

# DIGITAL ECU TUNER<sup>2</sup>

Schematy Montażowe



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### **Uwaga !**



Zamieszczone w poniższym dokumencie schematy mogą różnić się od rzeczywistych w związku z dużą ilością wersji silników i ich elektronicznego osprzętu występujących w danym modelu samochodu. W związku z tym należy przed podłączeniem urządzenia zweryfikować multimetrem i/lub oscyloskopem sygnały ECU.

### **Informacja**



Podane schematy są tylko niewielkim wycinkiem możliwych aplikacji urządzenia Ecumaster DET II. Dokument ten będzie rozwijany o kolejne modele pojazdów i ich silników.

### **Informacja**



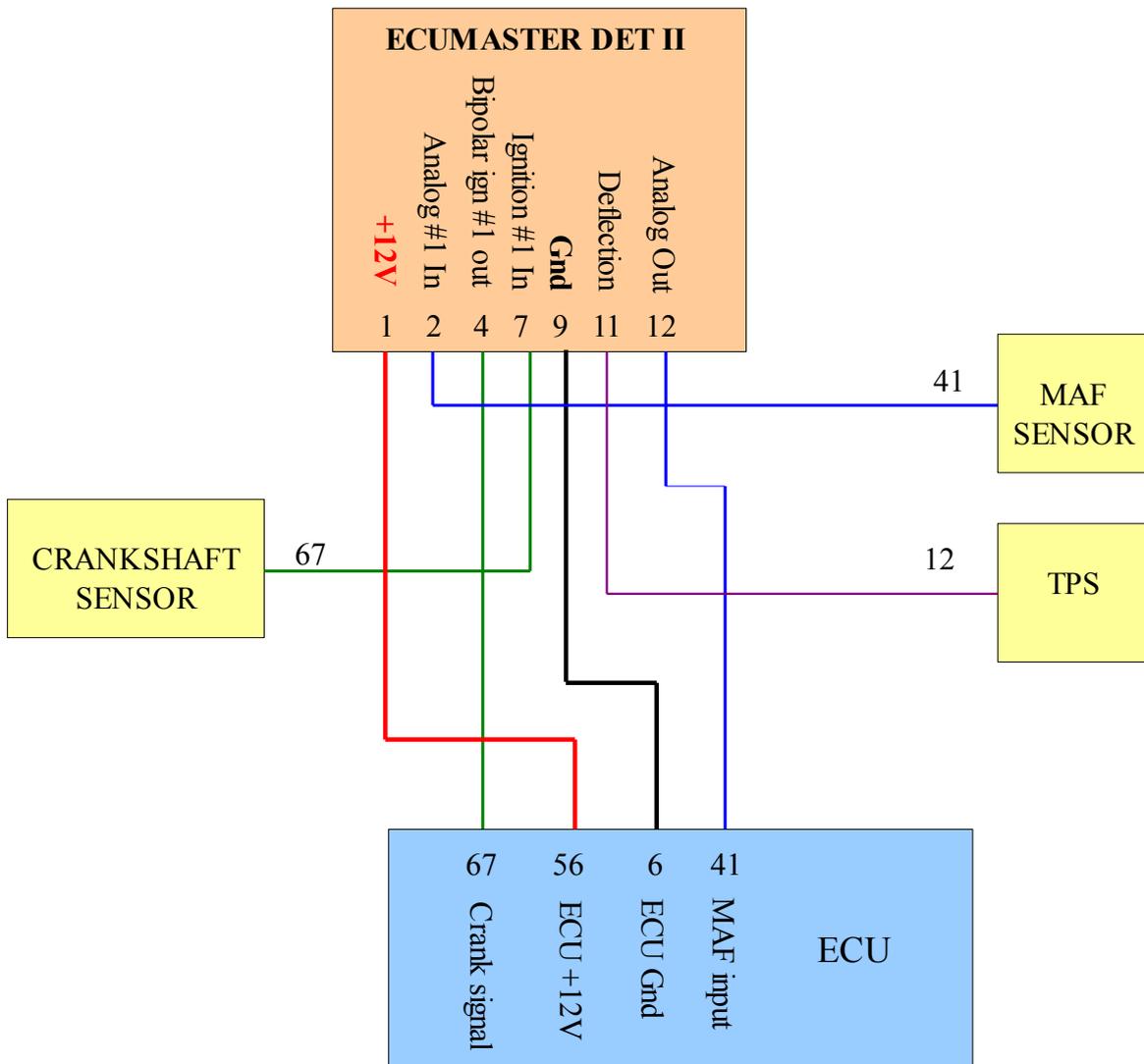
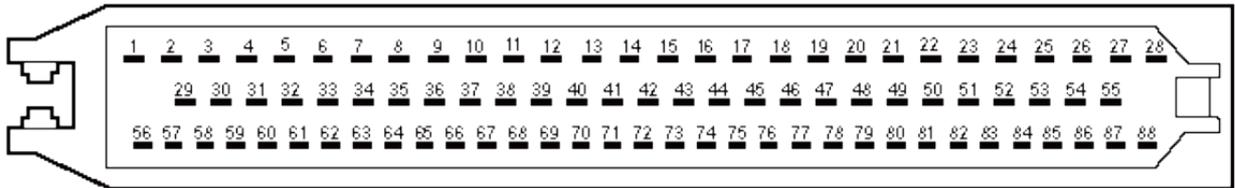
Jeżeli potrzebujesz schematu podłączenia do swojego auta i nie występuje on w niniejszym dokumencie prosimy o wysłanie email ze schematem elektrycznym samochodu na adres: [schematy@ecumaster.com](mailto:schematy@ecumaster.com)

