiniti, Hyundai, KIA, Smart, Chevrolet, Opel, Vauxhall, Holden, Buick.

As additional service, ICC can generate Key data by dump from EZS / EIS for Mercedes Benz. This is third-party solution available for extra charge.

To calculate PIN code for Porsche Cayenne by dump from ECU or KESSY - select any of the VAG brand.

To calculate PIN code for Ford models based on Mazda platforms by dump or by ISN - select Mazda as brand.

To calculate PIN code for Subaru Traviq by dump from ECU or Immo - select any of General Motors brand.

To calculate PIN code for Opel models based on Renault platforms by dump or serial no from label inside the key - select Renault or Dacia as brand.

To calculate keys password or synchronization password for Land Rover models based on BMW platforms select BMW as brand.

To calculate PIN code for Renault models based on Opel platforms by dump - select Opel as brand.

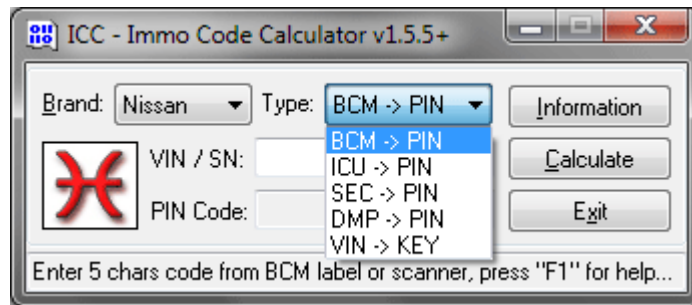
To calculate PIN code for Nissan Kubistar / Interstar by dump - select Renault as brand.

To calculate PIN code for Saipa models based on KIA platforms - select KIA as brand.

## **Nissan, Infiniti**

Immo / Key code for Nissan & Infiniti models

Various models of Nissan & Infiniti are supported by ICC.



PIN code for immobilizer can be calculated by:

crypted code from BCM for most of the models

crypted code from ICU for models with NATS-5, 5.6

crypted code from SEC for models with NATS-6

dump of EEPROM for models with NATS-4-5-7

In addition ICC can calculate a kecode by VIN for 1998-2010 USA, Mexico and Japan models.

For some of the models you can use default immobilizer PIN code - "5523". Such vehicles have a big letter "A" on ICU label. Following vehicle models have a default PIN code:

Nissan Altima 2001-2004

Nissan Maxima 2001-2003

Nissan Pathfinder 2001-2004

Nissan Sentra 2000-2005

Nissan 350Z < 2002

Nissan X-Terra 2003-2004

Infiniti QX4 2001-2004

Infiniti QX45 2002

Infiniti Q45 2001-2005

Infiniti G20 2000-2002

Infiniti I30 / I35 2001-2005

To identify NATS version - check label on ICU: STEP-5 means NATS-5, STEP-5.6 means NATS-5.6, STEP-6 means NATS-6 and STEP-7 means NATS-7.

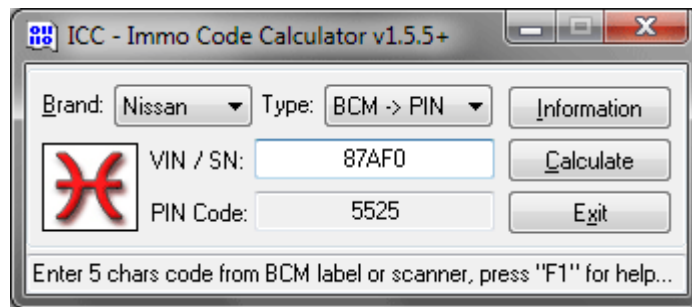
For Primera P12, new Almera and some other models equipped with NATS-6 immobilizer PIN code must be calculated by crypted code from SEC label. For models with NATS-5 immobilizer - by crypted code from BCM or ICU label. For models with NATS-7 (based on Renault-Samsung platforms) by dump from BCM or ECU.

NATS also known as NVIS - Nissan Vehicle Immobilizer System and IVIS - Infiniti Vehicle Immobilizer System.

## Nissan & Infiniti: PIN code by BCM / IMMU

For USA made Nissan and Infiniti models ICC can calculate immobilizer code by crypted code from BCM and IMMU label.

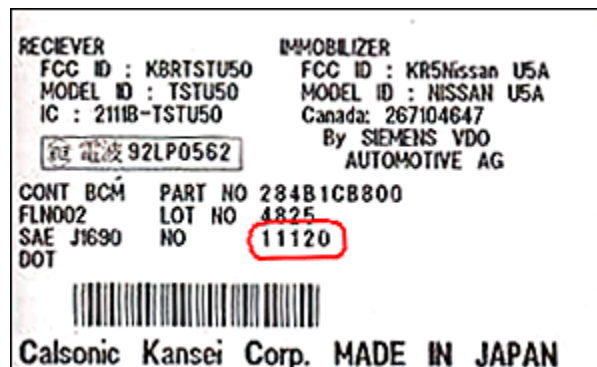
To calculate immobilizer code set type of algorithm to BCM2PIN and enter 5 digit code as shown on picture.



BCM is located in left side between centre console and steering rack. Part numbers of BCM are 284B1-XXXXX, 284B2-XXXXX. They are made in Japan by Calsonic Kansei Corp for Siemens VDO.

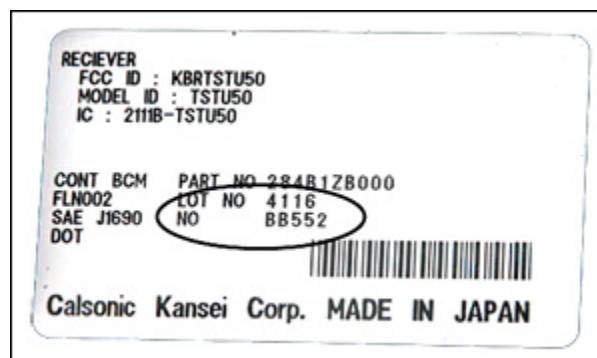
In most cases you can read BCM code using an diagnostic equipment like AD100 or Carman Scan then calculate a PIN code from BCM code.

BCM Calsonic Kansei, p/n 284B1-CB800:



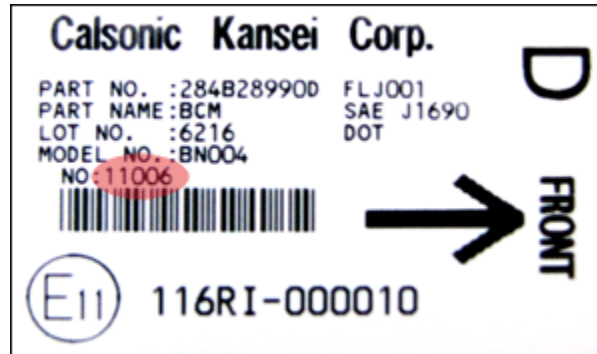
5 digit code on this label is "11120"

BCM Calsonic Kansei, p/n 284B1-ZB000:



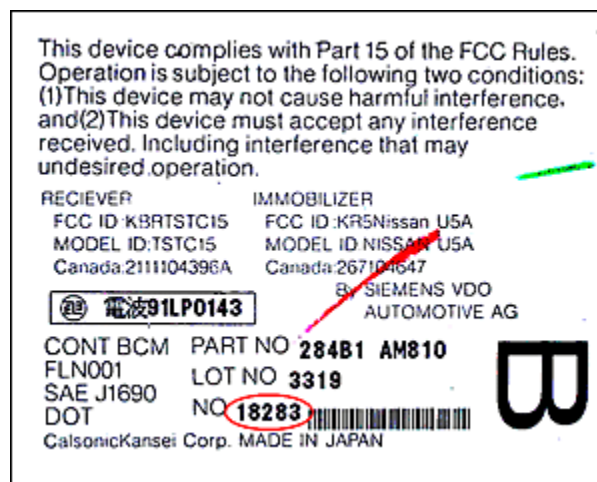
5 digit code on this label is "BB552"

BCM Calsonic Kansei, p/n 284B2-8990D:



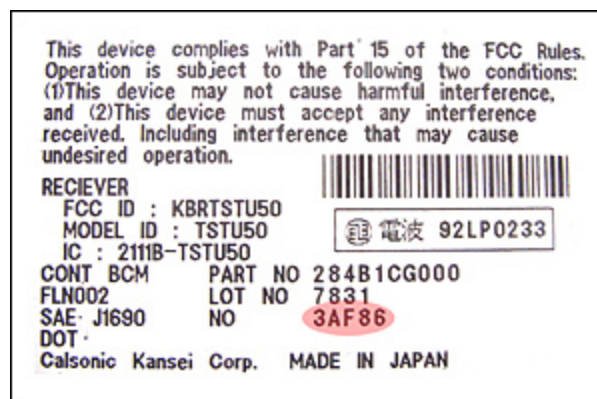
5 digit code on this label is "11006"

BCM Calsonic Kansei, p/n 284B1-AM810:



5 digit code on this label is "18283"

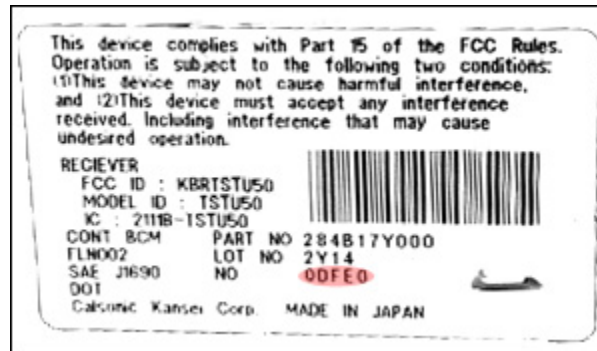
BCM Calsonic Kansei, p/n 284B1-CG000:



5 digit code on this label is "3AF86"

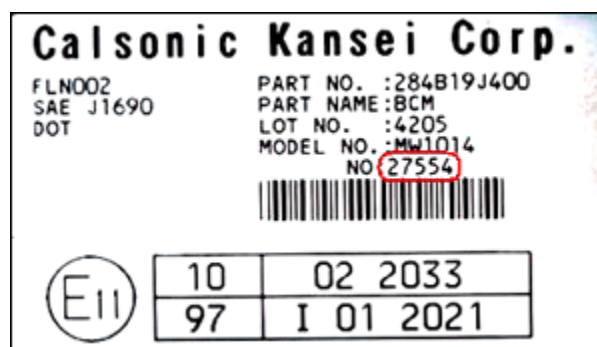
BCM Calsonic Kansei, p/n 284B1-7Y000:





5 digit code on this label is "0DFE0"

BCM Calsonic Kansei, p/n 284B1-9J400:



5 digit code on this label is "27554"

BCM Calsonic Kansei, p/n 284B1-8S100 (above gas pedal):



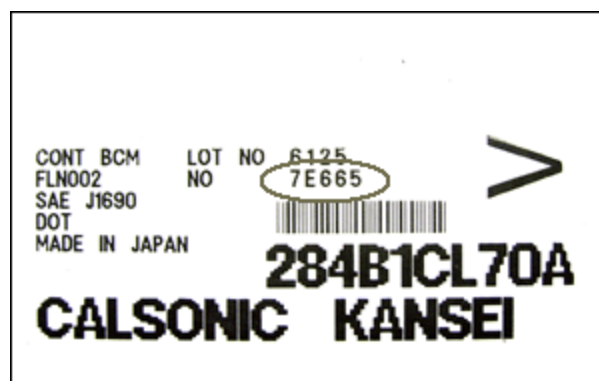
5 digit code on this label is "A8D37"

BCM Calsonic Kansei, p/n 284B1-CG80A (above gas pedal):



5 digit code on this label is "68383"

BCM Calsonic Kansei, p/n 284B1-CL70A:



5 digit code on this label is "7E665"

BCM Calsonic Kansei, p/n 284B1-CD410:



5 digit code on this label is "36B31"

BCM Siemens VDO, p/n 284B1-JA02A:



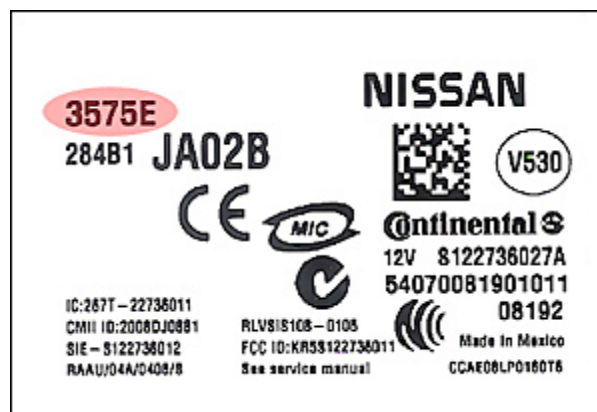
5 digit code on this label is "01858"

BCM Continental, p/n 284B1-JN00B:



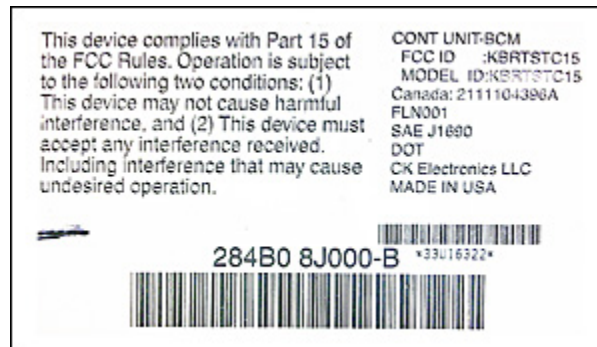
5 digit code on this label is "5FC71"

BCM Continental, p/n 284B1-JA02B:



5 digit code on this label is "3575E"

BCM CK Electronics LLC:



calculate PIN code by data from ICU,  
in most cases PIN code is default "5523"

IMMU Siemens VDO:



5 digit code in a red box on the label

IMMU Siemens VDO, p/n 284B2-EB:



5 digit code on this label is "8F4B0"

IMMU Siemens VDO, p/n 284B2-JD:



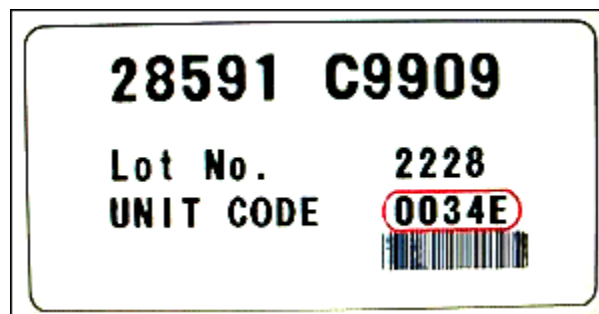
5 digit code on this label is "B13A4"

IMMU Siemens VDO, p/n 284B2-4X:



5 digit code on this label is "F6E14"

IMMU, p/n 28591-C9909:

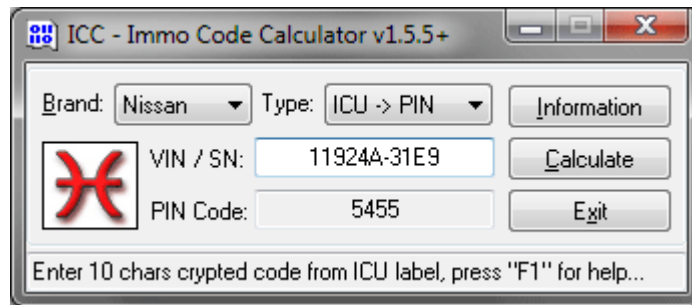


5 digit code on this label is "0034E"

And other electronic units...

For Nissan and Infiniti models with NATS 5.6 immobilizers ICC can calculate a PIN code by crypted code from ICU label.

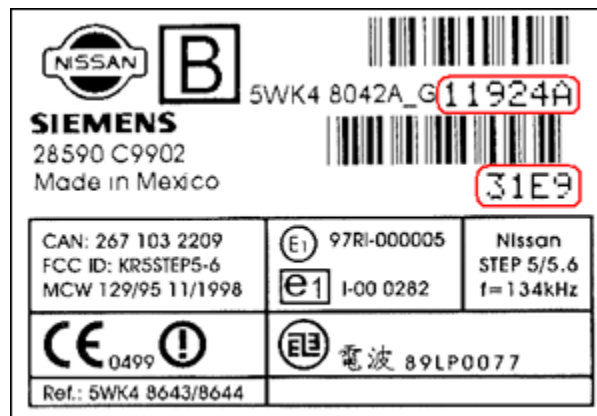
Select ICU2PIN and enter two codes from label separated by dash.



ICC may show two PIN codes, in dependence of car type and region. In most cases you need to use first PIN code for models with ICU made in Germany and second PIN code for models with ICU made in Mexico.

ICU is located near ignition. Part number of ICU is 28590-XXXXX, big letter "B" in box. They are made in Mexico or Germany by Siemens.

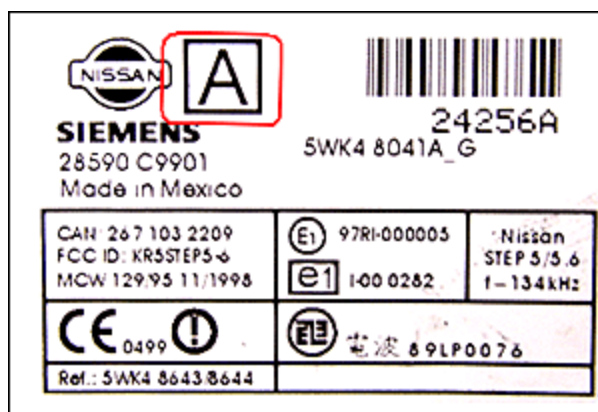
ICU Siemens, p/n 28590-C9902:



code on this label is "11924A-31E9"

For ICU with p/n 28590-C9901, big letter "A" in box and only one bar code you can use default PIN code for immobilizer - "5523".

ICU Siemens, p/n 28590-C9901:



PIN code for such units is "5523"

For ICU with p/n 28590-C9965, big letter "L" in box and only one bar code you need to calculate a PIN code by crypted code from SEC or BCM.

ICU Siemens, p/n 28590-C9965:



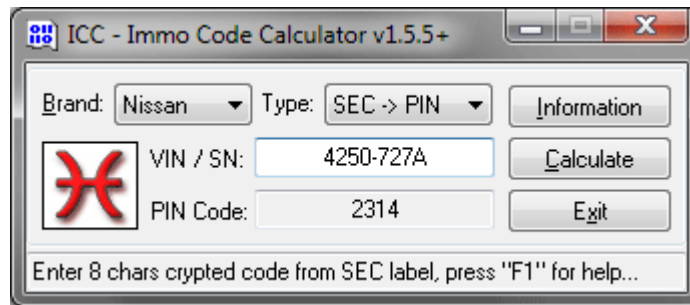
Such vehicle models are equipped with NATS6 immobilizer - new Almera, Primera P12 and others. "STEP 6" means NATS-6.

## Nissan & Infiniti: PIN code by SEC

For Nissan and Infiniti models with NATS 6 immobilizer, such as new Almera and Primera, ICC can calculate a PIN code by crypted code from SEC label.

To calculate immobilizer code you need to enter codes as shown on picture.





SEC Siemens, p/n 28550-BN8:



code on this label is "4250-727A"

SEC Siemens, unit:

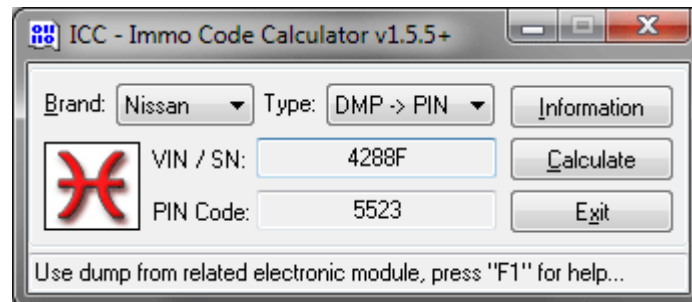




SEC is located in left side between centre console and steering rack. Part number of SEC unit is 28550-XXX, made in Europe by Siemens.

## Nissan & Infiniti: PIN code by dump

In cases when labels from electronic modules are lost or damaged you can calculate a code by dump of EEPROM for NATS4, NATS5 and NATS7 immobilizers.

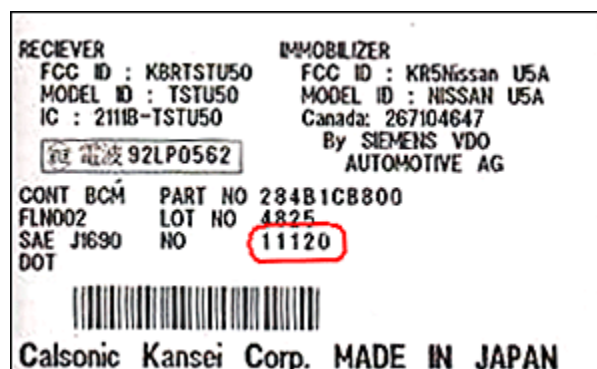


To calculate immobilizer code for Nissan and Infiniti models you need to locate and read dump from (depend of car model):

- ECU - 93C66
- ICU - TMS370C032, ST-A2C11776
- BCM - 93C56, 93C66, 95080, MC9S12XDT384

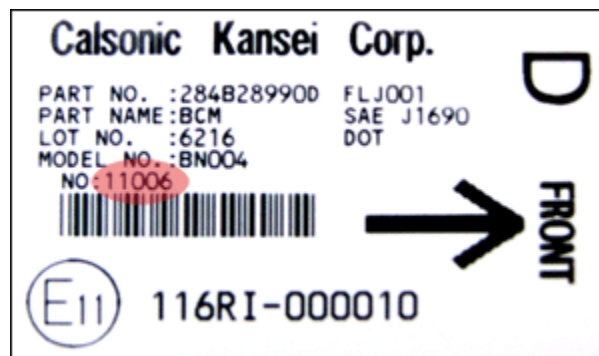
Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and serial number of electronic unit if available.

BCM Calsonic Kansei, p/n 284B1-CB800 (left side between centre console and steering rack):



locate and read 93C56 or 93C66

BCM Calsonic Kansei, p/n 284B2-8990D:



locate and read 93C56

BCM Calsonic Kansei, p/n 284B1-8S100 (above gas pedal):



locate and read 93C66

BCM Calsonic Kansei, p/n 284B1-AM810:



locate and read 93C56 or 93C66

BCM Johnson Controls, p/n 284B2-BC520:



locate and read BCM - 95080 or ECU - 93C66

BCM Siemens VDO, p/n 284B1-JA02A (located under dashboard):



locate and read MC9S12XDT384

BCM Continental, p/n 284B1-JN00B:



locate and read MC9S12XDT384

BCM Continental, p/n 284B1-JA02B:



ICU Siemens NATS7, p/n 28590-AX600:



locate and read BCM - 95080 or ECU - 93C66

ECU Nissan MEC32:



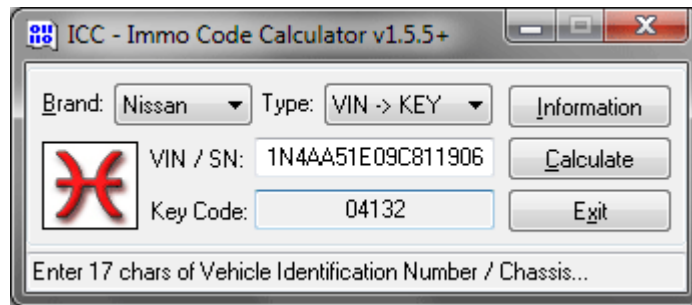
locate and read 93C66

And other electronic units...

## Nissan & Infiniti: KEY code by VIN

For Nissan and Infiniti 1998-2011 models ICC can calculate a keycode by VIN. This can help you in cases when all car keys are lost and you don't want to change all car's locks.





Note: Available for USA, Mexico and Japan cars only (WMLs are 1N4, 1N6, 3N1, 4N2, 5N1, 5N3, 5Z6, JN1, JN6, JN8, JNK, JNR).

