

# TMS374 ECU DECODER

Connection diagram:

+ :12v DC

- : GND

S :signal wire



## Introduction

This Tool is a frequency sweeper with 5V square wave output (Duty cycle 50%, effective frequency range from over 10kHz (max 50kHz) to 50Hz) .This tool can be also considered as a MCU version of the software TMS-374 Decoder ECU. The only difference between the two tools is that the MCU version works without a PC. A small MCU is used to generate the pulses instead of the PC RS232 Tx line.

## Manual

After powering the device on - the LED should blink twice. The sweeping process starts as power is supplied to the device. LED ON - means there are pulses on the output. After reaching the lowest frequency the LED goes off and the mcu stops the generation.

- Connect the GND line to any suitable GND on the ECU via the small grabber
- Connect the Data line to the Reset pin on the EPROM via the small grabber
- Power the ECU and then the sweeper, the sweeper will flash twice on power up
- Press the button and the device will start sweeping, once the LED turns off your done
- Cut the immo data line on the ECU before re-fitting back to car.

## TMS-374 Decoder ECU info

The sweeper should work with the following ECUs:

### Renault SIEMENS Fenix 3 and 5

Renault Megane 1400cc 8v  
Renault Megane 1600cc 8v  
Renault Megane 2000cc 8v  
Renault Megane 2000cc 16V  
Renault Megane Scenic 1400cc 8v  
Renault Megane Scenic 1600cc 8v  
Renault Megane Scenic 2000cc 8v  
Renault Sefrane 2000cc 16V  
Renault Laguna 2000cc 8v  
Renault Laguna 2000cc 16v  
Renault Espace 2000cc 8v

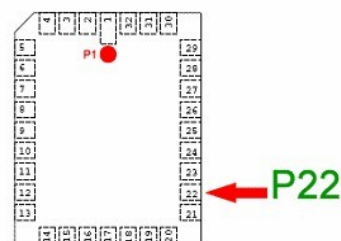
NOTE: If reset pin is connected to ground then it must be lifted or the track cut before decoding. This can be re-attached after decoding the ecu.

As a rule of thumb keep the power connected to the ECU for a futher five minutes after the decoder has completed the decoding process

### Renault SAGEM SAFIR 1 and 2

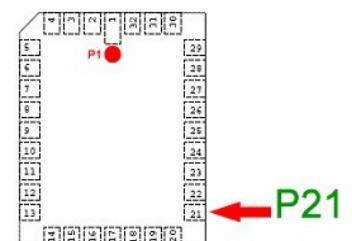
Renault Clio 1200cc 8V  
Renault Clio 1400cc 8V  
Renault Clio 1600cc 8V  
Renault Clio 2000cc 16V Williams  
Renault Laguna 1800cc 8V  
Renault Laguna 2000cc 8V  
Renault Laguna 1800cc 16V  
Renault Laguna 2000cc 16V  
Renault Twingo 1200cc 8V

28F512 or 29F010



pin 22 decoder

27C512 or 29C512



pin 21 decoder

### **Sagem SL96 Psa**

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Peugeot 306 1400cc 8V  
Peugeot 306 1600cc 16V  
Peugeot 306 1800 16V  
Peugeot Ranch 1400 8V  
Citroen Berlingo 1400cc 8V  
Citroen Xrara 1400cc 8V  
Citroen Xrara 1800cc 16V  
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### **DAEWOO SIEMENS**

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Daewoo Matiz 800cc  
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### **HYUNDAI SIEMENS**

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Hyundai Coupe 1600cc 16V  
Hyundai Coupe 2000cc 16V  
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### **KIA SIEMENS**

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Kia Rio 1300 16V  
Kia Rio 1500 16V  
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### **MAGNETI MARELLI**