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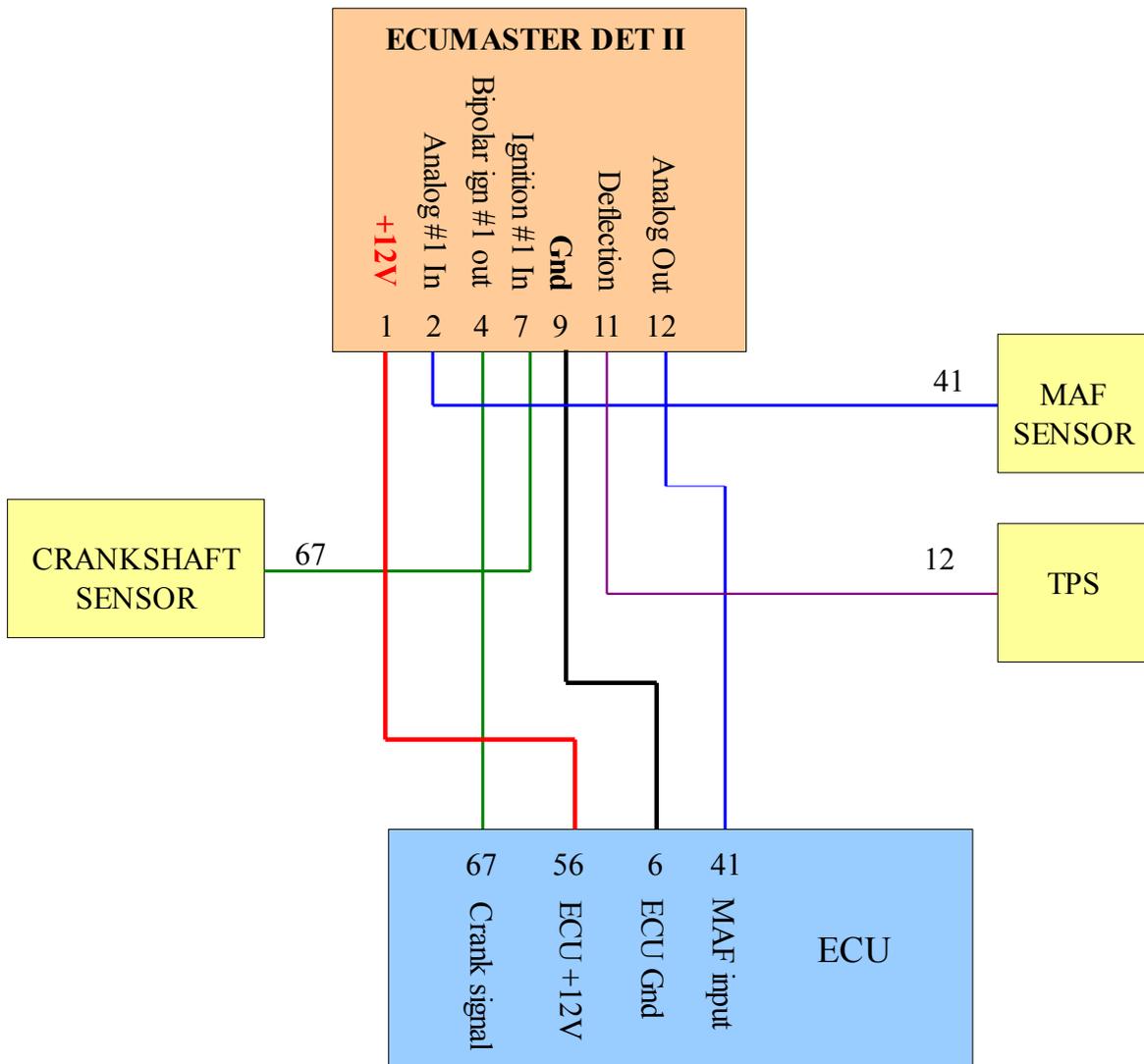
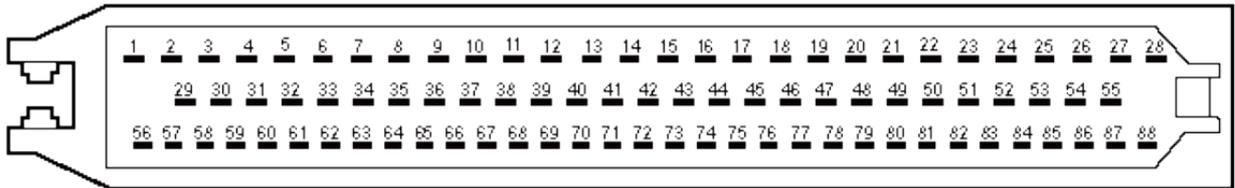
## BMW E36 325i, Bosch Motronic 3.1