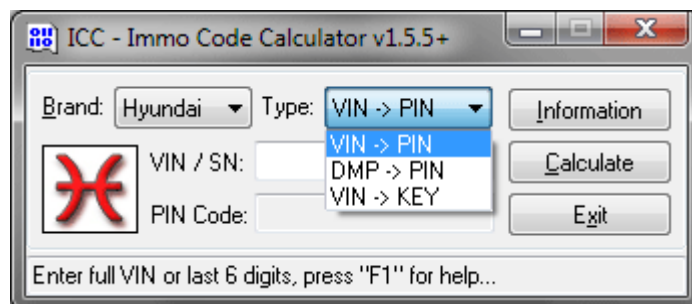
Set type of calculation method to VIN2KEY and enter required data. In few seconds ICC will calculate a KEY code for using with computerized key duplicators with "Cut to Code" function.

## Kia, Hyundai

### Immo / Key code for Kia & Hyundai models

Various models of KIA & Hyundai with 4, 5 and 6 digit PIN codes are supported by ICC.

PIN code for immobilizer can be calculated by VIN for models with SMARTRA ICM and by dump of EEPROM for all other models.



In addition ICC can calculate keycode by VIN for KIA 2001-2010 models, Hyundai 1986-2010 models and Hyundai Assan (HAOS) 2000-2009 models.

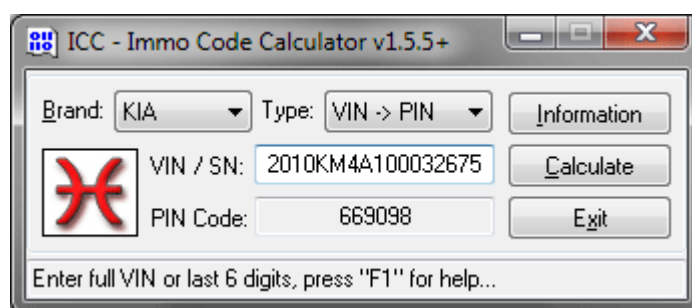
For some modifications of Kia Clarus, Shuma, Mentor 2, Sephia 2, Sportage, Carnival, Pride, Sedona, Carens, Rio and other vehicle models made in June-December of 1999 with Texton immobilizer you can use last 5 digits of VIN as immobilizer PIN code, where "0" may be replaced by "1" or "2" in dependencies of car model, VIN or date of production.

For models made in Russia - immobilizer code is same as KEY code, example: KEY code - K1234, PIN code - 1234 or 01234 or 001234 or 123400 depend of car model and type of immobilizer.

Default Immobilizer PIN code for SMARTRA is "234567" and "2345" for Shin Chang type of ICM.

## KIA & Hyundai: PIN code by VIN

For KIA and Hyundai models with SMARTRA immobilizer ICC can calculate 6 digit code by VIN.



To calculate a code for SMARTRA-2 immobilizer you need to enter last 6 digits of VIN. SMARTRA-2 system was used on vehicles made till 11 may 2007, all newer vehicles are equipped with SMARTRA-3 system.

Set type of calculation method to VIN2PIN and enter required data. In few seconds ICC will calculate a PIN code for immobilizer programming.

For KIA 2007-2011 models with SMARTRA-3 immobilizer you can calculate PIN code by full VIN (all of 17 chars). Covered WMIs are 200, 201, 5XY, KN4, KNA, KNC, KND, KNE, KNF, KNG, KNH, U5Y, U6Y.

For Hyundai 2007-2010 models with SMARTRA-3 immobilizer you can calculate PIN code by full VIN. Supported WMIs are 5NM, 5NP, KM8, KMC, KME, KMF, KMH, KMJ, MAL, TMA.

For Hyundai Assan (HAOS) 2000-2009 models made in Turkey, WMIs are NLH and NLJ you can calculate a PIN code by full VIN.

For not supported cars you need to calculate PIN code by dump.

For some of the models made in Russia - immobilizer code is same as KEY code, example:



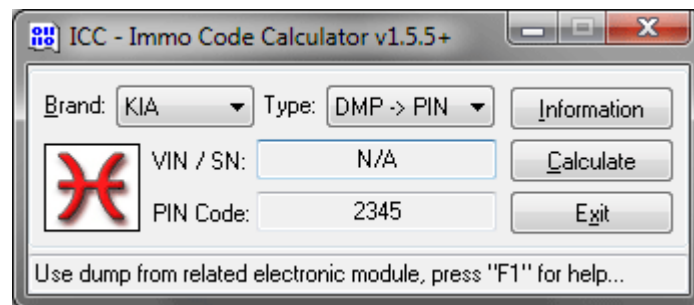
KEY code - K1234, PIN code - 1234 or 01234 or 001234 or 123400 depend of car model and type of immobilizer.

## KIA & Hyundai: PIN code by dump

To calculate immobilizer code for Kia and Hyundai models you need to locate and read dump from (depend of immobilizer type):

Immo - 93C46, 93C56, MC68HC08AB16A

ECU - S29CD016J, 29F400BB, 24C02, 95P08, 25080, 95040, 95080, 95160, 95320



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and additional information if available.

ICM SMARTRA:



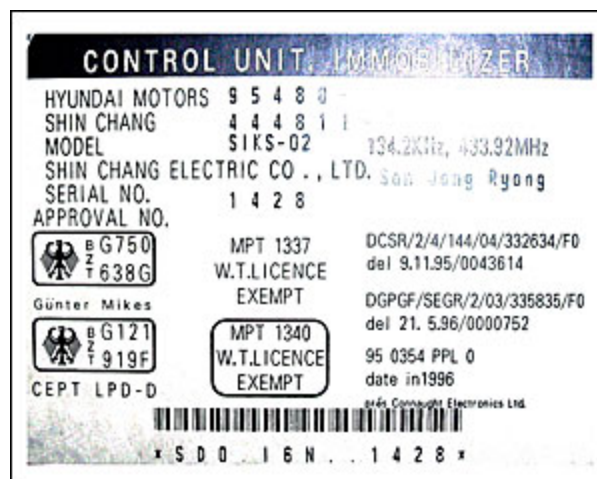
read dump of EEPROM / FLASH from ECU

ICM Shin-Chang (under armrest):



locate and read 93C56

ICM Shin-Chang (under armrest):



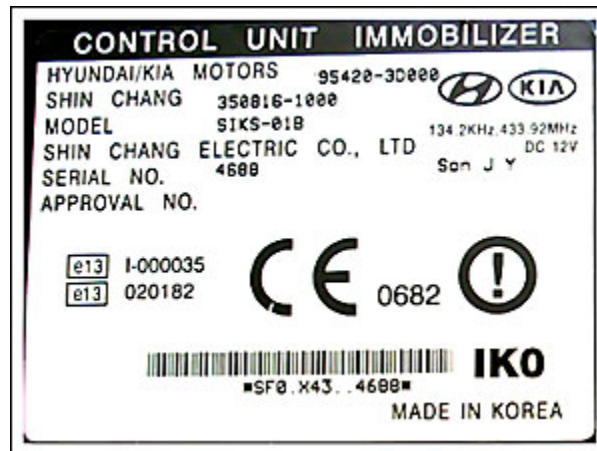
locate and read 93C56

ICM Shin-Chang:



locate and read 93C56

ICM Shin-Chang:



locate and read 93C56

ICM Shin-Chang:



locate and read 93C56

ICM Texton:



locate and read 93C46

ECU Bosch EDC15:



locate and read 95P08 or 95080 or 95320

ECU Bosch K2NC:



locate and read 95040

ECU Bosch MOST:



locate and read 24C02

ECU KEFICO:



locate and read 95040

ECU KEFICO:



locate and read 95160

ECU Delphi / TRW:



locate and read 95080

ECU Siemens VDO:

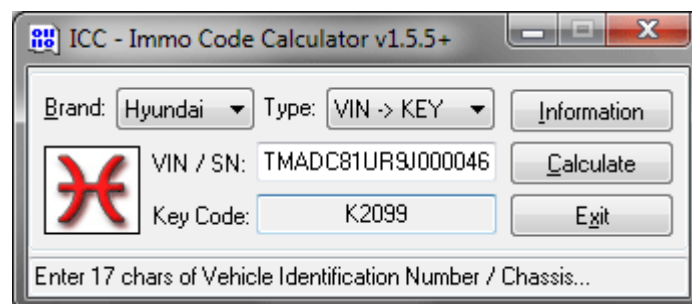


locate and read S29CD016J

And other electronic units...

## KIA & Hyundai: KEY code by VIN

For KIA 2001-2009 models, Hyundai 1986-2010 models and Hyundai Assan (HAOS) 2000-2009 models ICC can calculate a keycode by VIN. This can help you in cases when all car keys are lost and you don't want to change all car's locks.





Supported WMIs are 5NM, 5NP, KM8, KMC, KMD, KME, KMF, KMH, KMJ, KMP, KMX, KMY, KMZ, KN3, KNA, KNC, KND, KNE, KNF, KNH, KPH, MAH, MAL, NLH, NLJ, PL8, TMA, U5Y, U6Y.

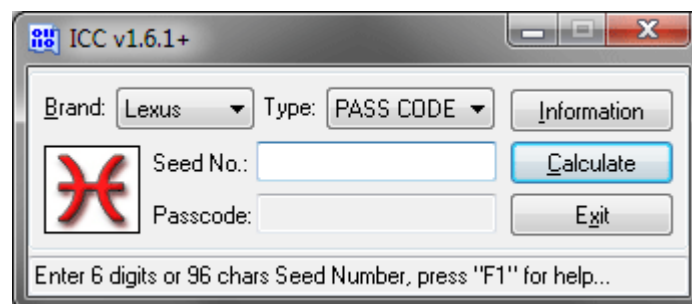
Supported KEY-prefixes are: 0, A, B, C, D, E (KE), F, G, H, J, K (HK), L, M, N, P, R, S, T, U, V (KV), W, X, Y.

Set type of calculation method to VIN2KEY and enter required data. In few seconds ICC will calculate a KEY code for using with computerized key duplicators with "Cut to Code" function.

## Toyota, Lexus, Scion

### Passcode for Toyota, Lexus & Scion models

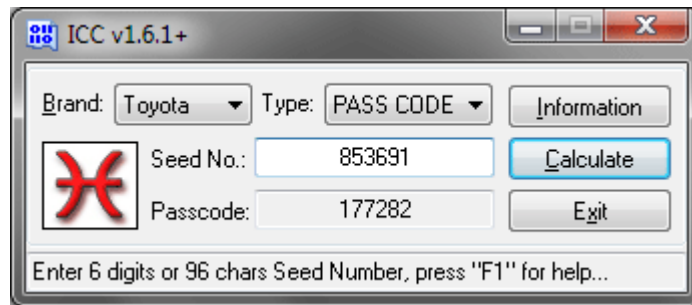
ICC can calculate Pass-Code for security programming (master key registration, immobilizer reset, etc) of Toyota, Lexus and Scion models. Passcode can be calculated by 6 digit or 96 chars Seed Number.



Pass-Code is required for Key Programming, Erasing, Immobilizer Reset and other security procedures with Intelligent Tester, Techstream and other OEM software and hardware equipment.

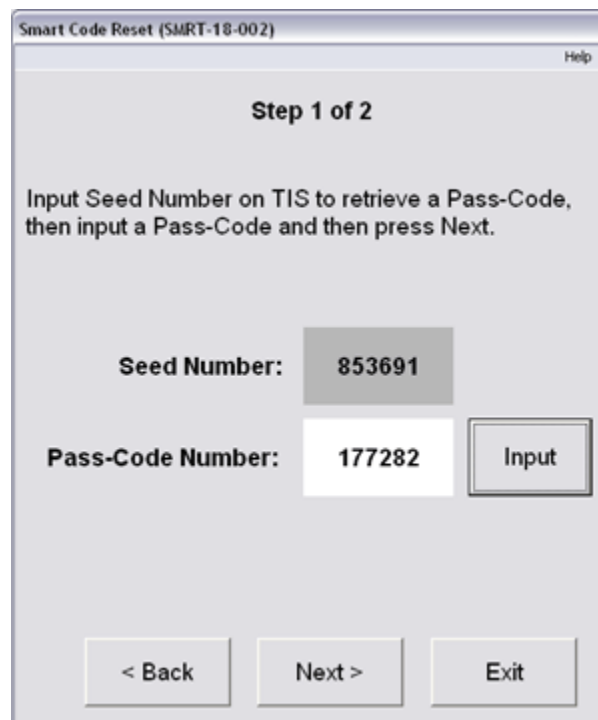
### Toyota & Lexus: Pass code by Seed No

For Toyota, Lexus and Scion models ICC can calculate a Pass-Code by Seed Number for security procedures with Intelligent Tester, Techstream and other OEM software and hardware equipment.



To calculate of Passcode - enter 6 or 96 chars Seed Number from Diagnostic Tester or OEM software and click on "Calculate" button. In few seconds ICC will show 6 digit Pass Code. Enter code as shown on picture.

Techstream - Smart Code Reset (6 digit Seed Number):



enter data as shown on picture

Techstream - Smart Code Reset (96 chars Seed Number):



Smart Code Reset (SMRT-18-002)

**Step 1 of 2**

Input Seed Number on TIS to retrieve a Pass-Code, then input a Pass-Code and then press Next.

Seed Number: 33bed9e521 Input to TIS

Pass-Code Number: 557748 Input

< Back Next > Exit

click on "Input to TIS" button, copy Seed number and paste to ICC window - "Ctrl+V"

## Ford, Mazda, Lincoln, Mercury

### Incode for Ford & Mazda models

ICC can calculate INCODE for most of the Ford, Mazda, Lincoln and Mercury models with PATS3+ and later. INCODE is required for coded access to Control Unit assignment, adding and erasing of transponder keys with IDS-VCN, AD100Pro, SBB or any other suitable equipment. INCODE can be calculated by 6 or 16 chars OUTCODE from diagnostic scanner.

ICC v1.5.7+

Brand: Mazda Type: OUT -> IN Information

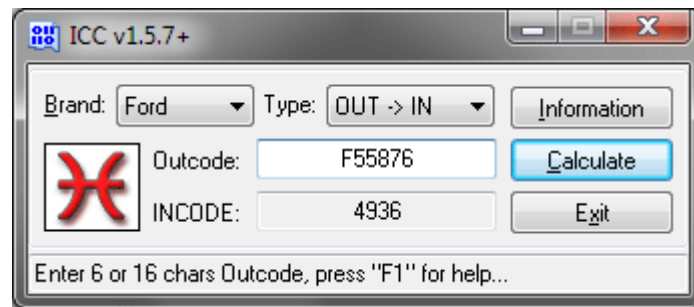
Outcode: INCODE: Calculate Exit

Enter 6 or 16 chars Outcode, press "F1" for help...

As well various models of Mazda with MECS are supported by ICC. PIN code for MECS can be calculated by ISN and by dump of EEPROM from Immo Box and ECU.

## Ford Group: Incode by Outcode

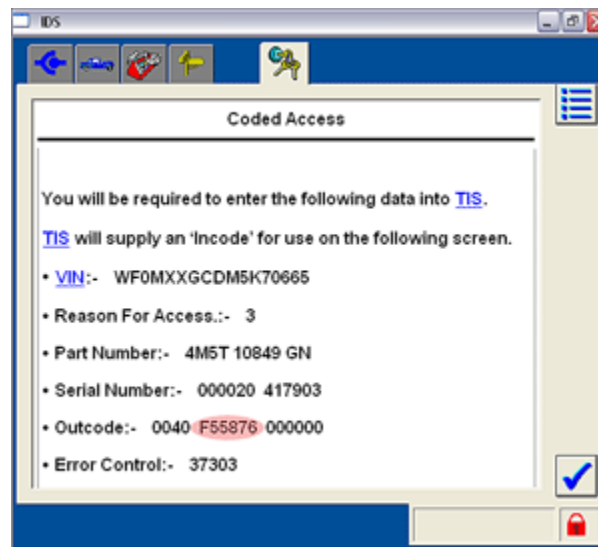
For Ford and Mazda models with PATS ICC can calculate INCODE by OUTCODE for accessing security procedures (coded access) with IDS-VCN and other diagnostic equipment.



To calculate of INCODE - enter 6 chars OUTCODE from Diagnostic Tester and click on "Calculate" button. In few seconds ICC will show 4 chars INCODE.

Please note: for coded access which require 8 chars Incode you need to enter full 16 chars Outcode, dash or space separated. For example "0044 1A2B3C 4D5E6F".

Ford IDS - Coded Access

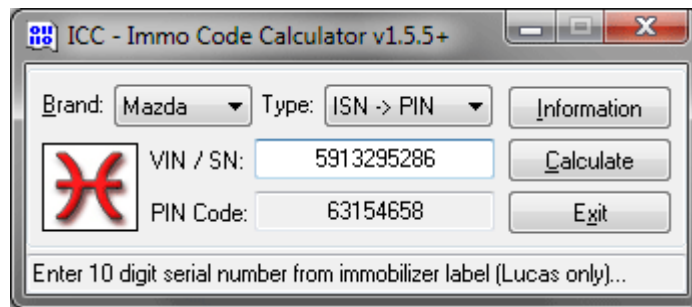


6 chars OUTCODE is "F55876"

You don't need to enter additional information such as VIN, Reason for Access, Part Number, Serial Number and Error Control.

## Mazda: PIN code by ISN

For Mazda models with LUCAS immobilizer ICC can calculate 8 digit MECS code by 10 digit serial number of immobilizer.



To calculate a code for LUCAS immobilizer set type of calculation method to ISN2PIN and enter 10 digit serial number of immobilizer as shown on picture. Serial numbers of Lucas immobox begins with 5 or 6 only.

Note: code calculation process can take up to 15 minutes (depend of serial number) using standard algorithm, please be patient. Extra fast algorithm (less than 7 seconds, 125 times faster) is available but it can not be loaded into dongle using remote update. Direct programming is required. Using ICC Tool you can check which algorithm is installed. XA module means eXtra fAst algorithm.

Lucas Immobilizer (right side of the steering column):



serial number on this label is "5913295286"

Lucas Immobilizer (right side of the steering column):



serial number on this label is "6049122561"

Lucas Immobilizer (right side of the steering column):

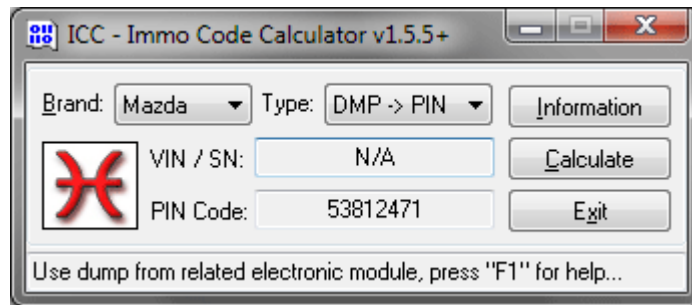


serial number on this label is "6201149030"

## Mazda: PIN code by dump

To calculate immobilizer code for Mazda models you need to locate and read dump from (depend of car model):

- Immo Box - HC705P3, HC705B8, HC705B16
- ECU - M951G, TC97101p, 77005, 77012, 77014, 25040, 24C01, 24C02, 93C56



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

Temic Immo (below radio on centre console or near steering column):



locate and read MC68HC05P3

Lucas Immo (right side of the steering column behind lower trim panel):



locate and read MC68HC05B8/16

Lucas Immo (right side of the steering column behind lower trim panel):



locate and read MC68HC05B8/16

TRW Immo (right side of the steering column behind lower trim panel):



locate and read MC68HC05B8/16

ECU Denso FP55:





locate and read 93C56

ECU Denso KJ16:



locate and read TC97101p

ECU Mitsubishi:



locate and read 24C01

ECU Mitsubishi FP15:



locate and read MC68HC05P3

ECU ZEXEL:





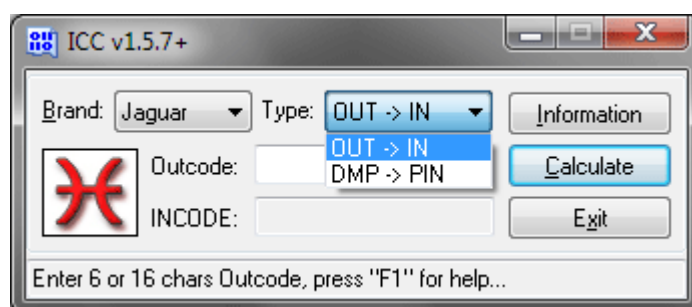
locate and read OKI M951G

And other electronic units...

## Jaguar

### Immo code / Incode for Jaguar models

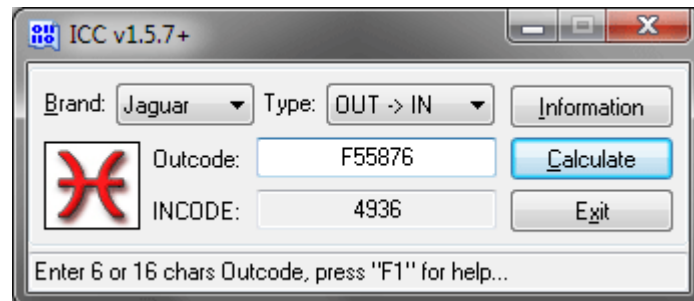
ICC can calculate INCODE for most of the Jaguar models with PATS3+ and later. INCODE is required for Control Unit assignment, adding and erasing of transponder keys with IDS-VCM, AD100Pro, SBB or any other suitable equipment. INCODE can be calculated by 6 or 16 chars OUTCODE from diagnostic scanner.



As well various models of Jaguar with 4 digit PIN codes are supported by ICC. PIN code for immobilizer can be calculated by dump of EEPROM from ECU.

## Jaguar: Incode by Outcode

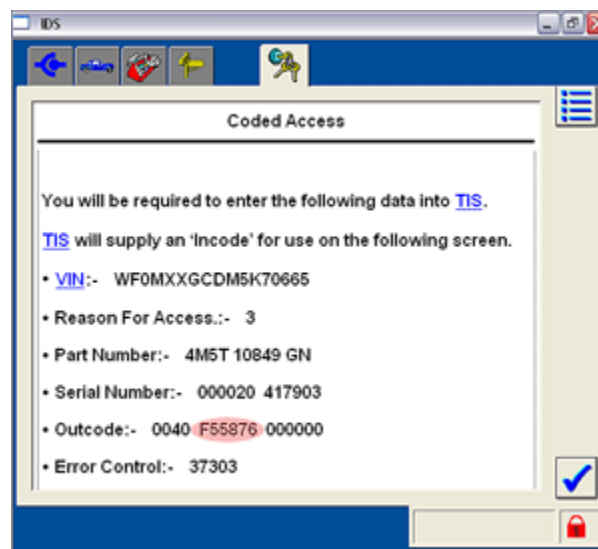
For Jaguar models with PATS ICC can calculate INCODE by OUTCODE for accessing security procedures with IDS-VCN and other diagnostic equipment.



To calculate of INCODE - enter 6 chars OUTCODE from Diagnostic Tester and click on "Calculate" button. In few seconds ICC will show 4 chars INCODE.

Please note: for coded access which require 8 chars Incode you need to enter full 16 chars Outcode, dash or space separated. For example "0044 1A2B3C 4D5E6F".

Ford IDS - Coded Access:



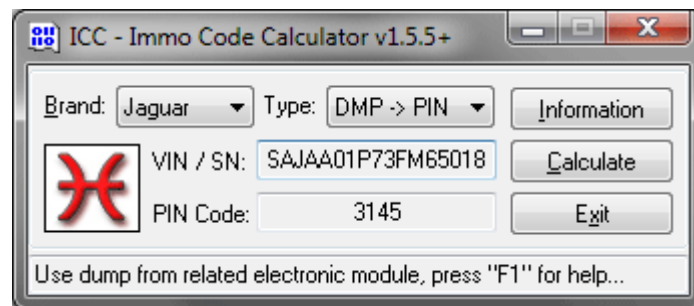
6 chars OUTCODE is F55876

You don't need to enter additional information such as VIN, Reason for Access, Part Number, Serial Number and Error Control.