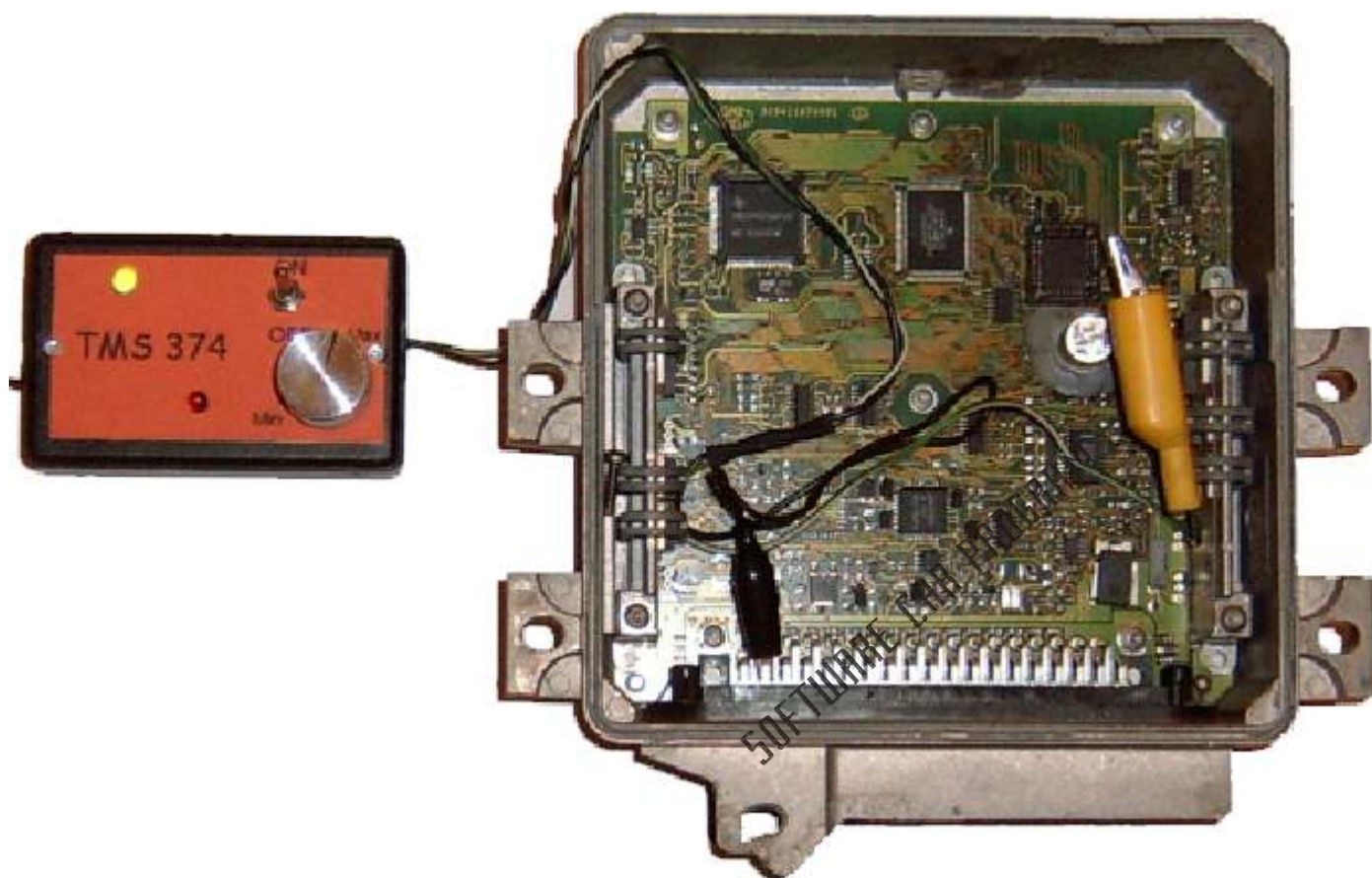
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1AP20, 1AP40, 1AP41, 1AP43, 1AP80, 1AP81, 1AP83 1AP90,  
Citroen Berlingo 1800cc 8V  
Citroen Saxo 1400cc 8V  
Citroen Saxo 1600cc 16V  
Citroen Xara 1400cc 8V  
Citroen Xara 1800cc 8V  
Citroen Xara 2000cc 16V  
Citroen ZX 1400cc 8V  
Peugeot 106 1400cc 8V  
Peugeot 106 1600cc 8V  
Peugeot 106 1600cc 16V  
Peugeot 206 1100cc 8V  
Peugeot 206 1400cc 8V  
Peugeot 306 1400cc 8V  
Peugeot 306 1600cc 8V  
Peugeot 306 1800cc 8V  
Peugeot 405 1800cc 8V  
Peugeot 406 1800cc 8V  
Peugeot Partner 1800 8V  
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NOTE: If reset pin is connected to ground then it must be lifted or the track cut before decoding. This can be re-attached after decoding the ecu.