<b>Firmware</b>	1.93_60_2
<b>Ignition Mode</b>	Retard / Advance 60-2 signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



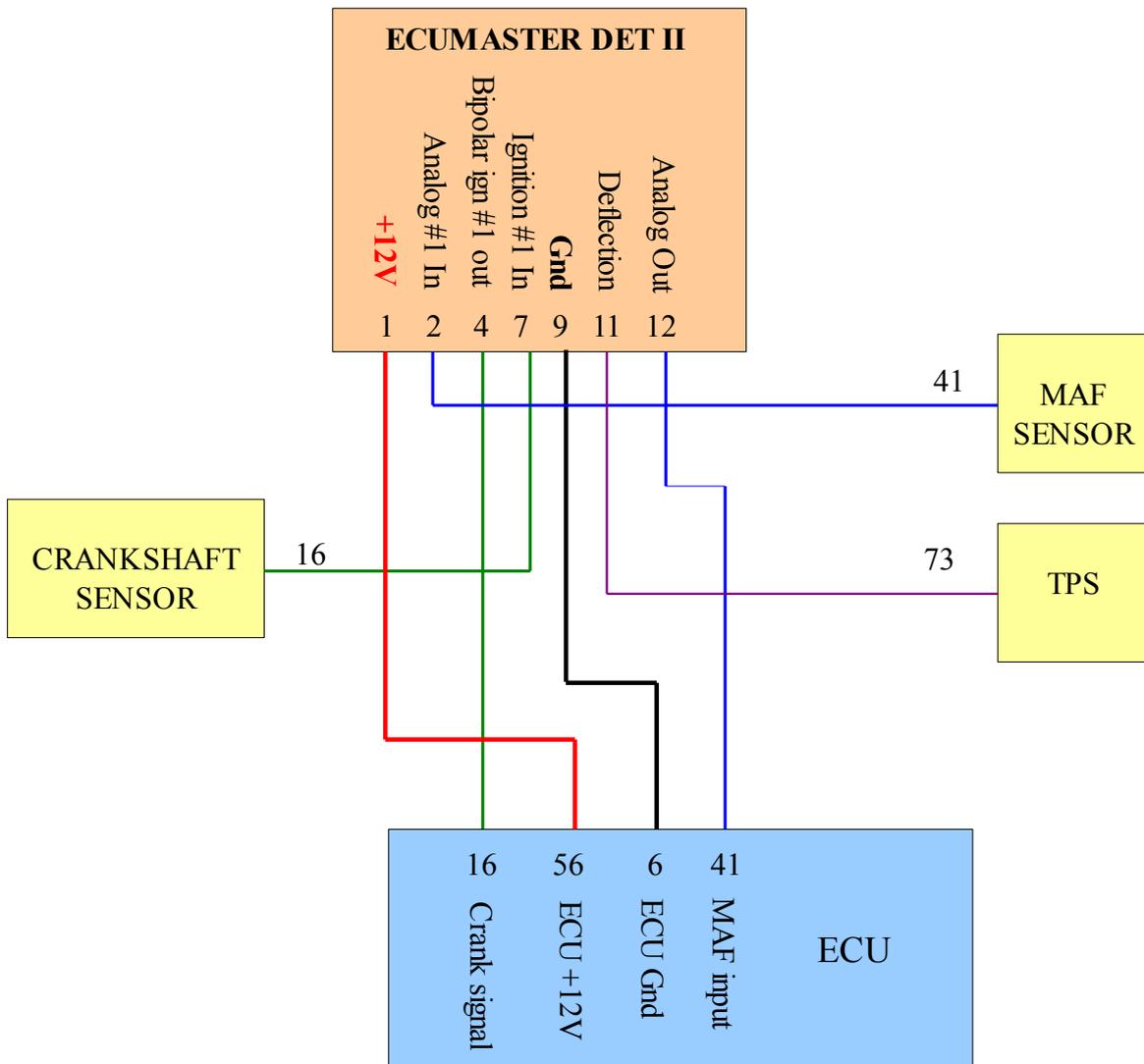
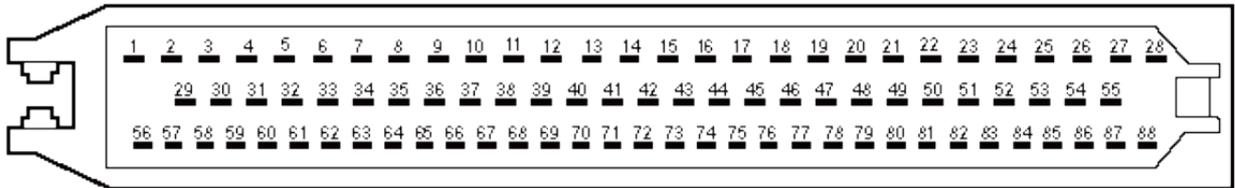
## BMW E36 318is, Bosch Motronic 1.7

<b>Firmware</b>	1.93_60_2
<b>Ignition Mode</b>	Retard / Advance 60-2 signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