## Jaguar: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- ECU - 24C08

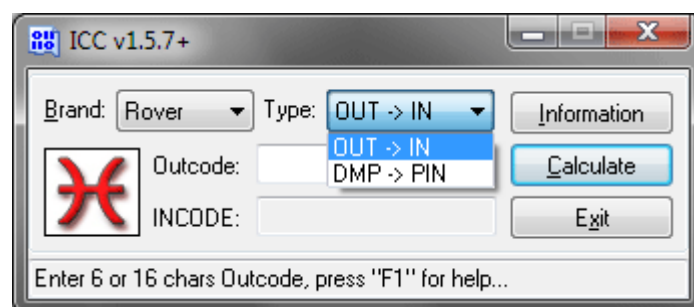


Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

## MG Rover, Land Rover

### Immo code / Incode for Rover Group models

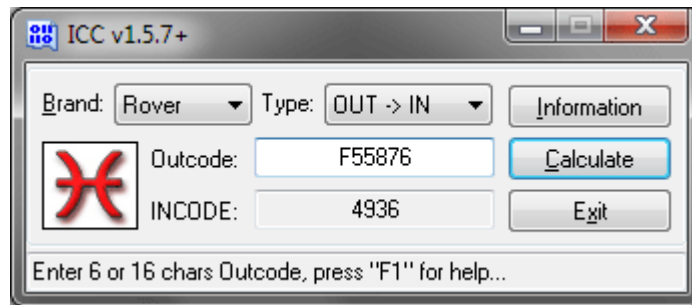
ICC can calculate INCODE for most of the Land Rover models with PATS. INCODE is required for Control Unit assignment, adding and erasing of transponder keys with IDS-VCN, AD100Pro, SBB or any other suitable equipment. INCODE can be calculated by 6 or 16 chars OUTCODE from diagnostic scanner.



As well various models of MG Rover and Land Rover with 4 digit PIN codes are supported by ICC. EKA code for immobilizer can be calculated by dump of EEPROM from BCU and Immo Box.

### Land Rover: Incode by Outcode

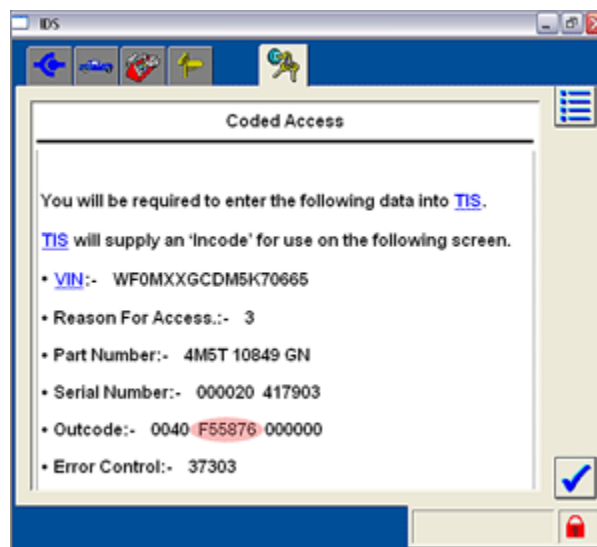
For Land Rover models with PATS ICC can calculate INCODE by OUTCODE for accessing security procedures with IDS-VCN and other diagnostic equipment.



To calculate of INCODE - enter 6 chars OUTCODE from Diagnostic Tester and click on "Calculate" button. In few seconds ICC will show 4 chars INCODE.

Please note: for coded access which require 8 chars Incode you need to enter full 16 chars Outcode, dash or space separated. For example "0044 1A2B3C 4D5E6F".

Ford IDS - Coded Access:



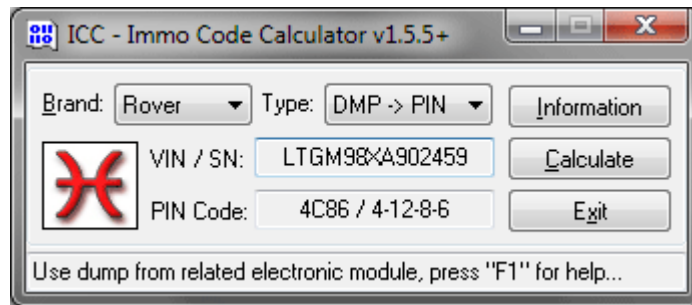
6 chars OUTCODE is F55876

You don't need to enter additional information such as VIN, Reason for Access, Part Number, Serial Number and Error Control.

## Rover Group: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- Immo - HC05B8, HC05B16
- BCU - 93C66, 68HC11P2, 68HC11PH8, 68HC11KA4, MC68HC05B16



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

**To calculate keys password or ISN by dump of EWS / DME for Land Rover models based on BMW platforms select BMW as brand.**

For Land Rover models ICC may calculate two codes as shown on picture, first one for using with diagnostic equipment and second one to enter by driver door key. On this example code for diagnostic equipment is "4C86", and code to enter by door key is "4-12-8-6".

BCU Land Rover:



locate and read 68HC11PH8 / P2, EEPROM area from 0xD00 to 0xFFFF or from 0xD80 to 0xFFFF

BCU Lucas:



locate and read MC68HC05B16

Valeo Box (left side, near pedals):



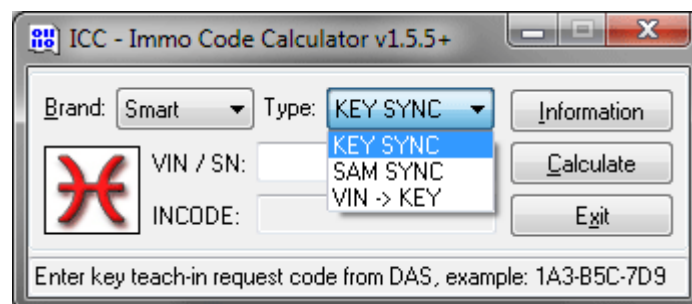
locate and read HC05B

And other electronic units...

## Smart

### TAN / Key code for Smart models

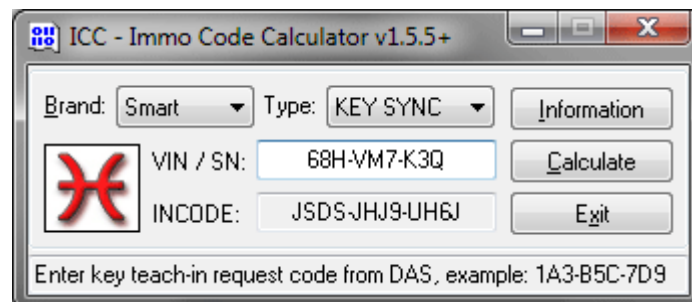
Various models of Smart are supported by ICC. 12 chars TAN code for DAS can be calculated by 9 chars outcode for key teaching procedure and by VIN for SAM synchronization.



In addition ICC can calculate a KEY code by VIN for MCC Smart 1998-2010 models.

## Smart: Teach-in key again

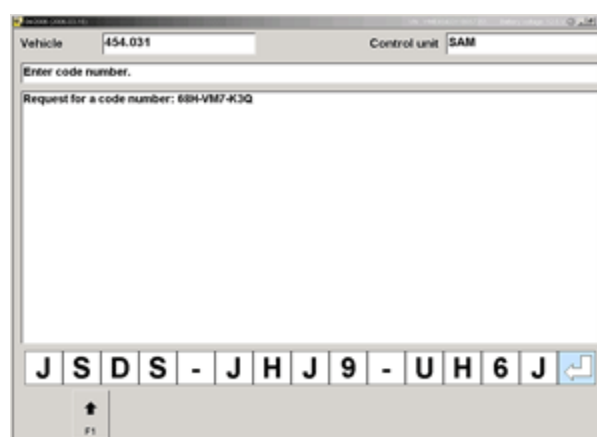
For Smart models ICC can calculate a request code (TAN) for teach-in a key procedure with DAS. This function is required in order to re-sync of keys.



In cases when synchronization of SAM unit was lost and key teaching procedure does not help to start vehicle ICC can calculate special TAN code by VIN for synchronization of SAM. This procedure called in DAS - "Carry out control unit assignment".

To calculate a TAN code - enter 9 chars outcode from DAS and click on "Calculate" button. In few seconds ICC will show 12 chars TAN for DAS. Enter it as shown on picture.

DAS program a key screen:

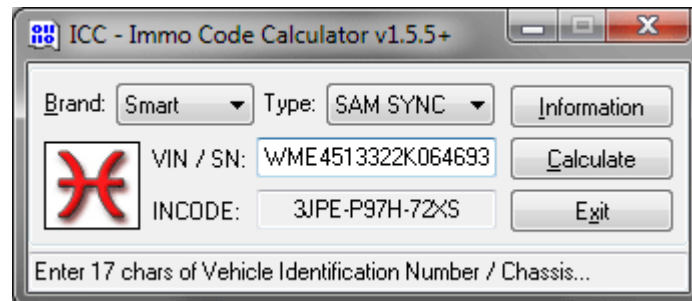


request code on picture is 68H-VM7-K3Q

Note: You need to re-sync all of your keys otherwise you will not start car with old key(s).

## Smart: SAM unit assignment

For Smart models ICC can calculate a request code (TAN) for synchronization of SAM. This procedure called in DAS - "Carry out control unit assignment".



To calculate a TAN code - enter VIN and click on "Calculate" button. In few seconds ICC will show 12 chars incode for DAS. Enter it as shown on picture.

DAS - SAM unit assignment:

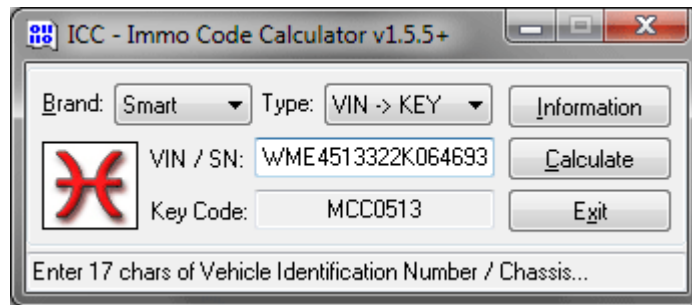


After synchronization of SAM unit you can start procedure "Teach-in key again".

## Smart: KEY code by VIN

For Smart 1998-2010 models ICC can calculate a KEY code by VIN. This can help you in cases when all car keys are lost and you don't want to change all car's locks. Supported WMIs are WME and TCC.





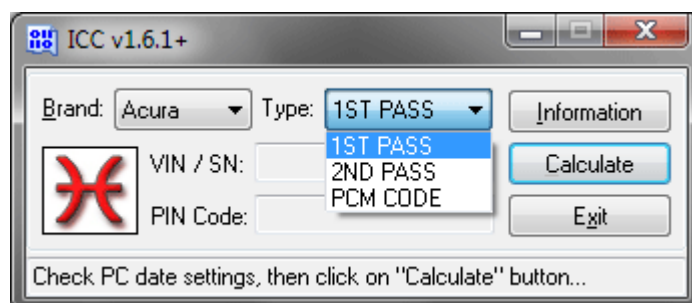
Two types of KEY codes are supported, 4 digit - MCC1234 and 6 digit - 012345.

Set type of calculation method to VIN2KEY and enter required data. In few seconds ICC will calculate a KEY code for using with computerized key duplicators with "Cut to Code" function.

## Honda, Acura

### 1st Pass / PCM code for Honda & Acura models

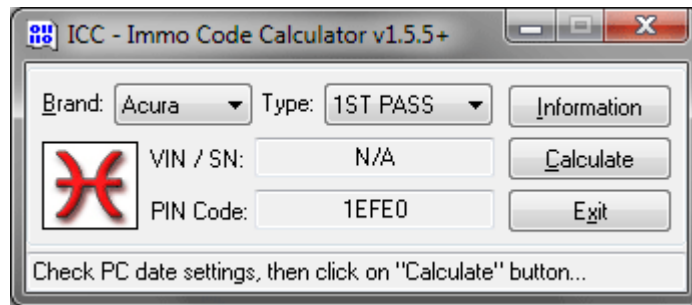
Various models of Honda & Acura are supported by ICC. This is complete solution for Key Programming and PCM replacement procedures with Honda Diagnostic System.



ICC can calculate 1st Immobilizer Password, Release Password and PCM access code for HDS. Please note this is not a 5 digit immobilizer brake codes.

### Honda & Acura: 1st Immo Password

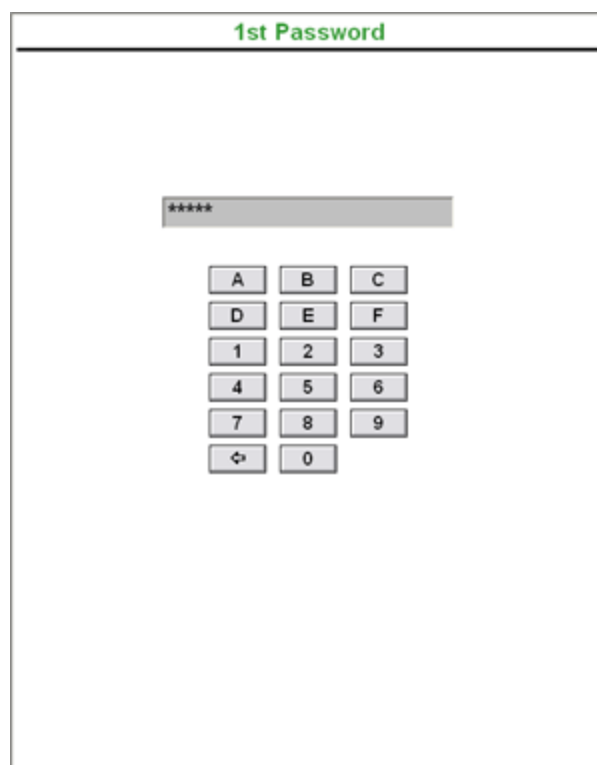
For Honda and Acura models ICC can calculate 1st Immobilizer Password for using with Honda Diagnostic System.



Set calculation method as shown on picture and click on "Calculate" button. That's all.

1st Password is required for adding a key(s) with HDS and clearing transponder codes of lost programmed ignition keys.

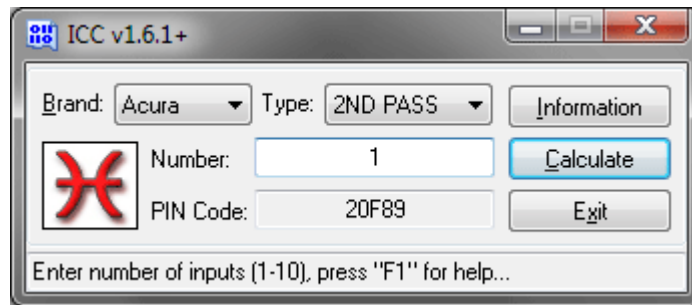
Honda Diagnostic System - 1st Password:



enter code as shown on picture

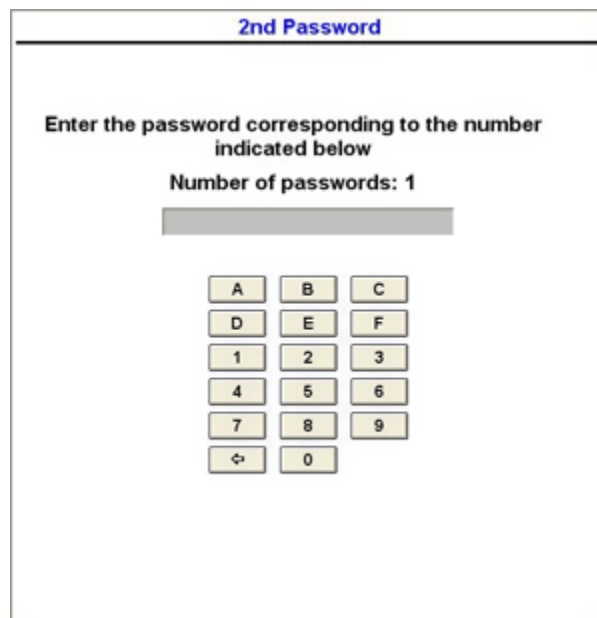
## Honda & Acura: Release Password

For Honda Diagnostic System ICC can calculate Release Password (2nd Password). It's required in cases when you entered wrong access code more than 3 times and diagnostic tester was locked.



Set calculation method as shown on picture, enter number of inputs and click on "Calculate" button.

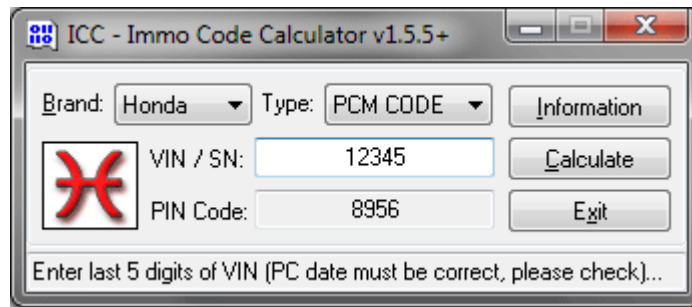
Honda Diagnostic System - 2nd Password:



enter code as shown on picture

## Honda & Acura: PCM code by VIN

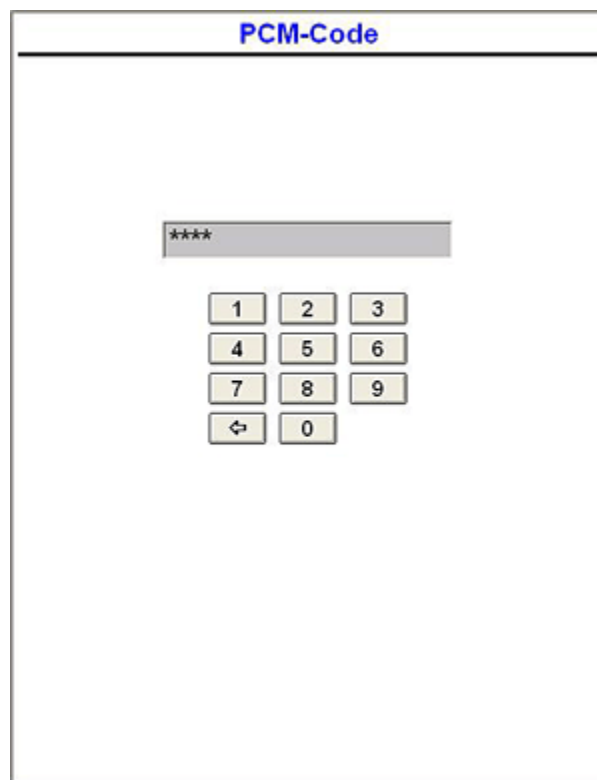
For Honda and Acura models ICC can calculate PCM access codes by VIN for using with OEM diagnostic equipment.



To calculate a PCM access code you need to enter last 5 digits of VIN as shown on picture.

PCM Code is required in cases when all car keys are lost or PCM/ECM Immobilizer replacement. Please note, PC date settings are must be correct because all of secret codes are calculating for the current day only.

Honda Diagnostic System - PCM Code:

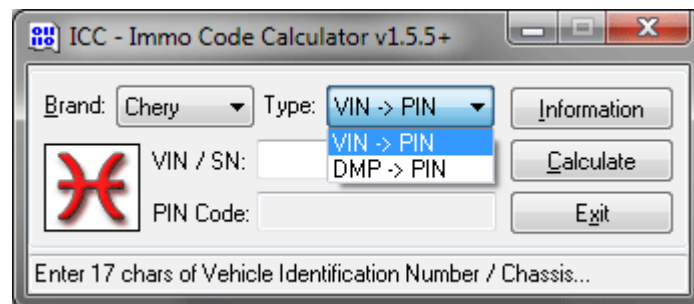


enter code as shown on picture

# Chery

## Immo code for Chery models

Various models of Chery with 4 digit PIN codes are supported by ICC.

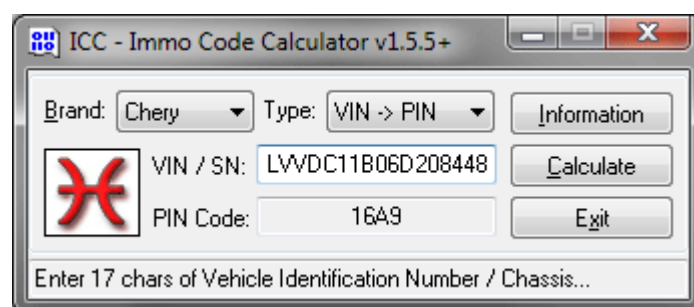


PIN code for immobilizer can be calculated [by VIN](#) and [by dump](#) of EEPROM from ECU and Immo Box.

Default PIN code for Chery Immobilizers is "1111". You can try it first before reading dump.

## Chery: PIN code by VIN

For Chery (Qirui) A5, IQ models made in China ICC can calculate 4 chars immobilizer PIN code by VIN.

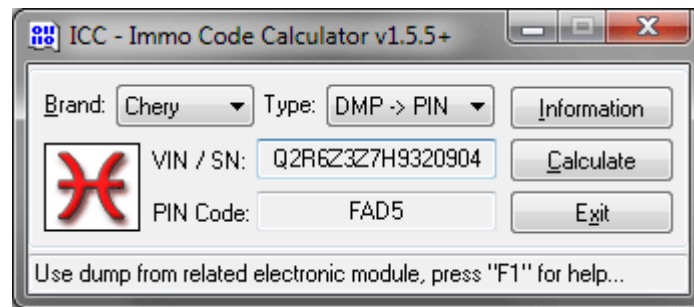


Set type of calculation method to VIN2PIN and enter required data. In few seconds ICC will calculate a PIN code for immobilizer programming.

## Chery: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- ECU - 95080
- Immo - MC68HC908AB32/Z32



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

ECU Bosch ME7.9.7:



locate and read 95080

Immo Siemens 03072004:



locate and read MC68HC908AB32

Immo 03072008:



locate and read MC68HC908AB32

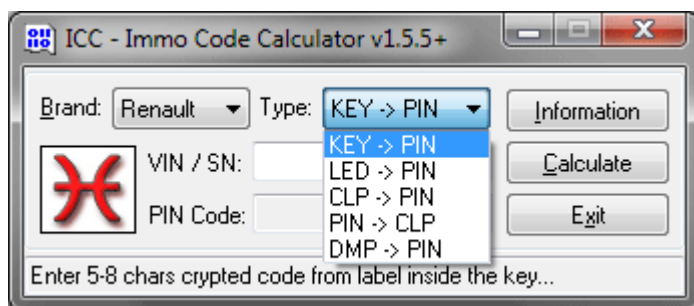
And other electronic units...

## Renault, Dacia

### PIN code by key tag

Immo code / Incode for Renault & Dacia models

Various models of Renault & Dacia with 4, 8 and 12 digit codes are supported by ICC.



PIN code for immobilizer can be calculated by serial number from label inside the key for old models with 4 digit codes and by dump of EEPROM for models with 4, 8 and 12 digit codes.

In addition, ICC can calculate PIN code for TYPE-1 immobilizers by number of blinks of ECU MIL lamp. This is special function for using with Renault ECU Decoding Tool aka Renault Immo Tool.

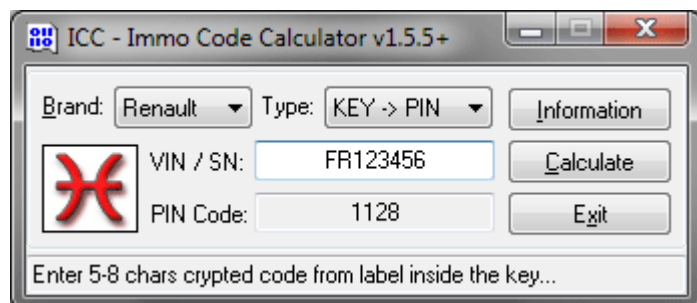
As well ICC have built-in code converter for Renault Clip: PIN code by INCODE and INCODE by PIN code.