As a rule of thumb keep the power connected to the ECU for a further five minutes after the decoder has completed the decoding process

# TMS-374

1AP\SAGEM\SIEMENS



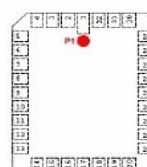
## Procedure

Simply power the ECU and device using a suitable 12V power supply.  
Connect the GND cable to a good ground source on the ECU and then the data line to the Reset Pin on the flash 27c512 or 28F512 as shown in the diagram.

Start the device and wait for it to finish its cycle (the led will turn off). At this point the ECU has been decoded and put into a new state. The Immo line will need to be disconnected before the ECU is re-fitted back to the car.

28F512 or 29F010

27C512 or 29C512



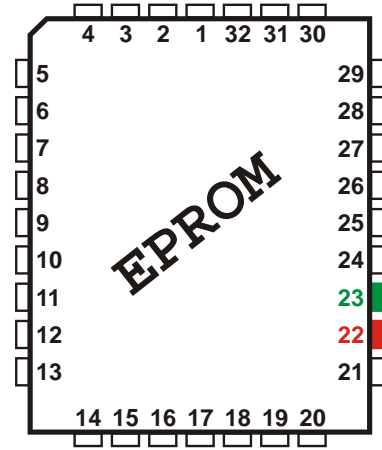
in 2 decoder

pin 2 decoder

# SAGEM SAFIR 1

Microprocessore

Eprom



ECU's with 27C512 PLCC RESET pin is 23

ECU's with 28F512 PLCC RESET pin is 22

## CENTRALINE SAGEM SAFIR RENAULT 35 PIN

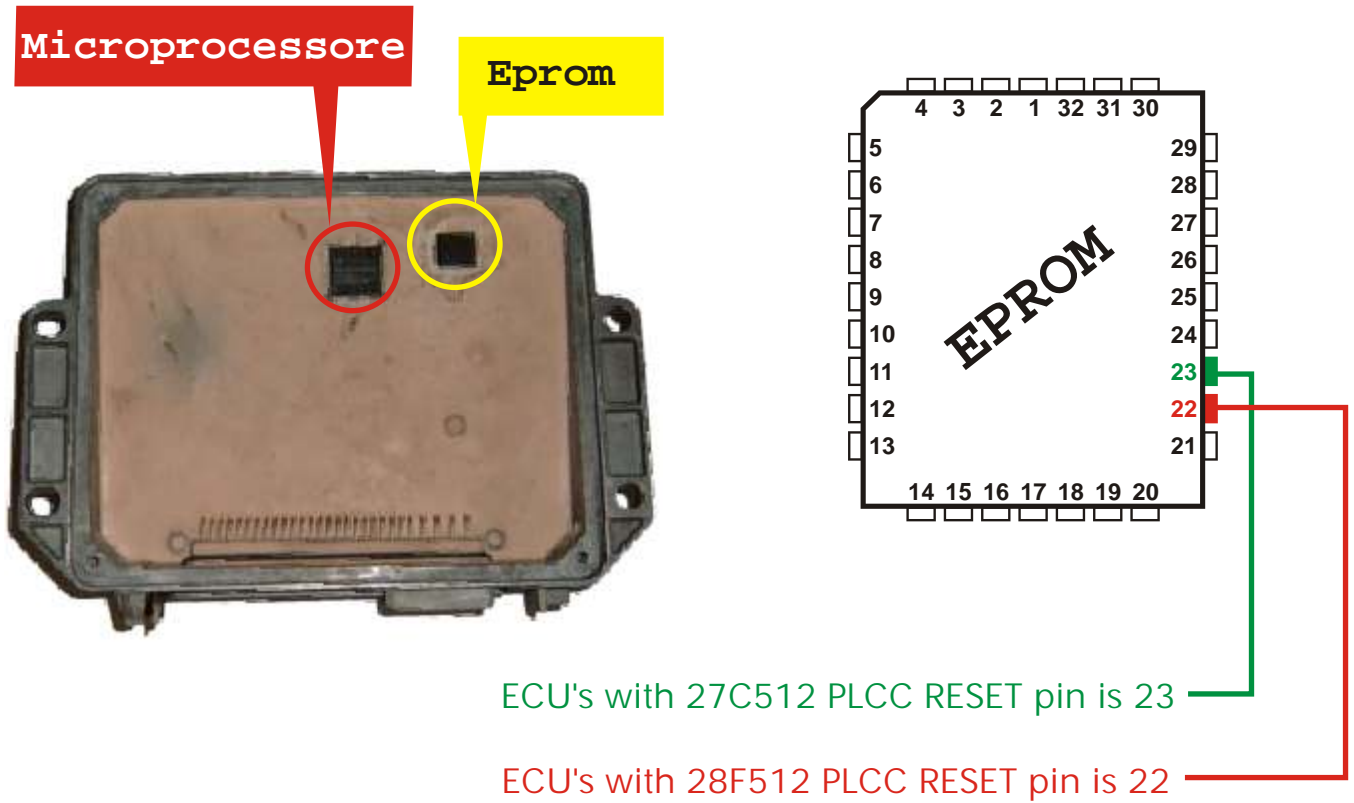
- PIN 18 --- 12v+
- PIN 4\34 --- GND
- PIN 30 Immo data line (cut)

## CENTRALINE SAGEM SAFIR 1 RENAULT 55 PIN

- PIN 1 --- 12v+
- PIN 2\3\18 --- GND
- PIN 37 Immo line (cut)



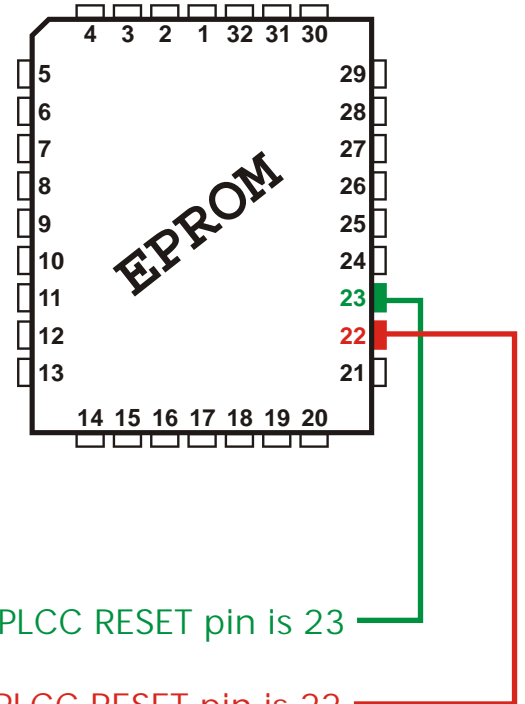
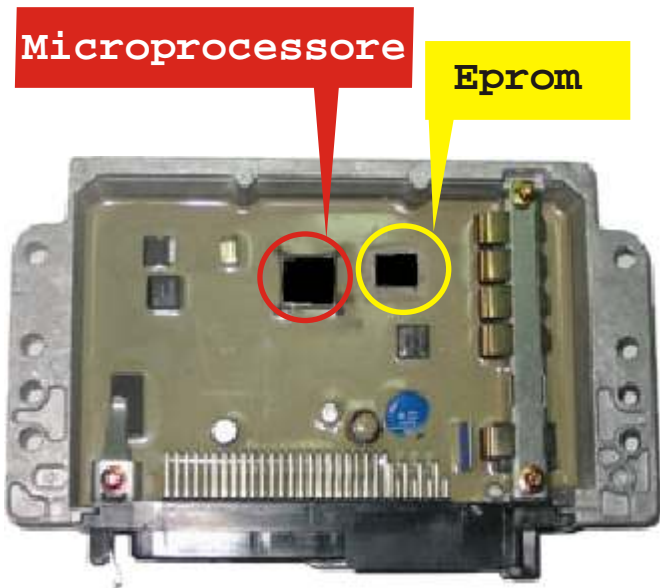
# SAGEM SAFIR 2