## PIN code by key tag

### Renault & Dacia: PIN code by key tag

To calculate 4 digit emergency code for Renault vehicle you need to use serial number from label inside the key, for example:

- Siemens Transponder - 8 chars code, YR000000 - YXXXXXXX
- Valeo IR old - 5 chars code, 00000 - 88888
- Megane IR Siemens - 5 chars code, S1111 - SUUUU
- Sagem Transponder RF - 8 chars code, A0000000 - EZZZZZZZ
- Twingo IR TRW - 7 chars code, WBAAABA - WZZZYZZ
- Valeo Transponder IR - 8 chars code, ZR000000 - ZXXXXXXX
- Valeo IR - 7 chars code, P000000 - VFFFFFFF
- Valeo Transponder RF - 8 chars code, FR000000 - FXXXXXXX

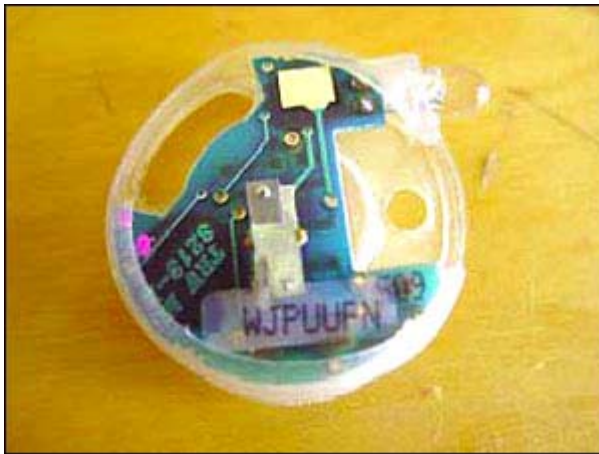


Serial number is printed on label, PCB or plastic:





serial number on yellow label



serial number on plastic - "WJPUUPN"



serial number on PCB - "P21D8AE"



serial number on PCB - "FX79DD2H"



serial number on white label - "SE18R"



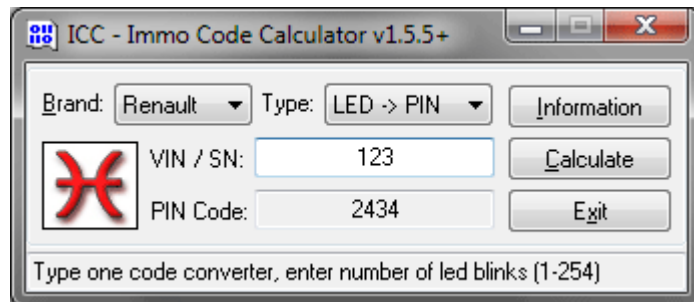
serial number on plastic - "S55TR"

If ICC will show two PIN codes, use first one for old type and second one for new type of car.

## PIN code by led

### Renault & Dacia: PIN code by led

This is special function for using with Universal Decoding Tool for Renault fuel injection ECU also known as Renault Immo Tool. This function available only for using with TYPE-1 immobilizers.



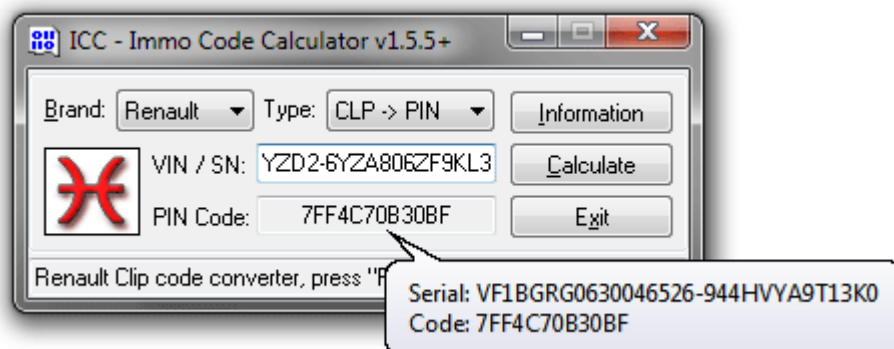
Select Semi-Auto operation mode (fast green LED blinking). Press START button. After every ignition-on, MIL immediately starts to blink fast. Watch the ECU MIL lamp and count number of ignition-on (start counting from 1). Note number of ignition-on cycles when MIL stops blinking for a while.

ECU is not decoded after this procedure, you only found out its security code. In worst case when MIL stops to blink on 254-th ignition-on, counting takes about 8 minutes.

## PIN code by INCODE

### Renault & Dacia: PIN code by INCODE

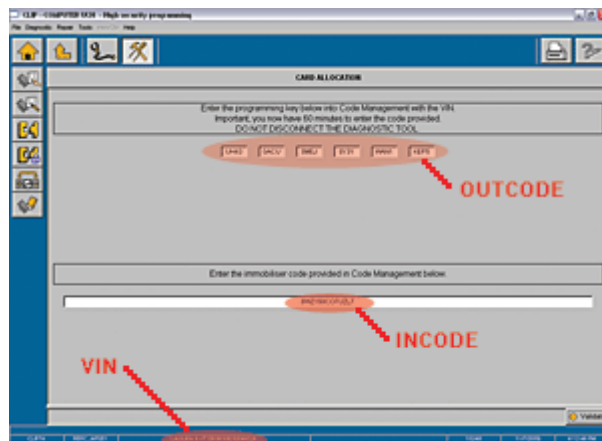
ICC have built-in code converter of Renault Clip codes for Card Allocation procedure. To calculate real PIN code from Renault Clip codes you need to enter following data: VIN + OUTCODE + INCODE, separated by dashes or spaces.



On this example: VIN - "VF1BGRG0630046526", OUTCODE - "944HVYA9T13K073MB1R1YZD2" and INCODE - "6YZA806ZF9KL3".

You need to enter this data as "VF1BGRG0630046526-944HVYA9T13K073MB1R1YZD2-6YZA806ZF9KL3".

Renault Clip, Card Allocation:

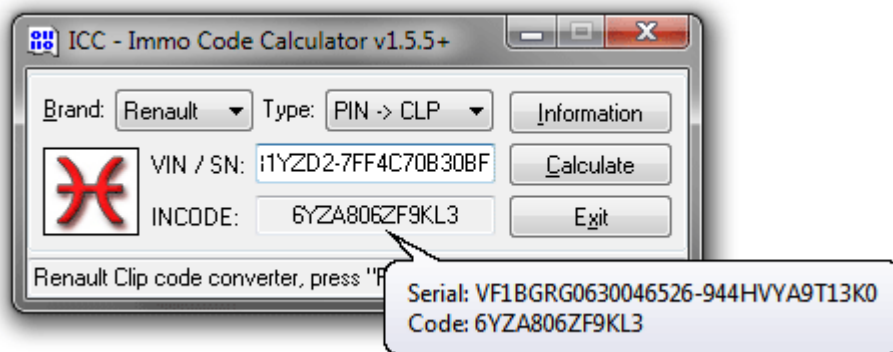


High Security Programming

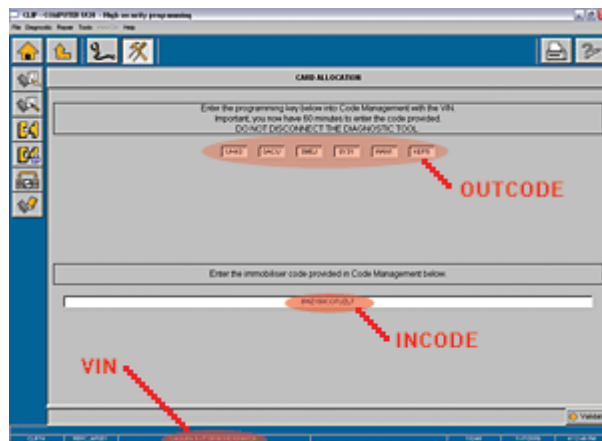
## INCODE by PIN code

### Renault & Dacia: INCODE by PIN code

ICC have built-in code converter of Renault Clip codes for high security programming procedure. To calculate INCODE for Renault Clip you need to enter following data: VIN + OUTCODE + PIN code, separated by dashes or spaces.



On this example: VIN - "VF1BGRG0630046526", OUTCODE - "944HVYA9T13K073MB1R1YZD2" and PIN code - "7FF4C70B30BF".  
You need to enter this data as  
"VF1BGRG0630046526-944HVYA9T13K073MB1R1YZD2-7FF4C70B30BF".  
Renault Clip, Card Allocation:



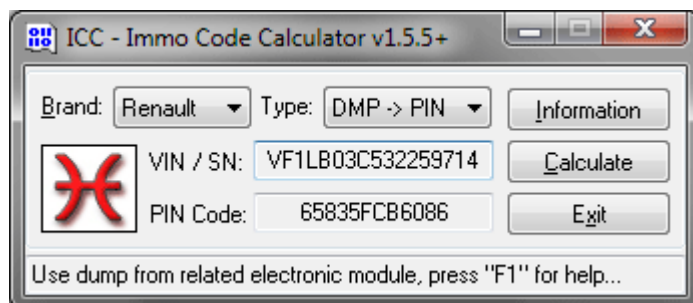
High Security Programming

## PIN code by dump

### Renault & Dacia: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- UCBIC - 93C46, MC68HC05B16 (4 digit code)
- Immo Box - 93C46, MC68HC05B6 (4, 8 digit code)
- ECU - HC11E9, 95P08, 93C86, 25080, 95080, 95160, 95320 (4, 12 digit code)
- UCH - 93C66, 95080, 95160, MC68HC05B16, MC68HC05B32, 68HC912DG128, 68HC912DG256 (8 and 12 digit code)

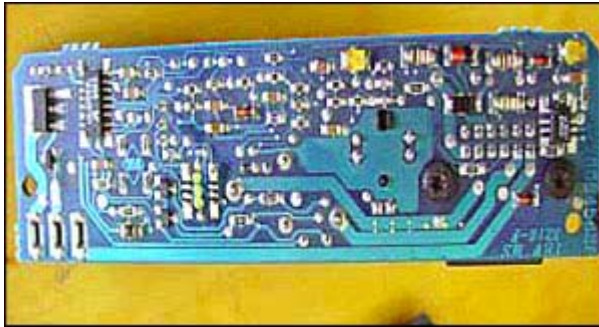


Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN if available.

ICC may show two PIN codes, in dependence of car type and year of production.

For Laguna II exist two types of immobilizers, if first code will not be accepted - click on text label "PIN Code:" and ICC will show second emergency code for another version of immo box.

Twingo IR TRW (immo near back mirror):



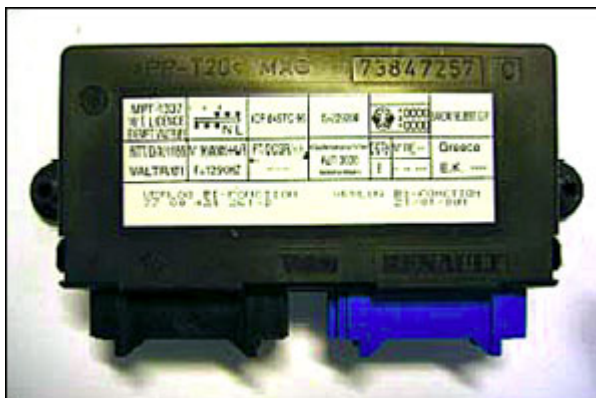
locate and read 93C46

Valeo IR:



locate and read 68HC05B16

Valeo TR+IR, TR+RF (behind fuse or glove box):



locate and read 93C46

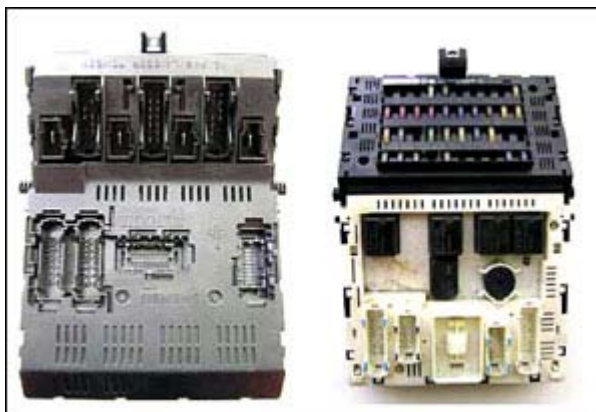
Siemens TR:





locate and read 68HC05B16

Megane IR Siemens:



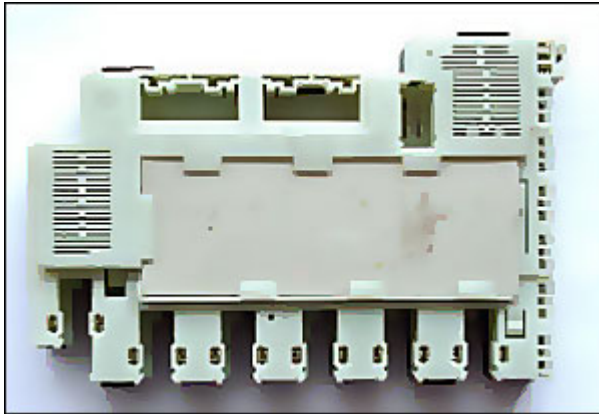
locate and read 68HC05B16

Immo Sagem TR+RF:



locate and read 93C46

Clio BMT Sagem:



locate and read 93C46

Clio BMT Sagem:



locate and read 93C46

Laguna II UCH Sagem (driver side, attached to fuse box):



locate and read MC68HC912DG128

Espace IV BII (passenger side underneath a panel):

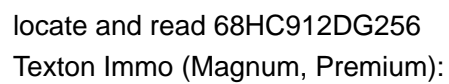
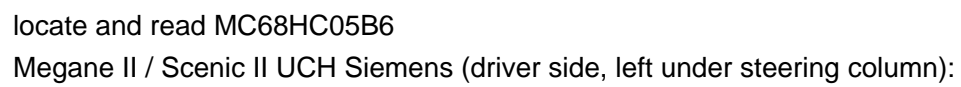




locate and read MC68HC08AZ60  
Megane, Scenic UCH Siemens (in fuze box):



locate and read MC68HC05B16/32  
Megane Immoibox Siemens (attached to the back of the fuse box):





locate and read 93C46

Siemens UCH:



locate and read 93C66

Sagem UCH (fuse box, driver's side):



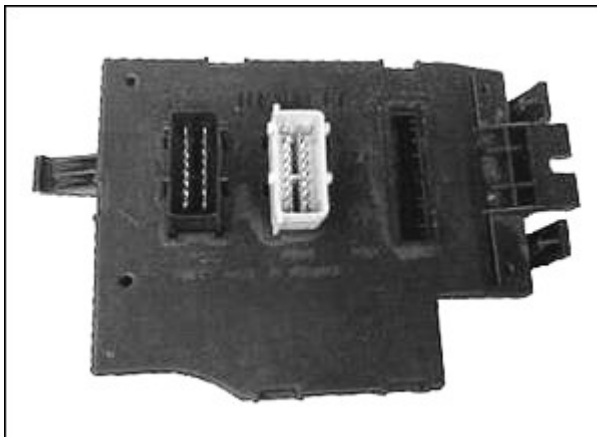
locate and read 93C66

Sagem UCH-N2:



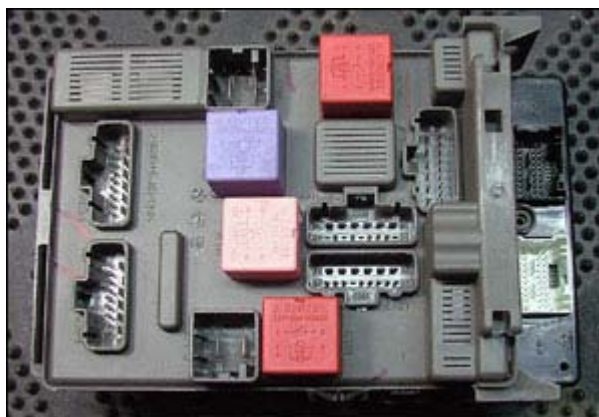
locate and read 93C66

Johnson Controls UCH (under plastic cover at steering column):



locate and read 95080

Johnson Controls UCH:



locate and read 95160

Siemens Fenix-3B ECU:



locate and read HC11E9

ECU Bosch:



locate and read 95P08

ECU Bosch EDC16:



locate and read 95320

ECU Sagem S2000-RPM:





locate and read 95080  
ECU Sagem S3000:



locate and read 95160  
ECU Delphi DDCR:



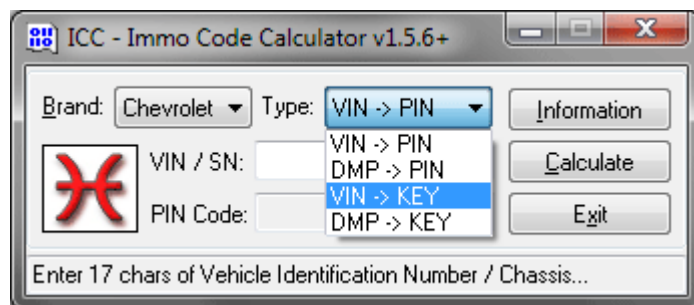
locate and read 95080

And other electronic units...

## Opel, GMC, Vauxhall, Chevrolet, Holden, Buickpel, GMCuxhall

### Immo code for General Motors models

Various General Motors models with 4 digit PIN codes are supported by ICC.



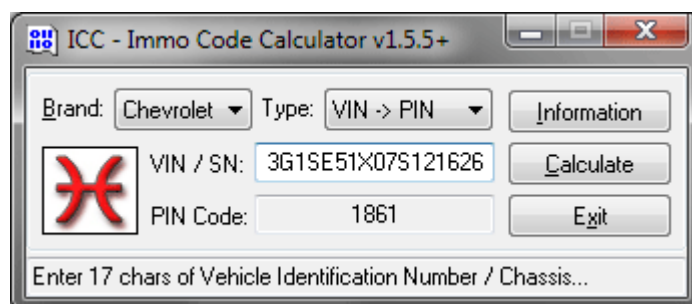
PIN code for immobilizer can be calculated by dump of EEPROM from Immo Box, BCM, UCH, ECU, REC, Radio or Dash. For Chevrolet 1999-2010 models made in Latin America ICC can calculate PIN code by VIN.

In addition ICC can calculate KEY code by VIN for Chevrolet 2000-2009 models made in Mexico, Argentina, Brazil. For all other GM models ICC can calculate KEY code by dump. For Opel models based on Renault platforms - set Renault as brand.

## PIN code by VIN

### Chevrolet: PIN code by VIN

For Chevrolet 1999-2010 models made in Latin America ICC can calculate 4 digit immobilizer PIN code by VIN.



Set type of calculation method to VIN2PIN and enter required data. In few seconds ICC will calculate a PIN code for immobilizer programming.

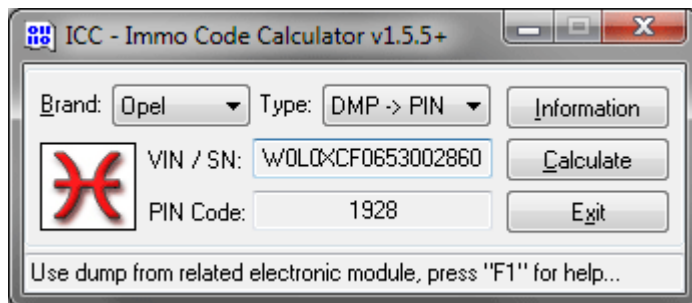
Supported WMIs are 3G1, 3GY, 8AG, 93C, W0L. For not supported cars you need to calculate PIN code by dump.

## PIN code by dump

### GM: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- REC - 95040
- UCH - 93C66
- Display - 93C56, 93C66
- Dash - 93C66, 95080, 780828
- ECU - 24C04, 95P08, 93C86, 95080, 95160, 95320, 95640, HC11F1
- BCM - 24C04, 24C16, 93C46, 93C66, 93C86, 95040, 95080, HC912DG128
- Immo Box - TMS370C702, MC68HC05B6, MC68HC08AB16A, 68HC912DC128A, 93C46, 93C66, 24C04
- Radio - 24C32, 95640, MC68HC05B16 (Blaupunkt / Grundig CAR300D, CAR2003, CC20, CD30, CD30 MP3, CDC40, CDC40 Opera)



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file.

ICC will show a PIN code and VIN or ID of electronic module if available.

Note: For Opel models based on Renault platforms - set Renault as brand.

IMMO Siemens (located near ignition):



locate and read 68HC05B6

IMMO Siemens (located near ignition):





locate and read TMS370C702 or HC908AB16A  
IMMO Megamos:



locate and read 93C46  
IMMO Megamos (right of the steering column):



locate and read 93C46  
Immo Delphi:



locate and read 93C46

IMMO Tokai Rika:



locate and read 93C66

IMMO Tokai Rika:



locate and read 93C66

IMMO Tokai Rika:



locate and read 93C66

IMMO Temic:



locate and read 68HC912DC128A

Immo Valeo:



locate and read 24C04

BCM Siemens:



locate and read 93C66

BCM Lomina:



locate and read 93C46

BCM Lomina:



locate and read 24C04

BCM Denso:



locate and read 95080

BSI Delphi SCCS platform (driver side, above pedals):



locate and read 93C86

UCH Sagem N2:



locate and read 93C66

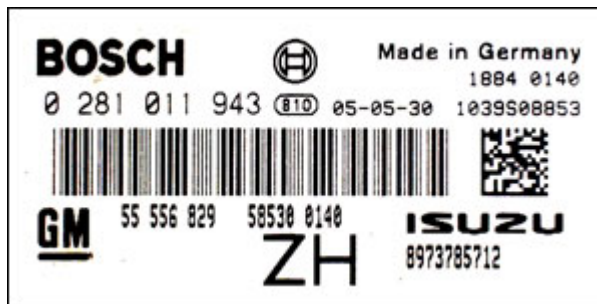
ECU Bosch:





locate and read 95P08

ECU Bosch:



locate and read 95160

ECU Bosch:



locate and read 95080

ECU Denso:



locate and read 93C86

ECU Delphi X16SZR:















locate and read HC11F1  
ECU Magneti Marelli MJD:



locate and read 95320  
Radio Blaupunkt CD30/CD30 MP3:



locate and read 95640

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No: 13 188 461		Made in Portugal																			
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LASERPRECUT																					
		FD 3953																			

Radio Blaupunkt CC20:



Radio Blaupunkt CDC40 / CDC40 Opera:



Radio Blaupunkt CDC40 / CDC40 Opera:





locate and read 95640

Radio Delphi Grundig CD30 / CD30 MP3:



locate and read 24C32

Radio Blaupunkt CAR2003:



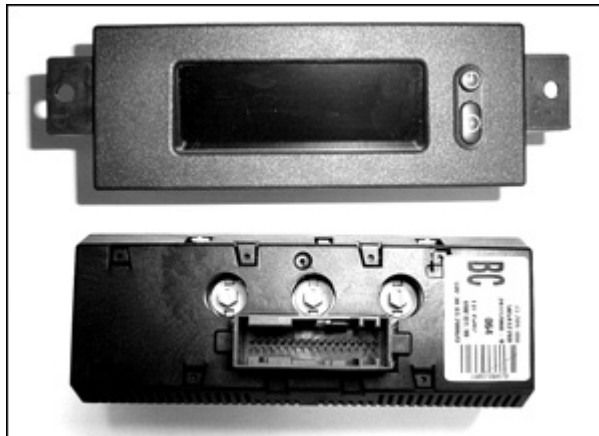
locate and read MC68HC05B16

Radio Blaupunkt CAR300D:



locate and read MC68HC05B16

Corsa-D Display:



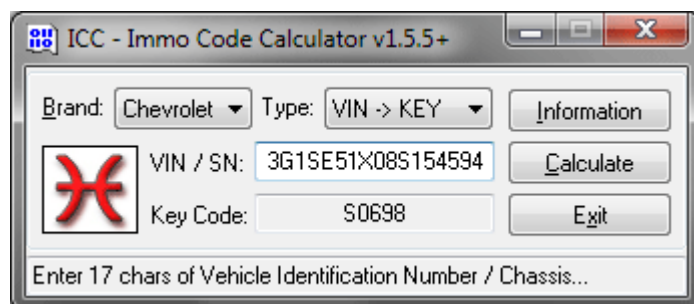
locate and read 93C56

And other electronic units...

## KEY code by VIN

### Chevrolet: KEY code by VIN

For Chevy 2000-2010 models made in Mexico, Argentina, Brazil ICC can calculate a keycode by VIN. This can help you in cases when all car keys are lost and you don't want to change all car's locks.



Supported WMIs are 3G1, 3GY, 8AG, 93C, W0L. Supported KEY-prefixes are: 1, D, H, S, Z.

Set type of calculation method to VIN2KEY and enter required data. In few seconds ICC will calculate a KEY code for using with computerized key duplicators with "Cut to Code" function.

## KEY code by dump

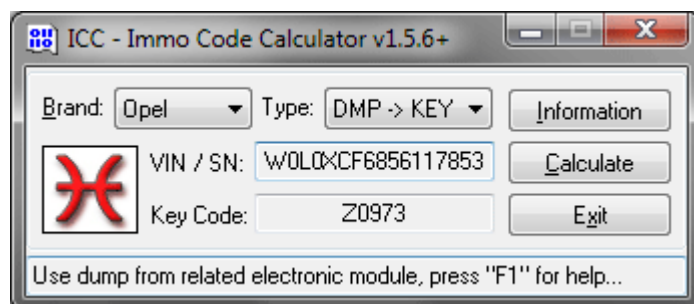
### GM: KEY code by dump

For Opel, Vauxhall, Chevrolet, Holden, Buick models ICC can calculate KEY cutting code by dump. This can help you in cases when all car keys are lost and you don't want to change all car's locks.

To calculate mechanical KEY cutting code you need to locate and read dump from

(depend of car model):

- BCM - 93C86
- Immo Box - TMS370C702, MC68HC05B6, MC68HC08AB16A



Set type of calculation method to DMP2KEY and browse for a dump file. In few seconds ICC will calculate a KEY code for using with computerized key duplicators with "Cut to Code" function.

IMMO Siemens (located near ignition):



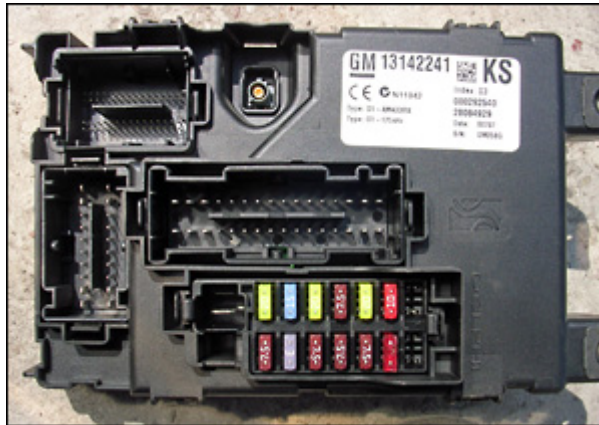
locate and read TMS370C702 or HC908AB16A

IMMO Siemens (located near ignition):



locate and read 68HC05B6

BCM Delphi:

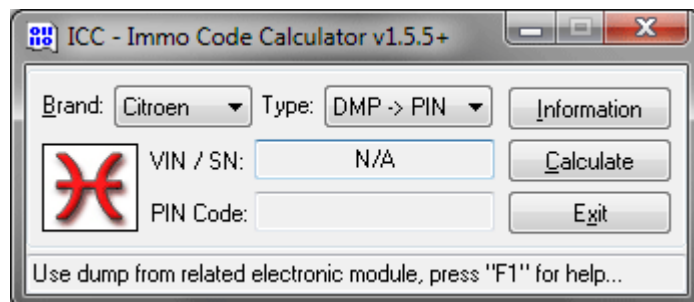


locate and read 93C86  
And other electronic units...

## Citroen, Peugeot

### Immo code for PSA models

Various models of PSA with 4 and 5 digit PIN codes are supported by ICC.



PIN code for immobilizer can be calculated by dump of EEPROM from Immo Box, BSI, CPH, ECU, Valve or Keyboard for models with keypad immobilizers.

Factory default code for models with keypad immobilizer is "1111". Also you can use this default code in cases when immobilizer was reseted or EEPROM in ECU is erased.

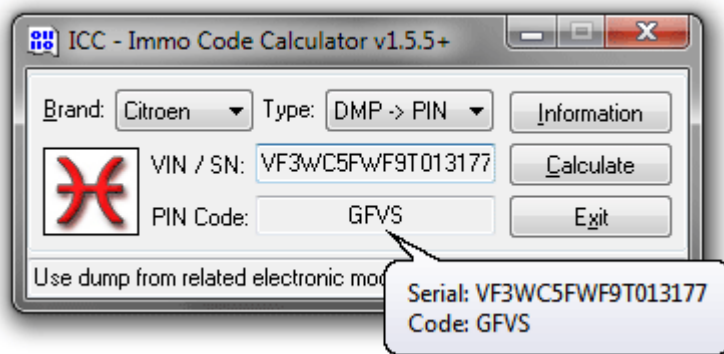
## PIN code by dump

### PSA: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- CPH - 93C66, 95040
- Valve - MC68HC05P3
- Immo Box - 93C46, 93C56, MC68HC05E6
- Keyboard - MC68HC05B6, HC11F1, 93C46
- BSI - uPD780949, 93C66, 24C128, 95040, 95128, 95160, 95256, MC68HC12, HC05B16, MC912DG128
- ECU - ST10F276, ST10F280, 29F200, 29F400, 68HC11E1, 68HC11E9, 93C46, 93C56,

95P08, 95040, 95080, 95160, 95320, 95640



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file.  
ICC will show a PIN code and VIN or serial no of electronic unit if available.  
Immo Valeo (behind dash on left hand side):



locate and read 93C46  
Immo Siemens (near steering column to the right):



locate and read HC05E6  
Immo Delphi:



locate and read 93C56

Immo Delphi (behind dashboard above pedals):



locate and read 93C46

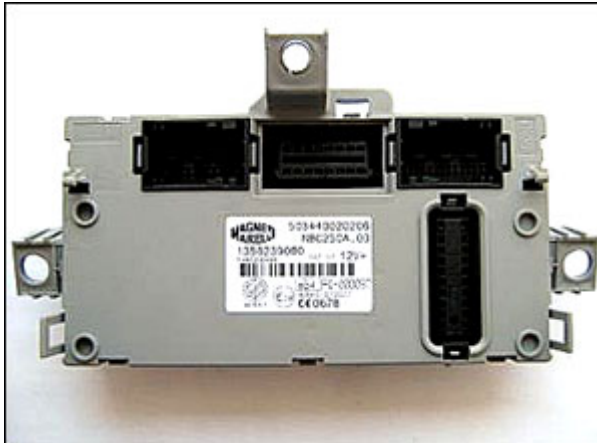
Keypad Immo:



locate and read 93C46 or HC05B6

BSI Magneti Marelli:





locate and read 95160

BSI Siemens (behind facia, drivers side):



locate and read 93C66

BSI Siemens E01-00:



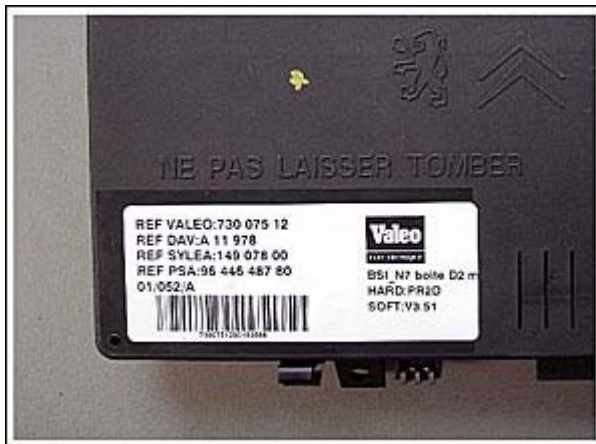
locate and read 95160

BSI Valeo type 2:



locate and read 95040

BSI Valeo type 2:



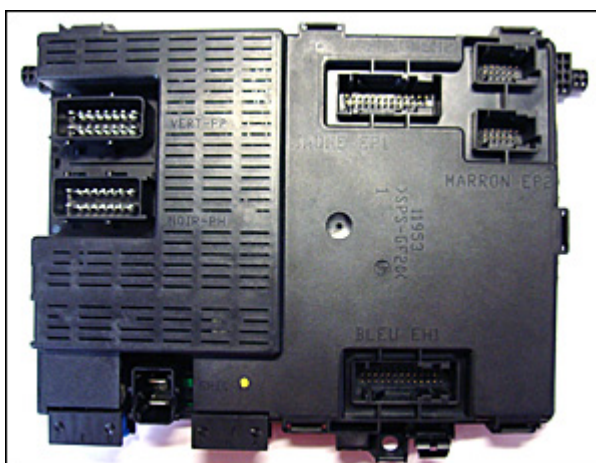
locate and read 95040

BSI Valeo type C:



locate and read 95040

BSI Valeo type C:



locate and read 95040

BSI Valeo type D:





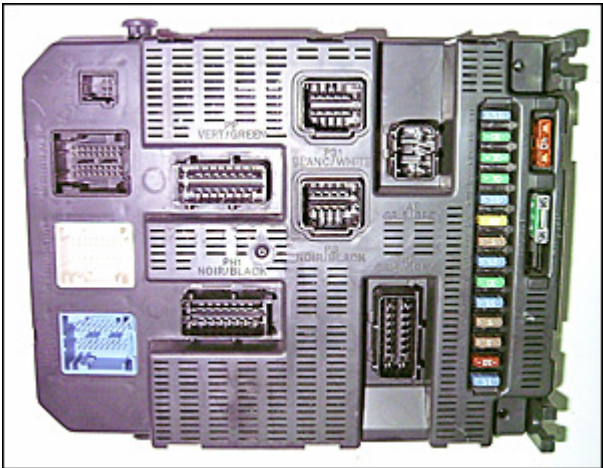
locate and read MC912DG128

BSI Valeo type D:



locate and read MC912DG128

BSI Valeo 2004 P06:



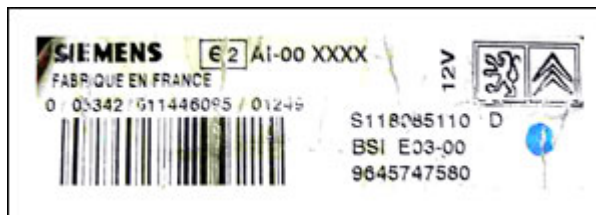
locate and read 95128

BSI Valeo X02:



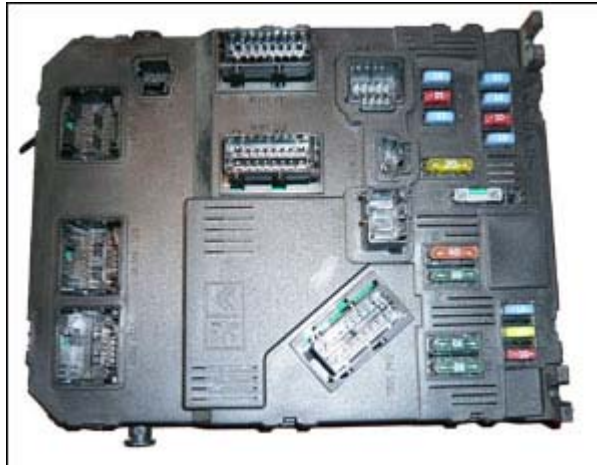
locate and read 9512

BSI Siemens:



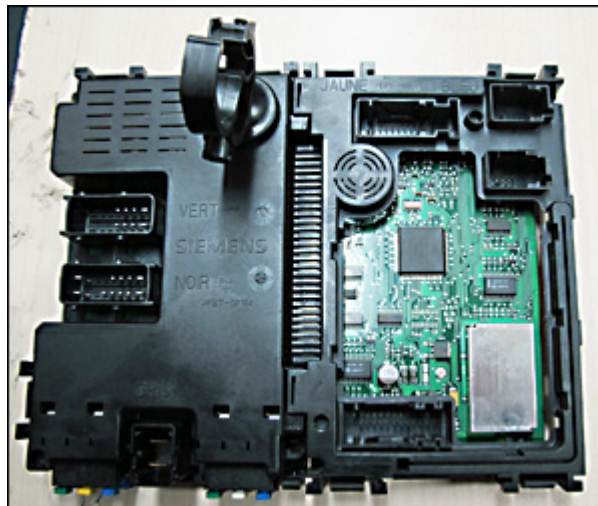
locate and read 95080

BSI Siemens:



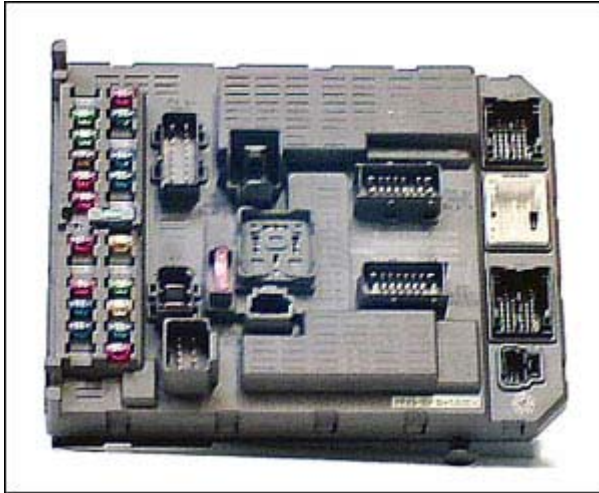
locate and read 95160

BSI Siemens:



locate and read MC68HC05B16

BSI Sagem:



locate and read HC912DG128

BSI Johnson Controls v02:



locate and read 95128

BSI Johnson Controls v02:



locate and read 95128

Texton CPH (drivers side, behind facia):



locate and read 95040 or 93C66

ECU Bosch MP5.1:



locate and read 93C46

ECU Bosch 0 281 001 213, MSA11:



locate and read 93C46

ECU Bosch 0 261 207 683, ME7.4.4:





locate and read 95160

ECU Bosch 0261 208 901, ME7.4.5:



locate and read 95320

ECU Bosch 0 281 010 931:



locate and read 95P08

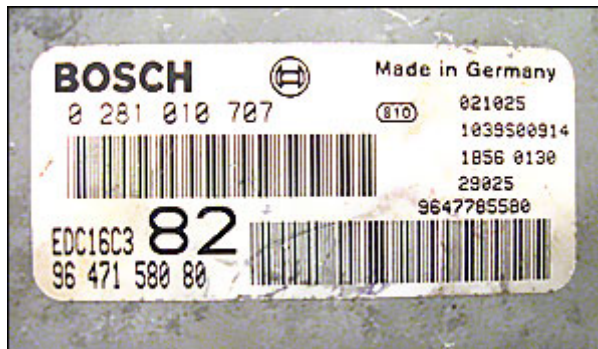
ECU Lucas:



locate and read 68HC11E1  
ECU Magneti Marelli 8PXX:



locate and read 68HC11E1



ECU Bosch

EDC15:

locate and read 95P08  
ECU Bosch EDC16C3:



locate and read 95160  
ECU Bosch EDC16C34:



locate and read 95160  
ECU Bosch EDC15C2:



locate and read 95P08  
ECU Bosch:



locate and read 95640  
ECU Lucas:



locate and read 95080  
ECU Lucas DCN2:



locate and read 95080  
ECU Valeo J34P-AAE:



locate and read 95160



ECU Magneti Marelli G6.14 0D03:



locate and read HCP11A1

ECU Magneti Marelli IAW48P2.XX:



locate and read 29F200 or 29F400

ECU Magneti Marelli 6LP-series:



locate and read ST10F280

ECU Sagem S2000-2C:



locate and read 95080  
ECU Sagem S2PM-381:



locate and read 95080  
ECU Siemens SID-801:

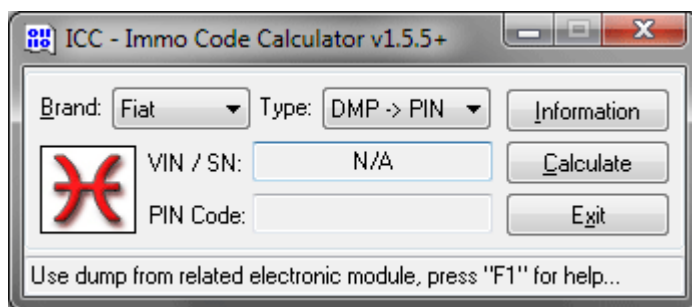


locate and read 93C56  
And other electronic units...

**Fiat, Alfa Romeo, Maserati, Lancia, Iveco**

**Immo code for Fiat Group models**

Various models of Fiat Group with 4 and 5 digit PIN codes are supported by ICC.



PIN code for immobilizer can be calculated by dump of EEPROM from BSI, CPH, ECU, Valve and Immo Box.

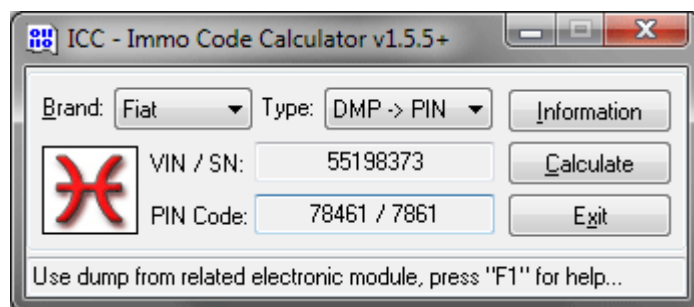
ICC can calculate 4 digit code for old models and 5 digit code for new models.

## PIN code by dump

### Fiat Group: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- CPH - 93C66, 95040
- Valve - MC68HC05P3
- Immo Box - 24C04, 93C46, 93C56, 68HC705E6, 68HC908AZ32
- BSI - 93C66, 93C86, 95128, 95160, 95320, MC9S12DG128, MC9S12DG256
- ECU - ST10F276, 24C02, 24C04, 24C16, 93C46, ST95P08, HC11A1, HC11E9, HC11F1, 95P08, 95080, 95160, 95640, 59C11, 16911



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

IMMO Bosch:



locate and read 93C56

IMMO Bosch (behind dashboard above pedals):



locate and read 93C46

IMMO Bosch:

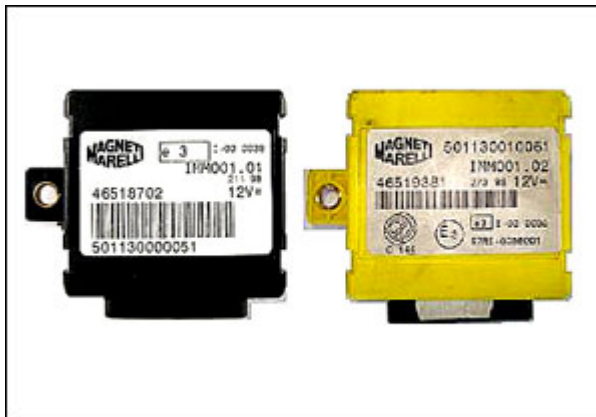


locate and read 93C56

IMMO Delphi (behind dashboard above pedals):



locate and read 93C46  
IMMO Magneti Marelli:



locate and read 68HC05E6  
IMMO Delphi:



locate and read 93C56  
IMMO Siemens:





locate and read 68HC05E6

IMMO Magneti Marelli (behind dashboard above pedals):



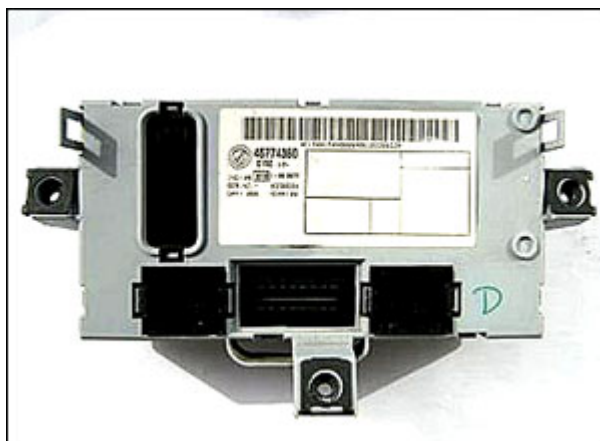
locate and read 68HC908AZ32

CPH Texton (drivers side, behind facia):



locate and read 93C66 or 95040

BSI Delphi:



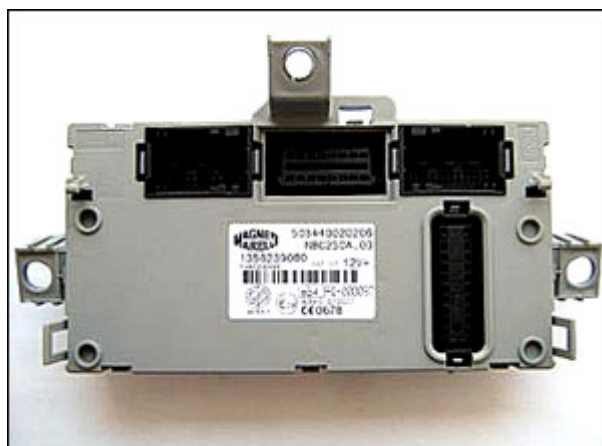
locate and read 93C66

BSI Delphi:



locate and read 93C66

BSI Magneti Marelli (behind fuse box):



locate and read HC912DG128/256

BSI Siemens (right of steering column):





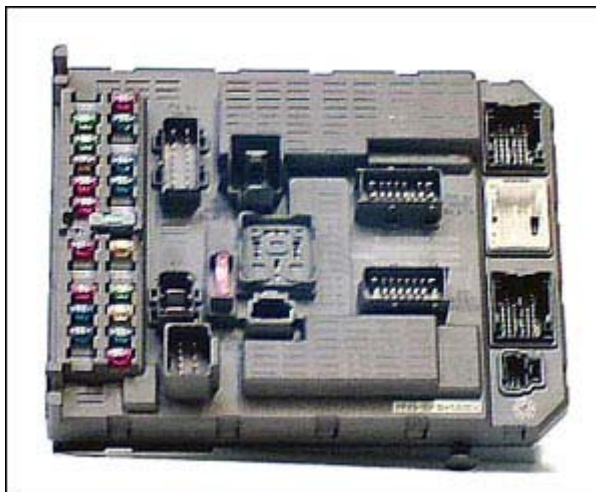
locate and read MC9S12DG128

BSI Delphi SCCS platform (driver side, above pedals):



locate and read 93C86

BSI Sagem:



locate and read HC912DG128

BSI Delphi SCCS platform (driver side, above pedals):



locate and read 93C86

BSI Magneti Marelli type 2:



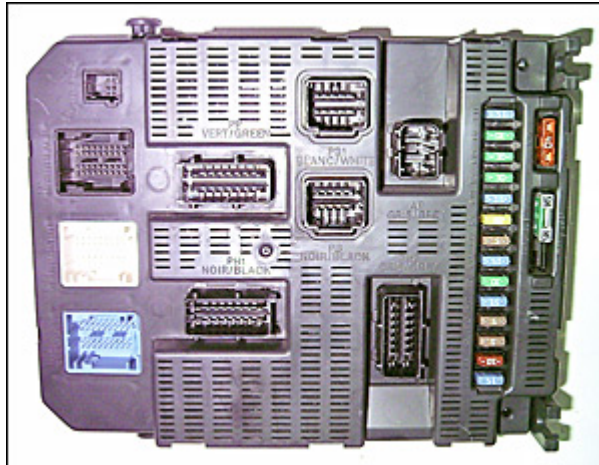
locate and read 95160 or 95320

BSI Johnson Controls v02:



locate and read 95128

BSI Valeo:



locate and read 95128

ECU EDC MS6.3:



locate and read 24C16

ECU Bosch 0 281 001 890:



locate and read 24C04

ECU Bosch 0 281 014 209:



locate and read 95640

ECU Bosch 0 281 011 228 EDC16:



locate and read 95640

ECU Bosch 0 261 204 406:



locate and read 24C02

ECU Magneti Marelli IAW 49F.B3:





locate and read 95040

ECU Magneti Marelli IAW 4AF.M9:



locate and read 95160

ECU Magneti Marelli IAW 16F.33:



locate and read HC11F1

ECU Magneti Marelli IAW 18FD.3Z:



locate and read HC11F1

ECU Magneti Marelli IAW 4EF.L1:



locate and read 95080

ECU Magneti Marelli IAW 59F.M3:



locate and read 95160

ECU Lucas:



locate and read 68HC11E9

ECU Lucas DCU3F:



locate and read 95080

ECU Delco BPJZ:



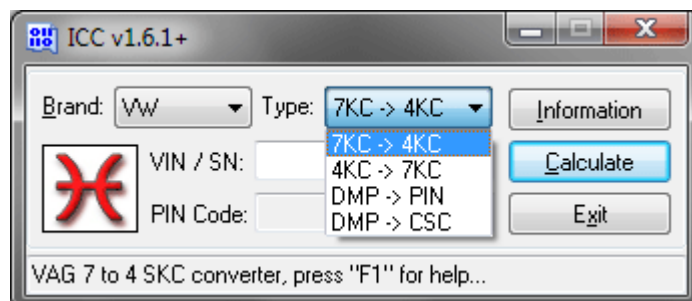
locate and read HC11F1

And other electronic units...