## CENTRALINE SAGEM SAFIR 2 RENAULT 55 PIN

- PIN 1 --- 12v+
- PIN 2\3\18 --- GND
- PIN 37 Immo data line (cut)

# SIEMENS DAEWOO



ECU's with 27C512 PLCC RESET pin is 23

ECU's with 28F512 PLCC RESET pin is 22

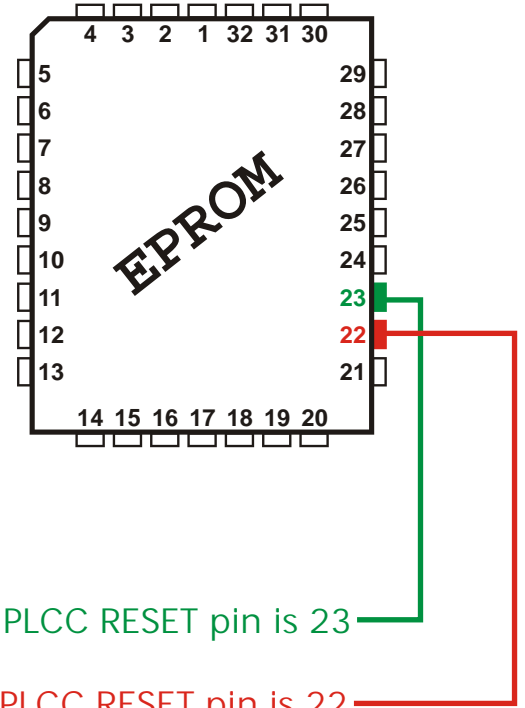
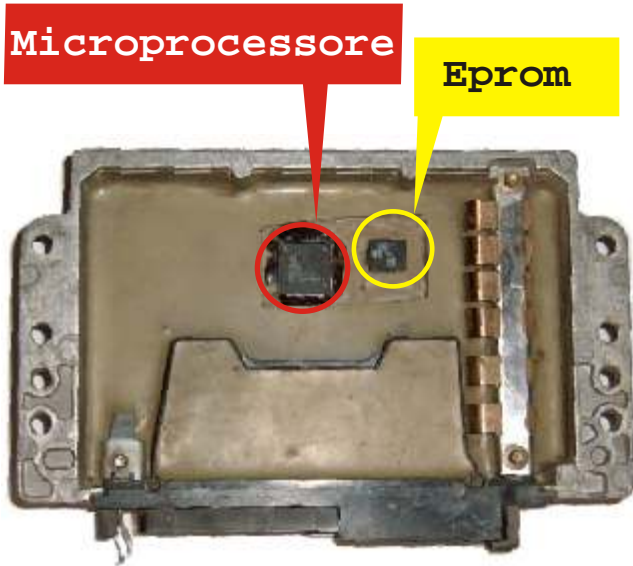
## CENTRALINE SIEMENS DAEWOO (MATIZ) 55 PIN

PIN 32\24 --- 12V+

PIN 2\3 --- GND

PIN 11 Immo data line (cut)