## VW, Audi, Seat, Skoda, Bentley

### Immo code for VAG models

Various models of VAG with 4 and 5 digit PIN codes are supported by ICC.



PIN code (SKC) for immobilizer can be calculated using 7 to 4 SKC converter or 4 to 7 SKC converter and by dump of EEPROM from Immo Box, ECU, KESSY or Dashboard.

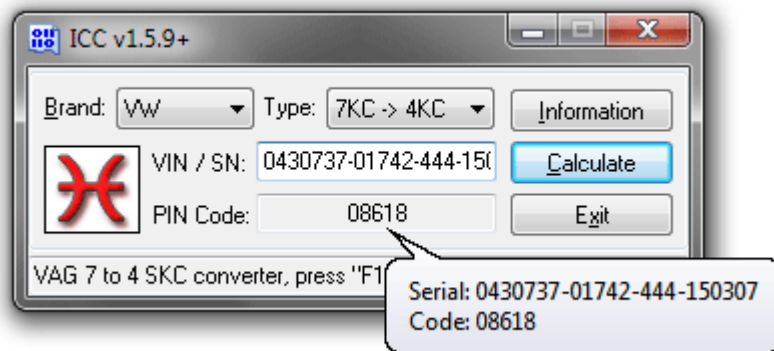
In addition ICC can calculate Component Security (CS) code by dump of EEPROM from various electronic units.



## 7 to 4 SKC converter

### VAG: 7 to 4 SKC converter

The seven digit code (SKC) is used by VAG from beginning of 2002 for increased security. ICC can convert this 7 digit PIN code to 4 digit code for all models of VW cars with IMMO I / II / III types.



To calculate a code set type of calculation to PIN2PIN and enter required data: 7 digit code (SKC), dealer no (WSC), importer code and date of issue.

The Importer Code should be:

- 210 for all dealerships in United Kingdom
- 261 for all dealerships in Portugal
- 264 for all dealerships in Italy
- 387 for all dealerships in Reunion Island
- 444 for all dealerships in USA
- 572 for all dealerships in Spain
- 724 for all dealerships in Saudi Arabia
- 730 for all dealerships in Israel
- 995 for all dealerships in France
- 999 for all dealerships in Canada

Example: 0430737 - 7 digit code, 01742 - dealer no, 444 - importer code, 150307 - date of issue (15 march 2007). As shown on picture you need to enter this data as "0430737-01742-444-150307".

Importer and dealer code are located on the rubber stamp used by the dealer to validate work done on the vehicle:



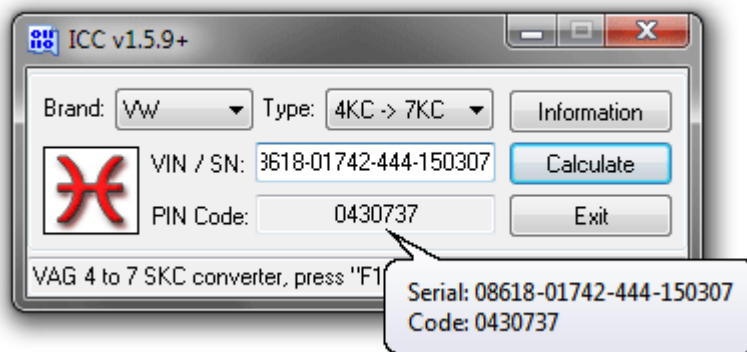
444 - importer code, 01234 - dealer code

As well importer and dealer codes can be readed from VAS-5051/5052 diagnostics scanner.

## 4 to 7 SKC converter

### VAG: 4 to 7 SKC converter

The seven digit code (SKC) is used by VAG from beginning of 2002 for increased security. ICC can convert this 4 digit PIN code to 7 digit code for all models of VW cars with IMMO I / II / III types.



To calculate a code set type of calculation to PIN2PIN and enter required data: 4 digit code (with leading zero - 01234), dealer no (WSC), importer code and date of issue.

The Importer Code should be:

- 210 for all dealerships in United Kingdom
- 261 for all dealerships in Portugal
- 264 for all dealerships in Italy
- 387 for all dealerships in Reunion Island
- 444 for all dealerships in USA

- 572 for all dealerships in Spain
- 724 for all dealerships in Saudi Arabia
- 730 for all dealerships in Israel
- 995 for all dealerships in France
- 999 for all dealerships in Canada

Example: 08618 - 4 digit code, 01742 - dealer no, 444 - importer code, 150307 - date of issue (15 march 2007). As shown on picture you need to enter this data as "08618-01742-444-150307".

Importer and dealer code are located on the rubber stamp used by the dealer to validate work done on the vehicle:



444 - importer code, 01234 - dealer code

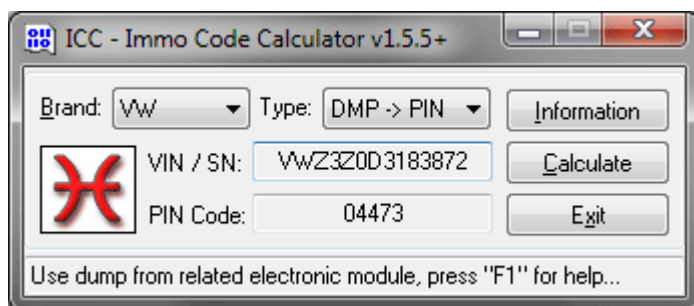
As well importer and dealer codes can be readed from VAS-5051/5052 diagnostics scanner.

## PIN code by dump

### VAG: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- KESSY - MC9S12DT128, 93C86
- Immo Box - 24C02, 24C04, 93C46, 93C56, TMS370C702, 68HC05B6, 68HC05B8
- ECU - 24C04, 93C46, 93C76, 93C86, 95040, 95080, 95128, 95160, 95320, 95P08
- Dashboard - 24C02, 24C04, 24C08, 24C17, 68HC912D60, 68HC912DG128, 68HC912DG256, 68HC711KG2/4, 93C66, 93C86



VDO Dashboards with crypted 93C86 for Audi models made after 2001; Skoda Roomster, Supeb, Fabia, Seat Ibiza, VW Polo and other models made after 2006 are supported as well.

Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

For PIN codes by dump from KESSY ICC may show 2 codes, first code for old types of units and second - for new.

Megamos Immo (near steering column):



locate and read 93C46

Megamos Immo (replacement):



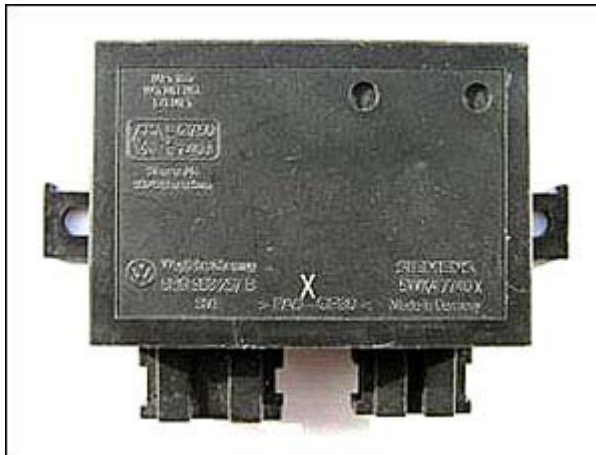
locate and read 93C46 (pin on label - 0554)

IMMO Siemens (above the pedals by the steering column):



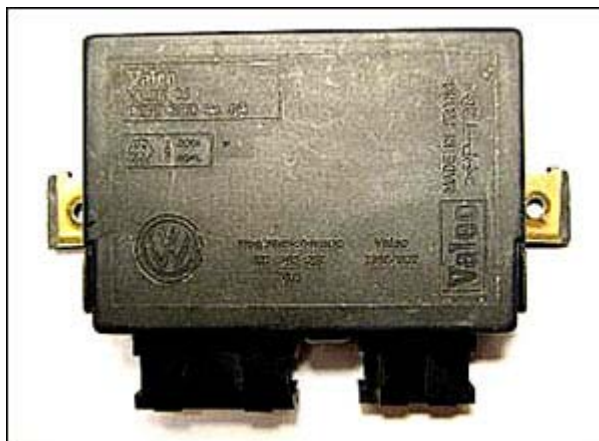
locate and read 68HC05B8

IMMO Siemens:



locate and read TMS370C702

IMMO Valeo:



locate and read 24C04

IMMO Temic:



locate and read 68HC705

IMMO KOSTAL:



locate and read 93C56 (default PIN - 1234)

Immo Siemens:



locate and read 68HC05B6

ECU Bosch ME7.5:





locate and read 95040

ECU Bosch ME7.5.20:



locate and read 95040

ECU Bosch ME7.1.1:



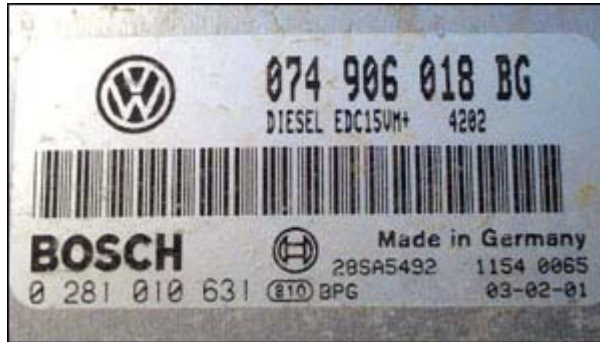
locate and read 95160

ECU Bosch:



locate and read 95040

ECU Bosch EDC15VM+:



locate and read 24C04

ECU Bosch EDC16:



locate and read 95320

ECU Bosch EDC16U1:



locate and read 95320

ECU Siemens Simos 3PE:



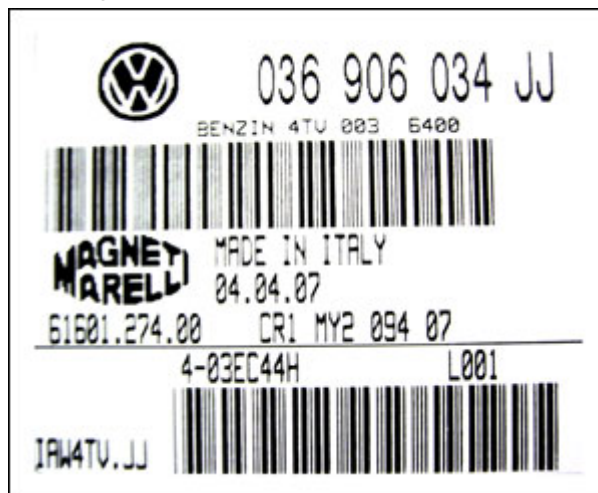
locate and read 93C76

ECU Magneti Marelli IAW 4HV.R:



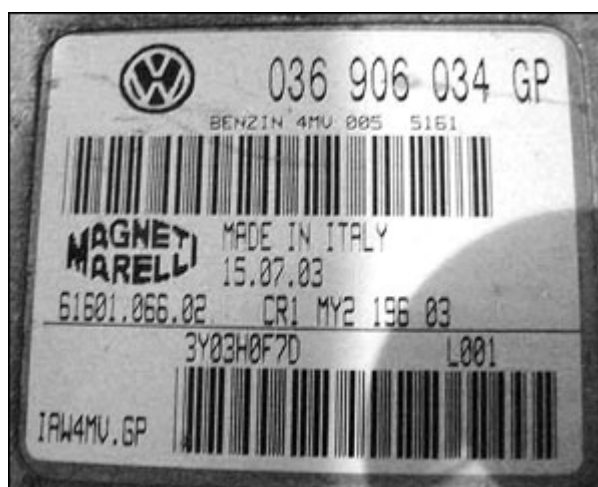
locate and read 95320

ECU Magneti Marelli IAW4TV.JJ:



locate and read 95320

ECU Magneti Marelli IAW4MV.6P:



locate and read 95080

Dashboard UK NSI:



locate and read 93C56

Dashboard VDO 1J0920 806B:



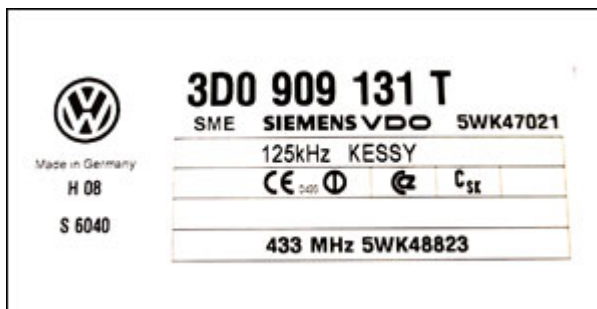
locate and read 93C86

KESSY Siemens VDO (located under dashboard):



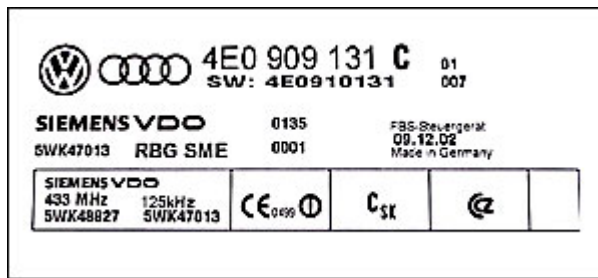
locate and read 93C86

KESSY Siemens VDO (located under dashboard):



locate and read 93C86

KESSY Siemens VDO (located under dashboard):



locate and read 93C86

KESSY Siemens VDO (located under dashboard):



locate and read 93C86

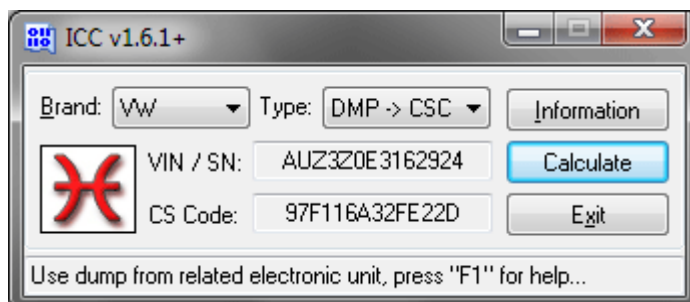
And other electronic units...

## CS code by dump

### VAG: CS code by dump

To calculate Component Security (CS) code you need to locate and read dump from (depend of car model):

- Dash - 93C86
- KESSY - 93C86
- ECU - 95040, 95160, 95320



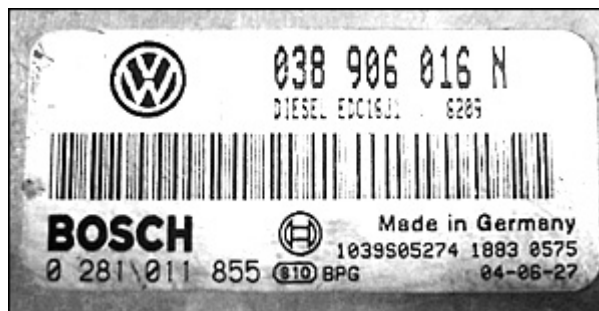
Set type of calculation to DMP2CSC and click on "Calculate" button, then select a dump file. ICC will show a CS code and VIN or ID of electronic module if available.

ECU Bosch ME7.5.20:





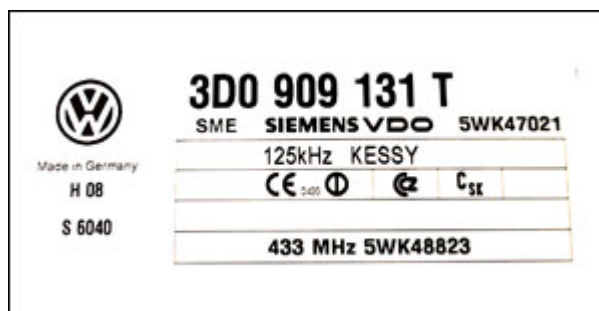
locate and read 95040  
ECU Bosch EDC16U1:



locate and read 95320  
KESSY Siemens VDO (located under dashboard):

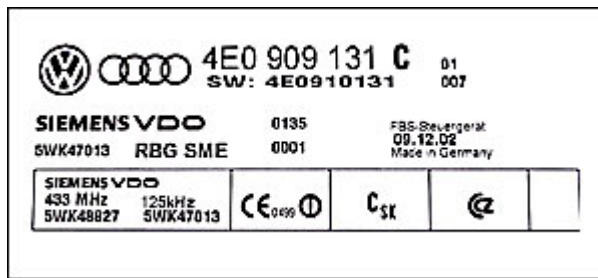


locate and read 93C86  
KESSY Siemens VDO (located under dashboard):



locate and read 93C86  
KESSY Siemens VDO (located under dashboard):





locate and read 93C86

KESY Siemens VDO (located under dashboard):



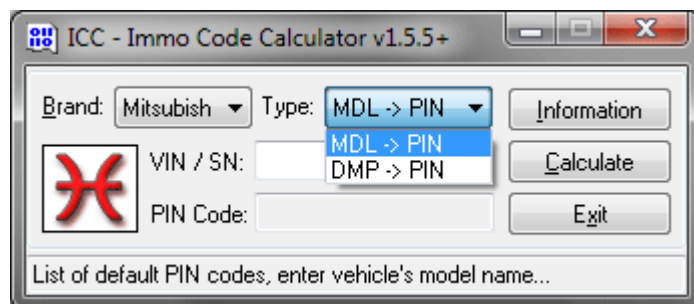
locate and read 93C86

And other electronic units...

## Mitsubishi

### Immo code for Mitsubishi models

Various models of Mitsubishi with 4 digit PIN codes are supported by ICC.

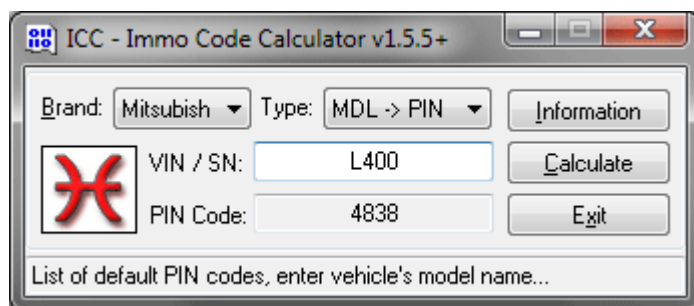


ICC have a list of default codes for immobilizer as well PIN code for immobilizer can be calculated by dump of EEPROM from Immo Box.

## List of default codes

### Mitsubishi: List of default codes

To find out default code for immobilizer you need to enter first 4 chars of vehicle's model name.



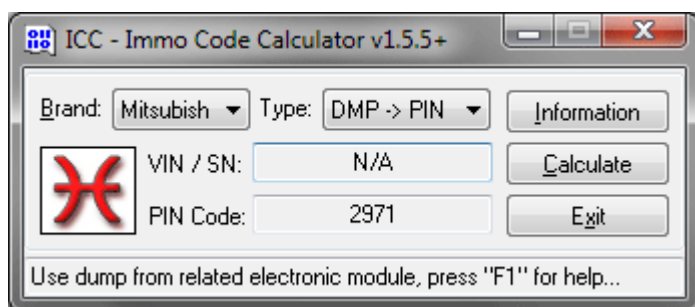
Please note, default PIN code can be changed using an diagnostic scanner. In this case you will need to read EEPROM dump from Immo Box and calculate a code by dump.

## PIN code by dump

### Mitsubishi: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- Immo Box - 24C01, 93C46



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and additional information if available.

IMMO Mitsubishi:



locate and read 24C01

IMMO Mitsubishi:



locate and read 24C01

IMMO Cartronic:



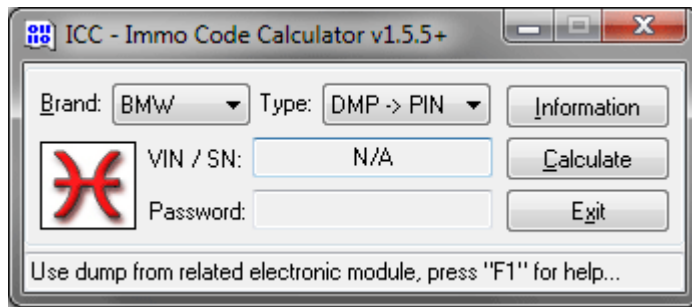
locate and read 93C46

And other electronic units...

## BMW

### Key / Synchronization password for BMW models

Various models of BMW with EWS2, EWS3, EWS4 and DME, DDE units are supported by ICC.



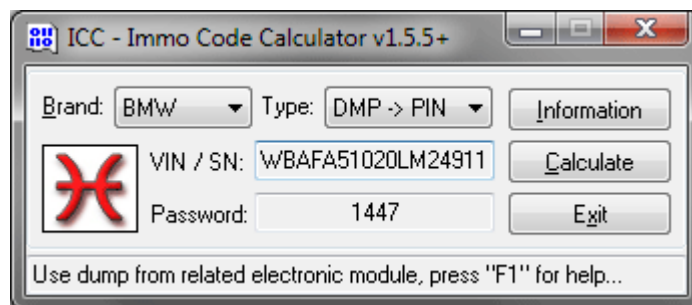
12 digit keys password can be calculated by dump from EWS2/3/4. Four digit synchronization password (ISN) can be calculated by dump from DME/DDE.

## Password by dump

### BMW: Key / Synchronization password by dump

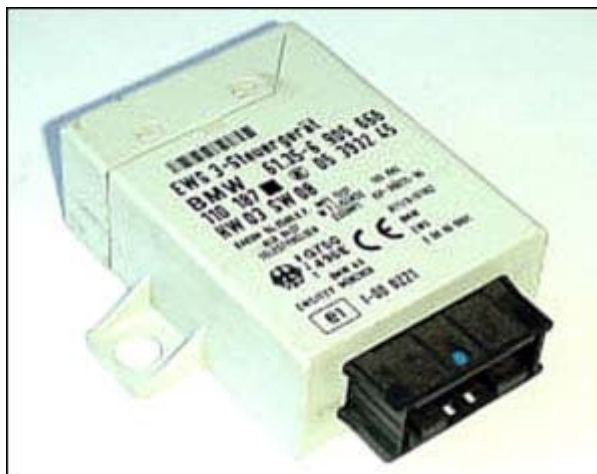
To calculate 12 digit keys password from EWS or 4 digit Individual Serial Number (ISN) from DME / DDE you need to locate and read dump from (depend of car model):

- EWS - 68HC11EA9, MC9S12D64
- DDE - 95P08, 95320, 95640
- DME - AM29F200AB, AM29F400BB



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a keys or synchronization password and decrypted VIN.

EWS-3 module (located near pedals):



locate and read 68HC11EA9

EWS-3 module (located near pedals):



locate and read 68HC11EA9

EWS-2 module (located near pedals):



locate and read 68HC11EA9

DME Bosch 0 261 207 715:



locate and read AM29F400BB



DME Bosch 0 261 207 106:



locate and read AM29F400BB

E Bosch 0 281 001 830:



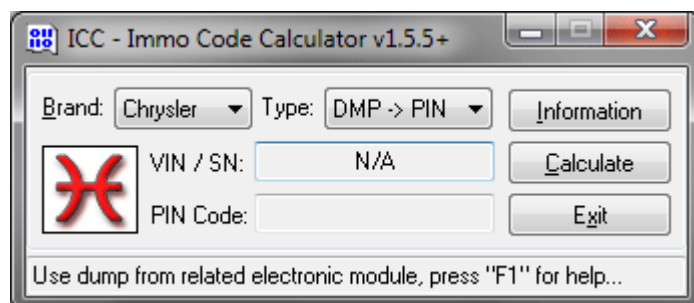
locate and read 95P08

And other electronic units...

## Chrysler, Dodge, Plymouth, Jeep

### Immo code for Chrysler & Jeep models

Various models of Chrysler with 4 digit PIN codes are supported by ICC.



PIN code for immobilizer can be calculated by dump of EEPROM from Immo-1 type, SKIM, SKREEM, WCM.

Default PIN code for some of the models based on Mitsubishi Eclipse platform like



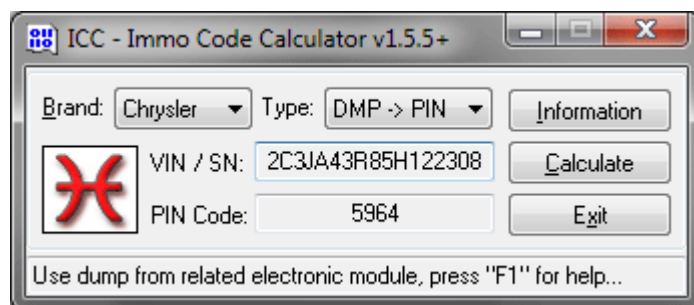
Sebring, Stratus produced in 2000-2001 is 6876.

## PIN code by dump

### Chrysler & Jeep: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- WCM - MC9S12DG128B
- Immo - 24C02, 24C16, 93C86, 95040, 95080, MC68HC08AB16A, MC68HC08AZ32, MC9S12DG128B



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

If ICC will show two PIN codes - please use second one for Immo-1 type with 24C02.

Immo Type-1/2 (near ignition):

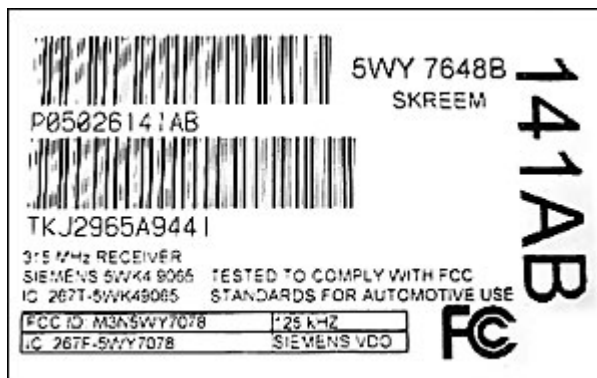


locate and read 68HC08 or 24C02

SKREEM (near ignition):



locate and read 95040 or 95080  
SKREEM (near ignition):



locate and read 95040 or 95080  
SKIM, DCX p/n 05026218AH:



locate and read 24C16  
WCM, DCX p/n 56038665AS:



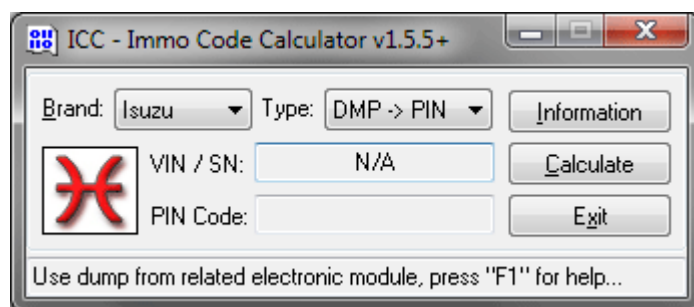
locate and read MC9S12DG128B

And other electronic units...

## Isuzu

### Immo code for Isuzu models

Various models of Isuzu with 4 digit PIN codes are supported by ICC.



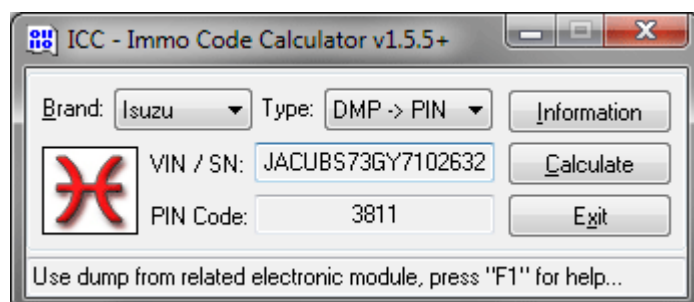
PIN code for immobilizer can be calculated by dump of EEPROM from Immo Box and ECU.

## PIN code by dump

### Isuzu: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- ECU - 25C320
- Immo - 93C46, 93C66, 24C04



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

IMMO Megamos:



locate and read 93C46

IMMO Megamos (right of the steering column):



locate and read 93C46

Immo Delphi:



locate and read 93C46

IMMO Tokai Rika:



locate and read 93C66

IMMO Tokai Rika:



locate and read 93C66

IMMO Tokai Rika:



locate and read 93C66

Immo Valeo:

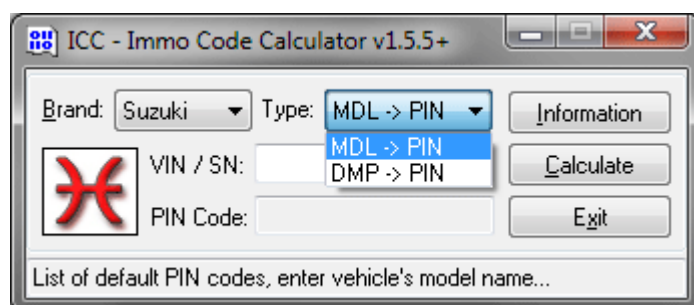


locate and read 24C04

And other electronic units...

Immo code for Suzuki models

Various models of Suzuki with 4 digit PIN codes are supported by ICC.



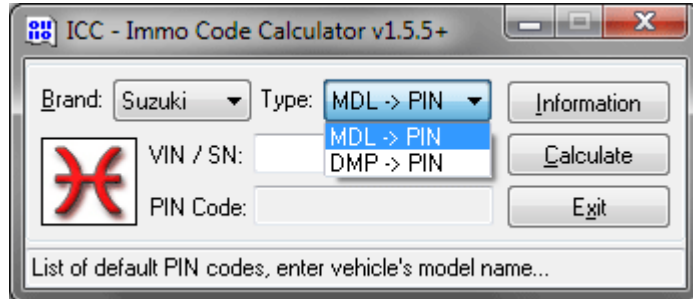
PIN code for immobilizer can be calculated by dump of EEPROM from Immo Box and ECU. For some of the new models ICC have a list of default codes.



# Suzuki

Immo code for Suzuki models

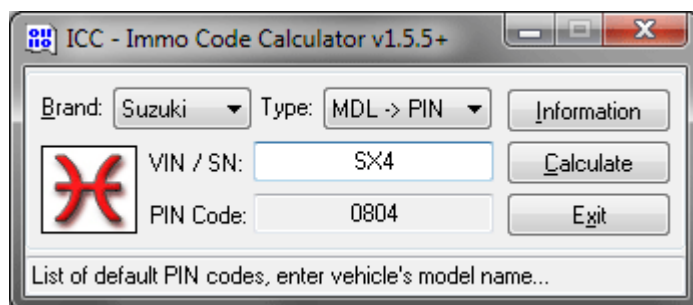
Various models of Suzuki with 4 digit PIN codes are supported by ICC.



PIN code for immobilizer can be calculated by dump of EEPROM from Immo Box and ECU. For some of the new models ICC have a list of default codes.

## Suzuki: List of default codes

To find out default code for immobilizer you need to enter first 4 chars of vehicle's model name:

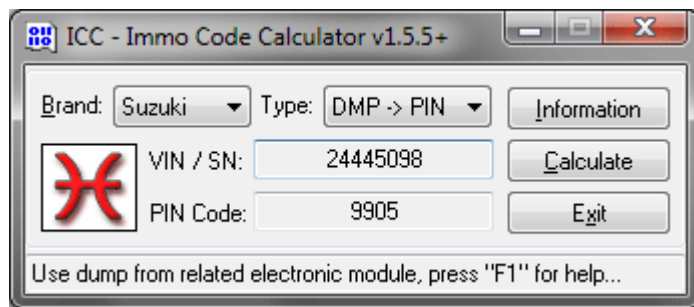


Please note, default PIN code can be changed using an diagnostic scanner. In this case you will need to read EEPROM dump from Immo Box or ECU and calculate a code by dump.

## Suzuki: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- ECU - 93C56
- Immo - TMS370C702, 24C01



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

IMMO Siemens (located near ignition):



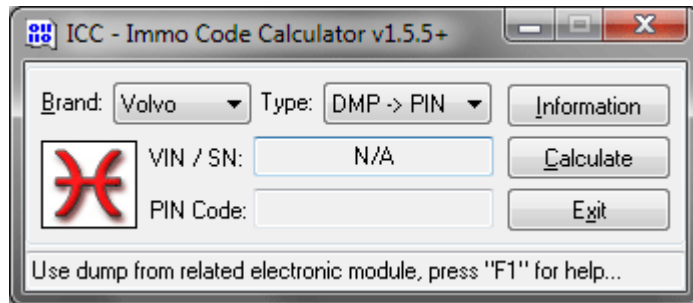
IMMO Mitsubishi:



And other electronic units...

# Volvo

## Immo code for Volvo models



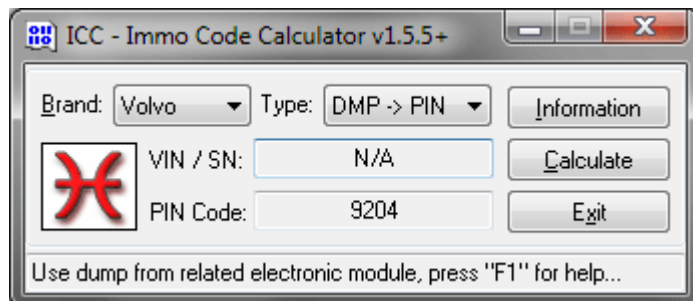
Various models of Volvo with IMMO type 1 and CARTRONIC Immo are supported by ICC.

PIN code for immobilizer can be calculated by dump of EEPROM from Immo Box.

## Volvo: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- Immo - 93C46



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

IMMO Bosch (located near pedals):



IMMO Cartronic:

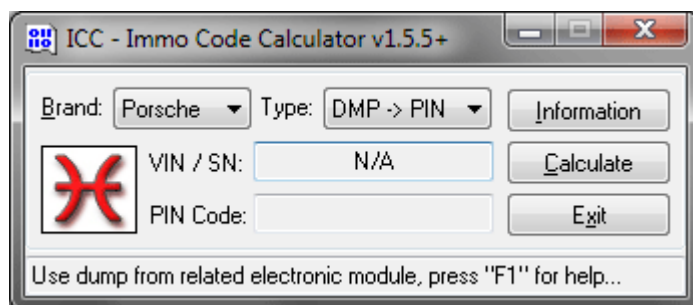


And other electronic units...

## Porsche

### Immo code for Porsche models

Various models of Porsche with 4, 5 and 6 digit PIN codes are supported by ICC.

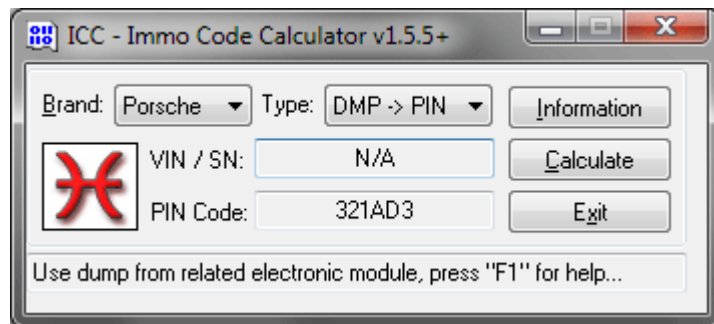


PIN code for immobilizer can be calculated by dump of EEPROM from BCM.

## Porsche: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- BCM - 93C66
- KESSY - 93C86
- ECU - 95P08, 95128, 95160, 95320



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

To calculate PIN code for Porsche Cayenne by dump from ECU or KESSY - select any of the VAG brand.

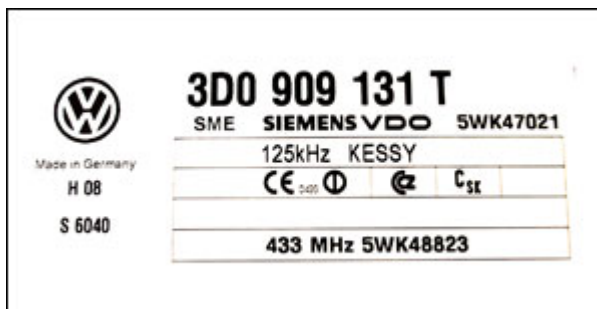
BCM Delphi:



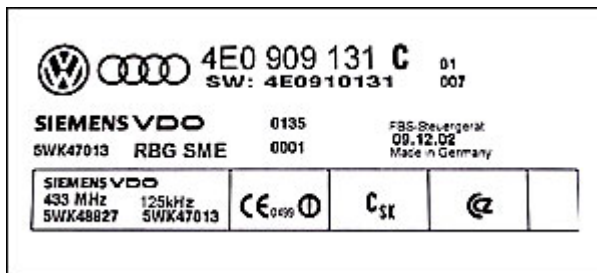
KESSY Siemens VDO (located under dashboard):



KESSY Siemens VDO (located under dashboard):



KESSY Siemens VDO (located under dashboard):

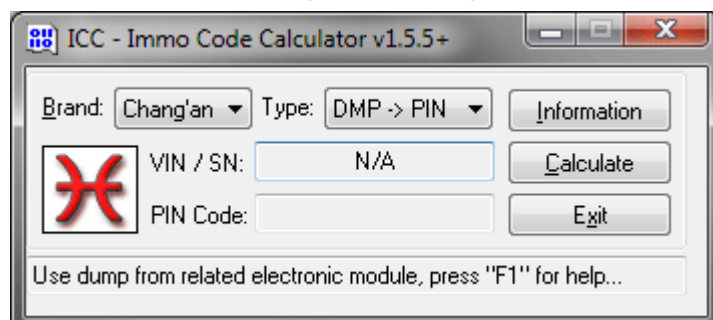


And other electronic units...

## Chang'an

### Immo code for Chang'an models

Various models of Chang'an with 4 digit PIN codes are supported by ICC.



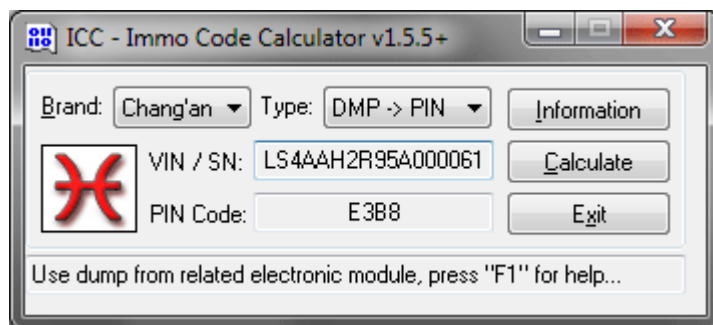


PIN code for immobilizer can be calculated by dump of EEPROM from ECU and Immo Box.

## Chang'an: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- ECU - 95080
- Immo - MC68HC908AB32/Z32



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

ECU Bosch ME7.9.7:



Immo Siemens 03072004:



Immo 03072008:

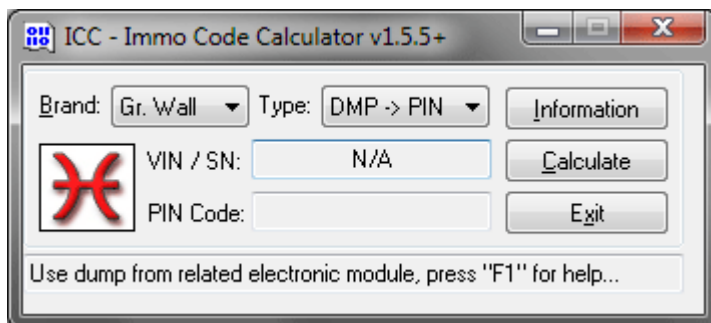


And other electronic units...

## Great Wall

### Immo code for Great Wall models

Various models of Great Wall with 4 chars PIN codes are supported by ICC.

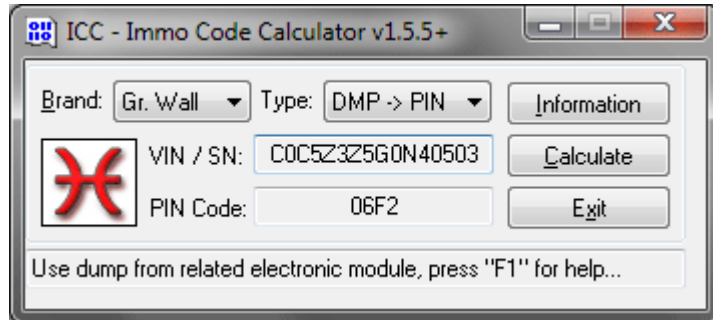


PIN code for immobilizer can be calculated by dump of EEPROM from ECU and Immo Box.

## Great Wall: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- ECU - 95080
- Immo - MC68HC908AB32/Z32



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

ECU Bosch ME7.9.7:



Immo Siemens 03072004:



Immo 03072008:

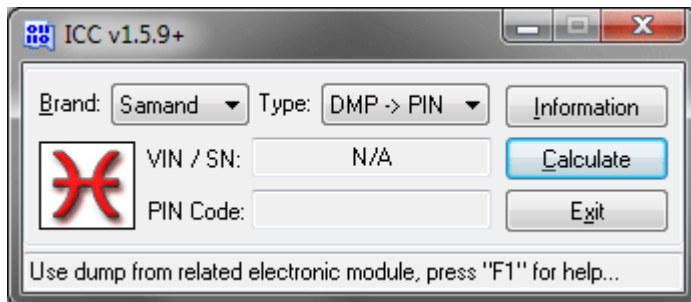


And other electronic units...

## Samand

### Immo code for Samand models

Various models of Samand with 4 chars PIN codes are supported by ICC.

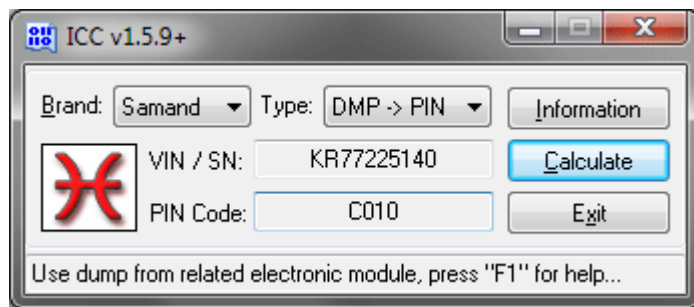


PIN code for immobilizer can be calculated by dump of EEPROM / FLASH from ECU and Immo Box.

## Samand: PIN code by dump

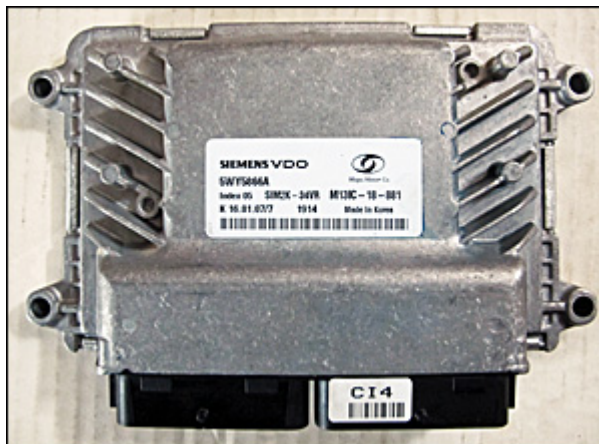
To calculate immobilizer code you need to locate and read dump from (depend of car model):

- ECU - M29F400BB
- Immo - MC68HC08AB16A



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

ECU Siemens VDO 5WY5866A:



ECU Continental 5WY1M50D-C:



Immo IKCO 5WK49763:

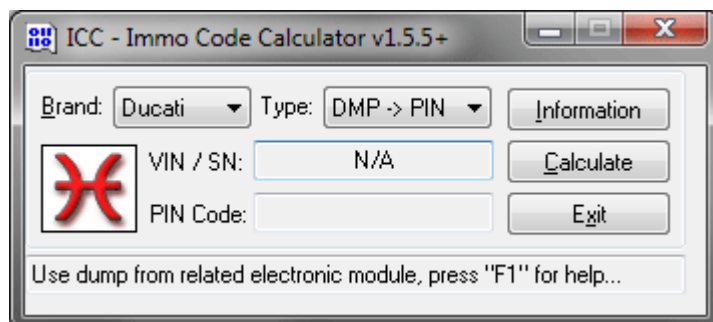


And other electronic units...

## Ducati

### Immo code for Ducati models

Various models of Ducati with 5 digit PIN codes are supported by ICC.



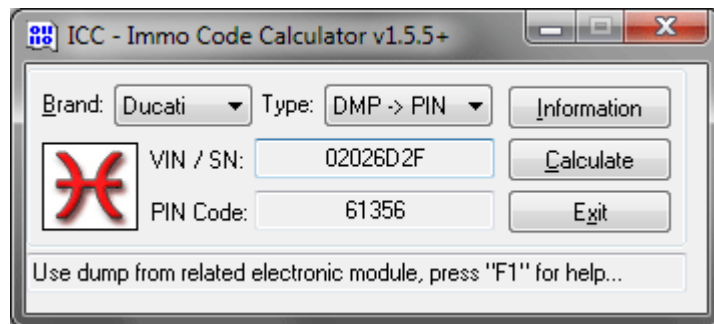
PIN code for immobilizer can be calculated by dump of EEPROM from Dashboard.

## Ducati: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of bike model):

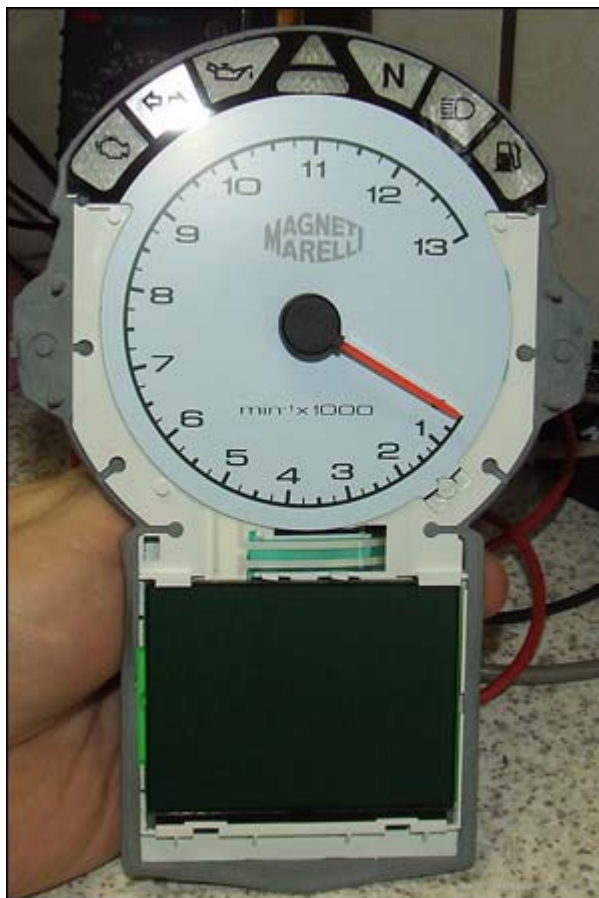
- Dash - 24C16





Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

Dashboard Magneti Marelli (999):

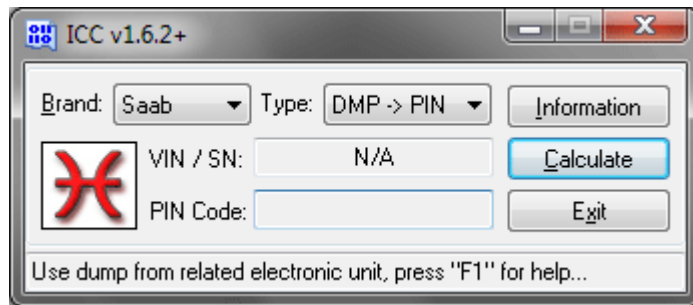


And other electronic units...