# SIEMENS RENAULT



ECU's with 27C512 PLCC RESET pin is 23

ECU's with 28F512 PLCC RESET pin is 22

## CENTRALINE SIEMENS RENAULT 55 PIN

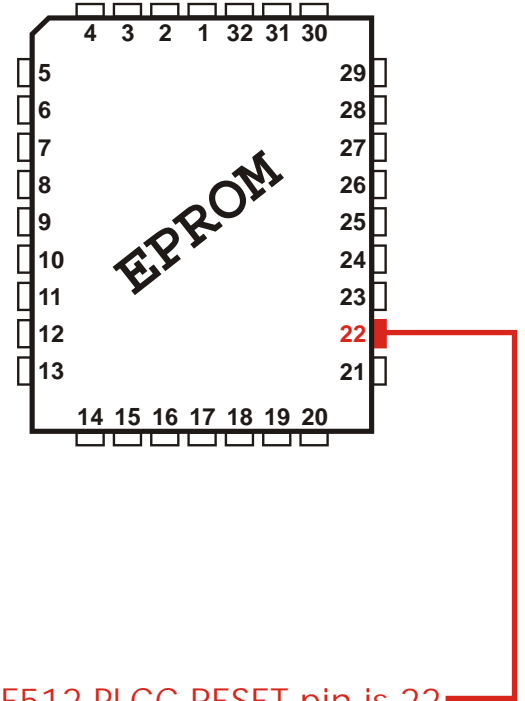
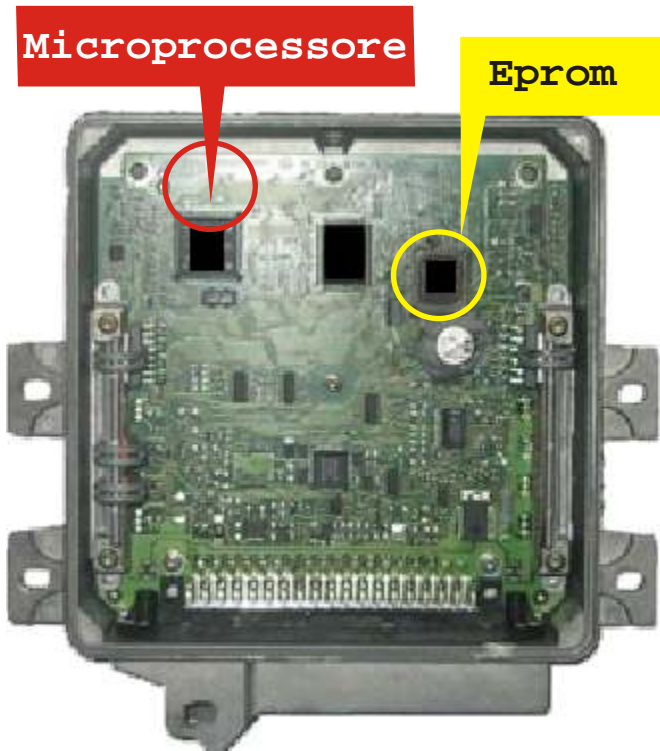
PIN 32\24\1 --- 12V+

PIN 2\3 --- GND

PIN 37 Immo data line on 1600 cc (cut)

PIN 35 Immo data line on 1800cc\2000 cc (cut)