## Saab

### Immo code for Saab models

Various models of Saab with 4 chars PIN codes are supported by ICC.

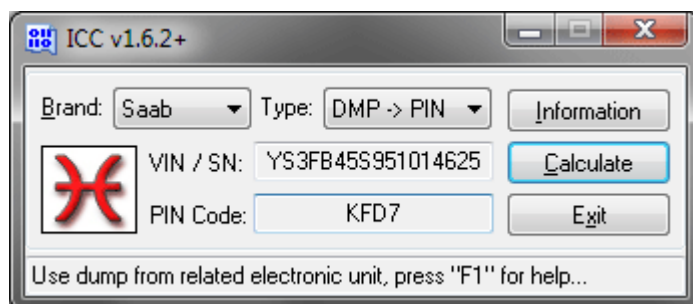


PIN code for immobilizer can be calculated by dump of EEPROM from CIM.

## Saab: PIN code by dump

To calculate immobilizer code you need to locate and read dump from (depend of car model):

- CIM - 93C66



Set type of calculation to DMP2PIN and click on "Calculate" button, then select a dump file. ICC will show a PIN code and VIN or ID of electronic module if available.

CIM (Column Integrated Module):

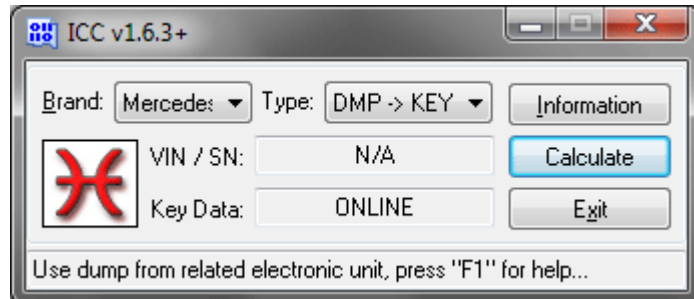


And other electronic units...

# Mercedes Benz

## Key generation for Mercedes Benz models

Online Key(s) generation for all kind of Mercedes cars, starting from 1997 till 2010 year with Motorola processors.



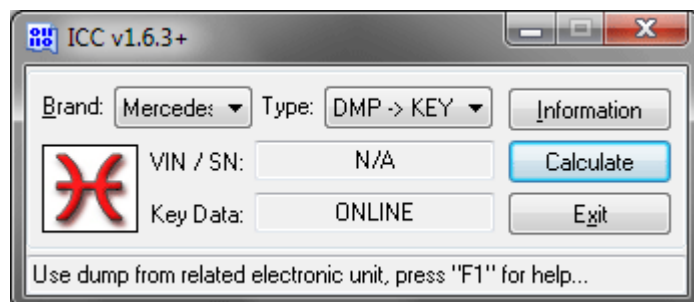
Key(s) can be calculated by full or partial dump of EZS / EIS.

Please note: this is third-party online service available for additional charge. You need to purchase this option before use. Internet connection is required for using this service. Please contact us for details.

## MB: Key generation by dump

To generate Key(s) data you need to locate and read dump from (depend of car model):

- EZS / EIS - HC05, HC08, 912, 9S12 (Motorola series)



Set type of calculation to DMP2KEY and click on "Calculate" button. ICC will launch internet browser, follow instructions on screen.

Please note: this is third-party online service available for additional charge. You need to purchase this option before use. Internet connection is required for using this service. Please contact us for details.

You can find additional information about this service in "MB Key Generation User's Guide".

# Supported file formats

Dump files are supported in 12 various formats, such as:

- Raw binary file format
- YH file format used in DigiMaster
- YHF file format used in DigiMaster
- YHE file format used in DigiMaster
- E2P file format used in PonyProg
- E2P file format used in DIGA-Consult
- Intel 8-bit HEX file format
- ETL EEF file format used in ETSmart
- Motorola S-Records file format
- Rosfar 3000 RS1 file format
- ASCII HEX file formats

For PIN codes by dump ICC have automatic byte swap function, auto detection of EEPROM type, car model, unit type and version.

And for full dump of EEPROM from MCU (64kb) ICC will find beginning of data block and automatically prepare valid data for calculation. In most cases you don't need to care about what range of data from MCU to read.

Binary dump files must have correct size: 128, 160, 256, 512, 640, 768, 1024, 2048, 4096, 8192, 16384, 32768, 65536, 262144, 524288, 851968 bytes. Depend of EEPROM / MCU / Flash type.

File size for other file formats is automatically calculating after conversion to binary format. Dump files with incorrect file size are not accepted.

For all of supported file types (except YanHua - YHF and ASCII HEX files with offsets) with wrong file extension or without extension ICC have built-in smart auto-detection algorithm. Also you can manually select correct file type in "Open File" dialog box, enter "\*" as file

name to see all files.

Contact us if you wish to add support of any other file format.

## **Raw binary file format**

Raw binary file is ordinary binary format.

Default file extensions are \*.bin, \*.eep, \*.dat, \*.ori

## **YanHua YH file format**

YH file format is used by DigiMaster II and YH6000. This is modified Motorola S-Records file format.

Default file extension is \*.yh

## **YanHua YHF file format**

YHF file format is used by DigiMaster II and YH6000. This is crypted raw binary file.

Default file extension is \*.yhf

## **YanHua YHE file format**

YHE format is used by DigiMaster II and YH6000. This is crypted raw binary file. It's familiar to YHF file format but have additional header of 3 bytes and different encryption key.

Default file extension is \*.yhe

## **DIGA-Consult E2P file format**

E2P file format is used by DIGA-Consult. This is binary file with additional header and information about car model at the end of file. This format is different than PonyProg E2P file format.

Default file extension is \*.e2p

## **PonyProg E2P file format**

E2P file format is used by PonyProg programmer. File begins with "E2P!Lanc" signature and includes additional header with information about EEPROM type (Chip ID) and user comments (Note).

Default file extension is \*.e2p

## **Intel 8-bit hex file format**

Intel 8-bit hex file format is a standard for most of programming devices.

Default file extension is \*.hex

## **ETSmart EEF file format**

ETL's EEF file format is used by ETSmart programmer.

Default file extension is \*.eef

## **Motorola S-Record format**

Motorola S-Record file format is a standard for most of programming devices.

Default file extensions are \*.s19, \*.sre

## **Rosfar 3000 file format**

ROSFAR 3000 file format is a modified Motorola SREC file format. You can see additional records at the end of file.

Default file extension is \*.rs1



# ASCII hex file formats

ASCII hex file is a format where all hex values are represented as text and separated by space or dash or CR/LF.

Default file extensions are \*.txt, \*.asc

example of dump in ASCII space separated format:

FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

77 00 84 34 16 12 11 04 03 0A 01 3F 3C 1E 3C 02

FF 0F 01 A4 16 26 00 FF FF FF FF FF FF FF FF FF

FF 3C 3C 1E 3C 02 3C 1E 1E 3C 02 3C 06 0A 0C 02

FF FF FF FF FF FF FF 02 FF FF FF FF FF FF 07 10

96 02 00 27 73 63 02 12 04 FF FF FF FF FF FF FF

DF F2 FF FF FF FF FF FF FF FF FF E0 FF FF FF FF FF

E0 19 FF 15 FF FF FF FF FF FF FF FF FF FF FF FF

03 D1 A8 4D FF FF FF FF FF FF FF FF 03 D1 A8 4D

FF FF FF FF FF FF 03 D1 A8 4D FF FF FF FF FF FF

55 D1 6A 17 C6 E4 CA 2B FF FF FF FF FF FF FF FF

FF FF FF FF FF FF FF FF 55 D1 6A 17 C6 E4 CA 2B

FF FF FF FF 55 D1 6A 17 C6 E4 CA 2B FF FF FF FF

FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

file format with offsets is supported also:

00000: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

00010: 77 00 84 34 16 12 11 04 03 0A 01 3F 3C 1E 3C 02

00020: FF 0F 01 A4 16 26 00 FF FF FF FF FF FF FF FF

00030: FF 3C 3C 1E 3C 02 3C 1E 1E 3C 02 3C 06 0A 0C 02

00040: FF FF FF FF FF FF FF 02 FF FF FF FF FF FF 07 10

00050: 96 02 00 27 73 63 02 12 04 FF FF FF FF FF FF FF

00060: DF F2 FF FF FF FF FF FF FF FF FF E0 FF FF FF FF FF

00070: E0 19 FF 15 FF FF FF FF FF FF FF FF FF FF FF FF

00080: 03 D1 A8 4D FF FF FF FF FF FF FF FF 03 D1 A8 4D

00090: FF FF FF FF FF FF 03 D1 A8 4D FF FF FF FF FF FF

000A0: 55 D1 6A 17 C6 E4 CA 2B FF FF FF FF FF FF FF FF

000B0: FF FF FF FF FF FF FF FF 55 D1 6A 17 C6 E4 CA 2B

000C0: FF FF FF FF 55 D1 6A 17 C6 E4 CA 2B FF FF FF FF

000D0: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

000E0: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

000F0: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

Number of columns (chars per line) is not limited. Supported space separated, CR/LF separated, and dash separated file formats. HEX (0-9, A-F) values must be in upper case.

## Additional information

Below you will find following information:

- ICC software error messages
- Abbreviations

- MCU mask sets
- Unsupported car models
- Updates and support
- Tips and hints
- Special thanks

## Error messages

- "ICC dongle not found" - means what dongle is not connected or **drivers are not installed** if dongle switched to USB mode.
- "ICC dongle error 03" - means error in communication, in most cases you can see this error because of poorly powered USB port or when dongle is removed. Try to switch dongle **from HID to USB mode** using ICC Tool or insert dongle to well powered USB port. Do not use passive USB hubs.
- "This module is not installed" - means what for using this function you need to **install latest hardware update** with required code calculation algorithm. For lite version that means what you need to purchase additional module.
- "ICC dongle is blocked" - means what your have violated **our rules** and your dongle is permanently blocked.

## Abbreviations

AAM	All Activity Module
BCM	Body Control Module
BCU	Body Control Unit
BMT	Multi Timer Unit
BSI	Body System Interface
CCU	Central Control Unit
CIM	Column Integration Module
CPH	Centrale Protection Habitable
CSC	Component Security Code
DAS	Diagnosis Assistance System

Dash	Dashboard
Dump	Dump file of EEPROM
DMP	Dump file of EEPROM
DME	Digital Motor Electronics
ECM	Engine Control Module
ECU	Engine Control Unit
ECU	Electronic Control Unit
EIS	Electronic Ignition System
EKA	Emergency Key Access
EMS	Engine Management System
EWS	Electronic Watchdog System
EZS	Electronic Ignitions System
HDS	Honda Diagnostic System
HIM	Honda Interface Module
HISS	Honda Ignition Security System
ICC	Immo Code Calculator
ICM	Immobilizer Control Module
ICS	Intergrated Control System
ICS	Immobilizer Control System
ICU	Immobilizer Control Unit
IDS	Integrated Diagnostic System
IKE	Instrument Cluster Electronics
ISN	Immobilizer Serial Number
ISN	Individual Serial Number
IVIS	Infiniti Vehicle Immobilizer System
Immo	Immobilizer
Immo Box	Immobilizer Box
Immobilizer	Immobilizer
IMMU	Immobilizer Unit
KESY	Keyless Entry Start and Exit System
MECS	Mazda Electronic Control System
NATS	Nissan Anti Theft System
NVIS	Nissan Vehicle Immobilizer System
OBD	On-Board Diagnostics
PATS	Passive Anti-Theft System
PCM	Powertrain Control Module
PIN	Personal Identification Number
REC	Rear Electronic Center
SAIS	Suzuki Advanced Immobilizer System
SAM	Signal Acquisition / Actuation Module
SCN	Software Calibration Number
SEC	Smart Entrance Control module

SEC	Security Control System
SKIM	Sentry Key Immobilizer Module
SKREEM	Sentry Key Remote Entry Module
SKC	Secret Key Code
SMARTRA	Smart Transponder Antenna
Transponder	Transmitter-Responder
UCH	Unite de Controle Habitable
UCBIC	Unite Centrale d'habitable et Boitier d'InterConnexion
VCM	Vehicle Communication Module
VIN	Vehicle Identification Number
VIS	Vehicle Identifier Section
WCM	Wireless Control Module
WDS	Worldwide Diagnostic System
WMI	World Manufacturer Identifier
WSC	Work Shop Code

## MCU, EEPROM mask sets

### Motorola

Mask	MCU
A20T	MC68HC705S3
A38P	MC68HC11A8
A49N	MC68HC11A8
A75H	MC68HC811A2
B16B	MC68HC805C4
B19C	MC68HC811E2
B36T	MC68HC805B6
B46E	MC68HC11A8
B60R	MC68HC11E9
B65H	MC68HC11A8
B83T	MC68HC05B8
B84N	MC68HC11A1
B91T	MC68HC05B6
B95T	MC68HC11A8
B96D	MC68HC11A8
C11W	MC68HC11A1

### Bosch

Mask	EEPROM / MCU
B22AN	93C06
B34AB	24C02
B42AB	93C06
B43AB	24C02
B46AJ	24C02
B49AJ	24C02
B52AP	24C02
B54AH	24C02
B81AB	93S66
B56022	27C128
B57324	2732A
B57325	27C32
B57347	27C64
B57423	27C256
B57477	27C64
B57519	27C64

C13W	MC68HC11L6
C14H	MC68HC05B6
C16J	MC68HC811E2
C16W	MC68HC705C8
C27B	MC68HC11E1
C28M	MC68HC11G5FN1
C35N	MC68HC05B16
C40H	MC68HC05J1
C45A	XC68HC711D3
C47M	MC68HC711E9
C83W	MC68HC11E9
C85W	XC68HC711L6
C91F	MC68HC11E1
C92K	MC68HC05C12A
C95K	MC68HC05E0
D10J	MC68HC705B5
D20J	MC68HC05B16
D26E	MC68HC11A1
D28J	MC68HC705B16
D33J	MC68HC705B16
D35E	MC68HC11E9
D37R	MC68HC05C12A
D40J	MC68HC705B32
D40J	MC68HC705X32
D41V	XC68HC705BE12
D45R	MC68HC11ED0
D46J	MC68HC11A8
D47J	MC68HC11EA9
D48J	MC68HC11PH8
D53J	MC68HC05X32
D54E	MC68HC705P9
D54J	MC68HC05B8
D58J	MC68HC11PA8
D59J	MC68HC705B32
D59J	MC68HC705X32
D60J	MC68HC05B16

B57546	27C010
B57604	27C256
B57605	27256
B57607	27C128
B57610	27C128
B57618	87C257
B57618	87C64
B57625	2764A
B57654	27C256
B57684	27C256
B57696	27C256
B57701	27C256
B57764	87C257
B57764	87C64
B57769	MC68HC05SR3
B57771	27C256
B57808	27C256
B57922	87C257
B57960	27C256
B57995	TMS27C256
B58014	27C256
B58038	27C256
B58094	27C510
B58098	27C512
B58126	27C010
B58127	27C512
B58150	87C257
B58157	27C512
B58185	87C257
B58196	93C46
B58213	93C06
B58214	27C256
B58234	27C256
B58235	87C257
B58239	27C512
B58243	CJ87BC6QG



D61N	XC68HC711KA4
D62J	MC68HC05X16
D67F	MC68HC711K4
D69F	PC68HC711N4
D69J	MC68HC05X32
D82R	MC68HC11E9
D82R	MC68HCP11E1
D86B	MC68HC705J2
D99H	MC68HC711P2
E11P	MC68HC16Z2
E20T	MC68HC705C4A
E20Y	MC68HC705P6CP
E22B	MC68HC11E20
E25B	MC68HC05P3
E28B	MC68HC11E9
E31M	MC68HC705K1
E32B	MC68HC05C8
E38B	MC68HC05J3
E41C	PC68HC916Y1
E53M	MC68HC711P2
E54F	MC68HC16Z1
E57S	MC68HC11KA4
E59B	MC68HC11KA4
E61R	MC68HC705C8
E61W	MC68HC705F8
E62H	MC68HC11K4
E62W	MC68HC16Z1
E69W	MC68HC16Z1
E74J	MC68HC11P2
E75J	MC68HC11K4
E78C	MC68HC05J1A
E79R	MC68HC705C8A
E82K	MC68HC11E20
E88N	MC68HC711KA2
F10V	MC68HC05B6
F10W	MC68HC705SR3

B58252	24C02
B58253	24C02
B58256	24C01
B58258	24C02
B58275	27C1024
B58293	27C512
B58323	93C46
B58331	28F010
B58334	28C64
B58335	AT28C64B
B58380	24C02
B58381	AM28F512
B58399	AM29F010
B58400	87C510
B58424	27C512
B58517	27C020
B58530	27C010
B58533	27C4096
B58539	27C256
B58541	27C512
B58542	27C512
B58543	27C512
B58544	27C1001
B58545	87C257
B58546	87C510
B58547	27C010
B58548	TMS27PC210
B58550	27C512
B58601	AM29F200B
B58608	93C66
B58639	87C510
B58647	87C257
B58718	27C512
B58755	AM29F200
B58768	AM29F400AB
B58791	AM29F200AB

F11N	MC68HC11L6
F12A	MC68HC05J1A
F17V	MC68HC11F1B4
F23H	MC68HC05P4A
F29K	MC68HC11MA8
F33P	PC68HC16V1
F37E	MC68HC11F1
F41E	MC68HC05L28
F41J	MC68HC05L28
F44T	MC68HC705J1A
F49K	MC68HC705C8A
F52E	MC68HC11E32
F53E	MC68HC11KG4
F56K	MC68HC705B16
F62A	MC68HC05C8
F62J	MC68HC05B16
F63J	MC68HC705C9A
F67V	MC68HC16Z1
F68K	MC68HC912D60
F71L	MC68HC05C8
F73K	MC68HC912D60
F73T	MC68HC16Z1
F74B	MC68HC05X4
F88B	MC68HC705X4
F92J	MC68HCP11A1
F96J	MC68HC11E9
F97J	MC68HC11E9
F98Y	MC68HC708AS48
G10V	MC68HC(7)11P2
G11D	MC68HC16Z2
G23V	MC68HC08AZ32
G26C	MC68HC16Z3
G28F	MC68HC05B16
G32V	MC68HC11KG4
G33P	XC68HC705P6ACP
G35N	MC68HC05B16

B58813	93C56
B58838	27C256
B58911	TMS27C010A
B9411	AM27C256

G39Y	MC68HC08AS20
G40G	MC68HC805K3
G41V	MC68HC705B32
G47V	MC68HC705X32
G49V	MC68HC08AZ32
G53F	MC68HC05J1A
G54K	MC68HC05TB
G58F	MC68HC705J1A
G58T	MC68HC705JJ7
G59F	MC68HC711E20
G62K	MC68HC708AS48
G63P	MC68HC705J1A
G78M	MC68HC705V12
G96A	MC68HC705B32
G96Y	MC68HC705V12
H14A	MC68HC708AS48
H19S	MC68HC711E20
H24M	MC68HC05V12
H32S	MC68HC705JB4
H42K	MC68HC705C8A
H48T	XC68CM16Z1
H50F	MC68HC812AV4
H50W	MC68HC711E9
H52P	MC68HC705V12
H54T	MC68HC12BE32
H55B	MC68HC705BD9
H55F	MC68HC805K3
H55W	MC68HC912DG128
H56A	MC68HC08AZ32
H57A	MC68HC05H12
H62A	MC68HC908AS60
H62P	MC68HC908AT32
H72J	MC68HC705C8A
H73K	68HC812AV4
H77A	MC68HC705C9A
H86A	MC68HC711KG2

H91F	MC68HC912B32
H94K	MC68HC08AS20
H96J	MC68HC05JJ6
H98X	MC68HC11KS8
J15G	MC68HC912BC32
J20X	MC68HC908GP32
J26H	MC68HC08AS20
J26R	MC68HC08AS20
J27F	MC68HC08AS32
J34P	MC68HC12BE32
J35D	MC68HC08AZ60
J37F	MC68HC908MR24
J38M	MC68HC12BE32
J54E	MC68HC912B32
J56W	MMC2001
J61D	MC68HC908AS60
J64Y	MC68HC912B32
J66D	MC68HC08AZ32
J66H	MC68HC705J1A
J73R	MC68HC705C8A
J74Y	MC68HC908AS60
J79Y	MC68HC908BD48
J88Y	MC68HC908JK3
K00J	MC68HC908RK2
K02S	MC68HC05P4A
K03B	MC68HC705C9A
K05W	MC68HC711D3
K07E	MC68HC11KS2
K08B	MC68HC705C8A
K08S	MC68HC908GP32
K08W	MC68HC711KS2
K11N	MC68HC908LD64
K13J	MC68HC12D60
K20R	MC68HC05PV8A
K22K	MMC2001
K25E	MC68HC912BC32

K29E	MC68HC912BD32
K36N	MC9S12DP256
K38K	M68HC912D60
K39K	MC68HC908SR12
K45D	MC68HC908KX8
K45H	MC68HC908JB8
K50E	MC68HC912DG128
K54X	MC68HC711K4
K56G	MC68HC908AB32
K59D	MC68HC08JB8
K59H	PC527283MFU
K75F	MC68HC912D60
K78X	MC9S12H256
K79X	MC9S12DP256
K81H	MC68HC711E9
K82H	MC68HC11E20
K85K	MC68HC908AZ60A
K85V	MC68HC908AZ60A
K91D	MC68HC912DG128
L02H	M68HC912D60
L05H	M68HC912DT128
L06H	MC68HC908SR12
L09H	MC68HC908KX8
L45J	MC9S12C32
L51J	M68HC912D60
L52H	MC68HC08AZ32A
L53J	MC68HC908GR8
L54J	MC68HC908MR32
L69J	MC68HC908QT1-4
L72A	MC68HC08AB16A
L85D	MC9S12A128
L87J	MC68HC908AZ60A

## Unsupported car models

For car models which are not supported by current version of ICC please provide us following information:

- photo of electronic module and information about manufacturer and unit location.
- full dump of EEPROM includes information about manufacturer and type
- car model, year of production, VIN, PIN code if available

## Updates and support

To download latest version of ICC software, hardware update package or additional files you need to login to support area of <http://immo-code.com>

Enter dongle's serial number as your user name and your e-mail address as password.

Run ICC software and press "Information" button to see hardware serial number and registered e-mail address, example:

Login: "01234567-89ABCDEF"

Password: "bob@free-mail.com"

Login must be entered in upper case, without blanks and quotes. Password must be entered in lower case, without blanks and quotes.

Please use direct link - <http://immo-code.com/updates> if you have problems accessing support area.

## Tips and hints

- Click on text label "VIN / SN:" to scroll VIN or serial number of electronic unit.
- Click on text label "PIN Code:" to scroll long PIN code or list of PIN codes.
- Drag-n-Drop dump file onto ICC window to save your time when calculating codes by dump.
- You can press "Enter" key instead of clicking on "Calculate" button.



- Press "F1" to find out information about selected code calculation method.
- Set value of parameter "sounds" in configuration file (ICC.ini) to "0" if you want to disable sounds, example "sounds=0".
- Set value of parameter "winhelp" in configuration file to "1" if you want to use WinHelp file instead of HtmlHelp.
- Set value of parameter "autohelp" in configuration file to "1" and ICC will automatically show help file when incorrect data was entered.
- Set value of parameter "tooltips" in configuration file to "0" if you want to disable balloon tool tips.
- Set value of parameter "logging" in configuration file to "1" to enable log of calculated codes. Run "notepad %AppData%\ICC\ICC.log" to see log file. Or press "Information" button and click on ICC logo.
- Set value of parameter "topwindow" in configuration file to "1" to show ICC window always on top.

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