# MAGNETI MARELLI 1AP

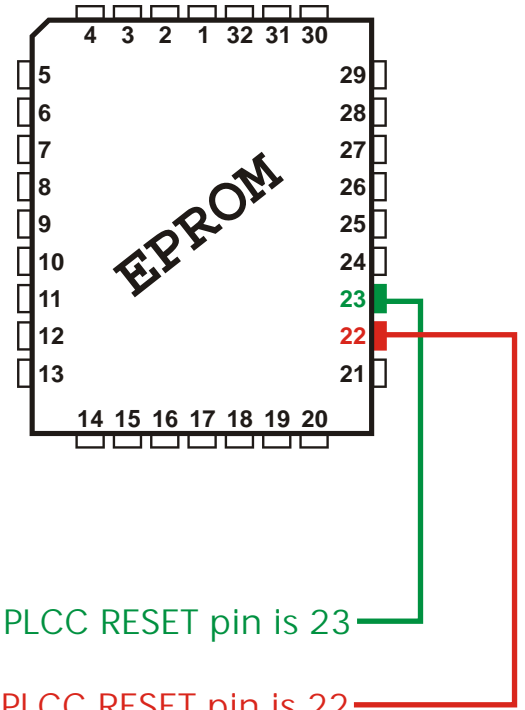
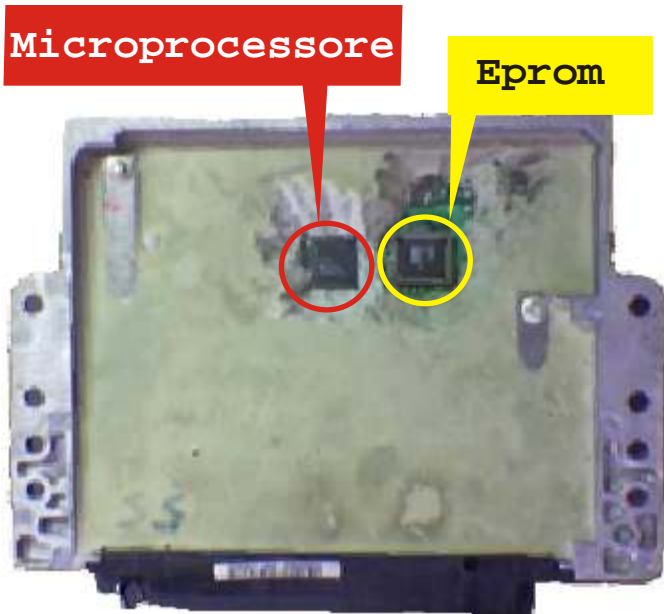


ECU's with 28F512 PLCC RESET pin is 22

## CENTRALINE 1AP 55 PIN

PIN 35\13 --- 12v+  
PIN 54\36 --- GND  
PIN 27\48 Immo data line (cut)

# SIEMENS HYUNDAI



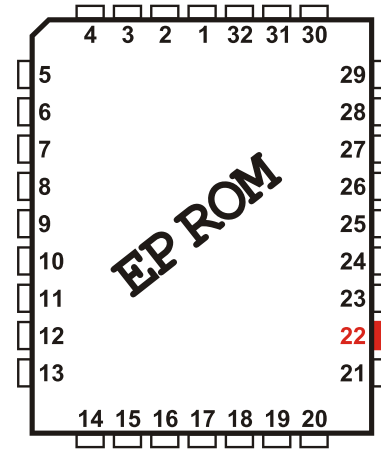
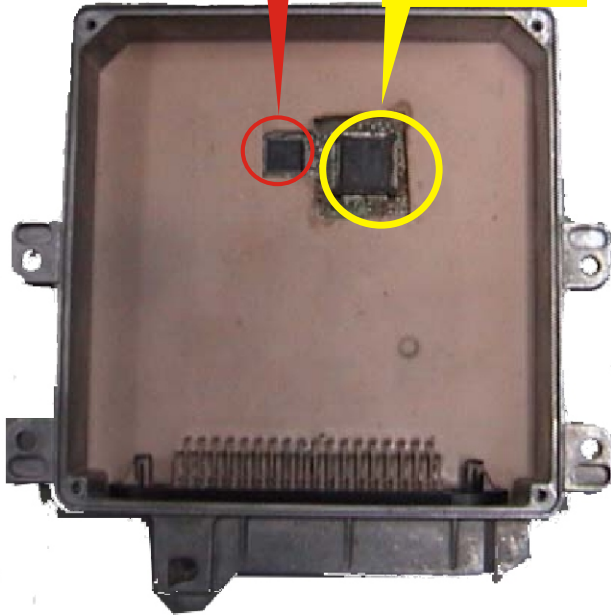
CENTRALINE SIEMENS HUNDAY 55 PIN



# SAGEM SL96 PSA

Microprocessor

Ep rom



ECU's with EPROM's 29F512 PLCC pin 22 is RESET

## CENTRALINE SAGEM SL96 PSA

Pin 1 --- 12v+  
Pin 2\3\18 --- GND  
Pin 27\48 Immo data line (cut)