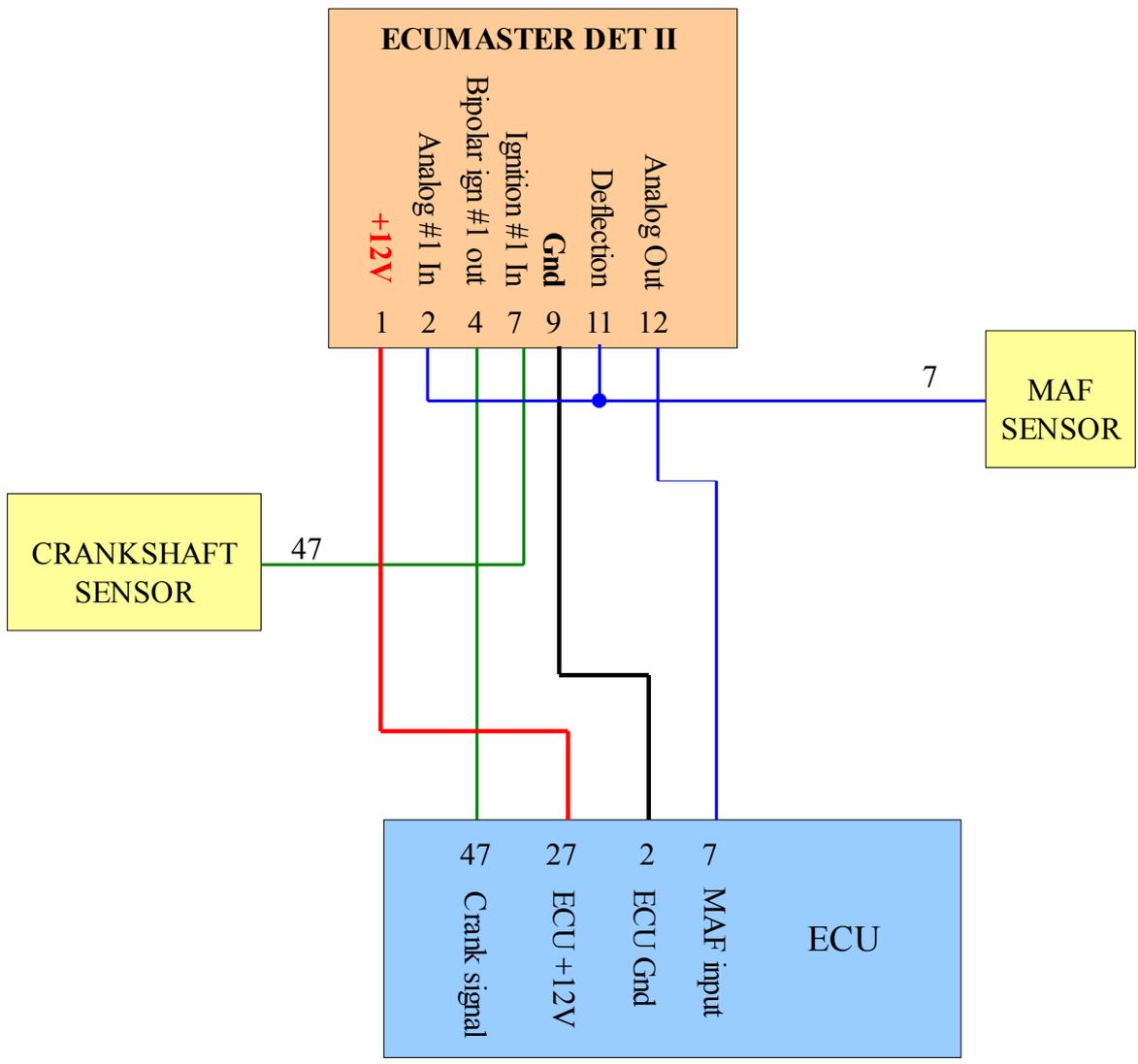
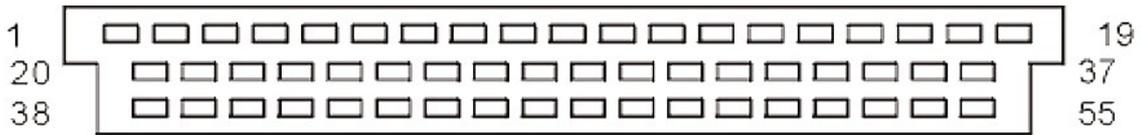
## BMW E36 325i Vanos, Bosch Motronic 3.3.1

<b>Firmware</b>	1.93_60_2
<b>Ignition Mode</b>	Retard / Advance 60-2 signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



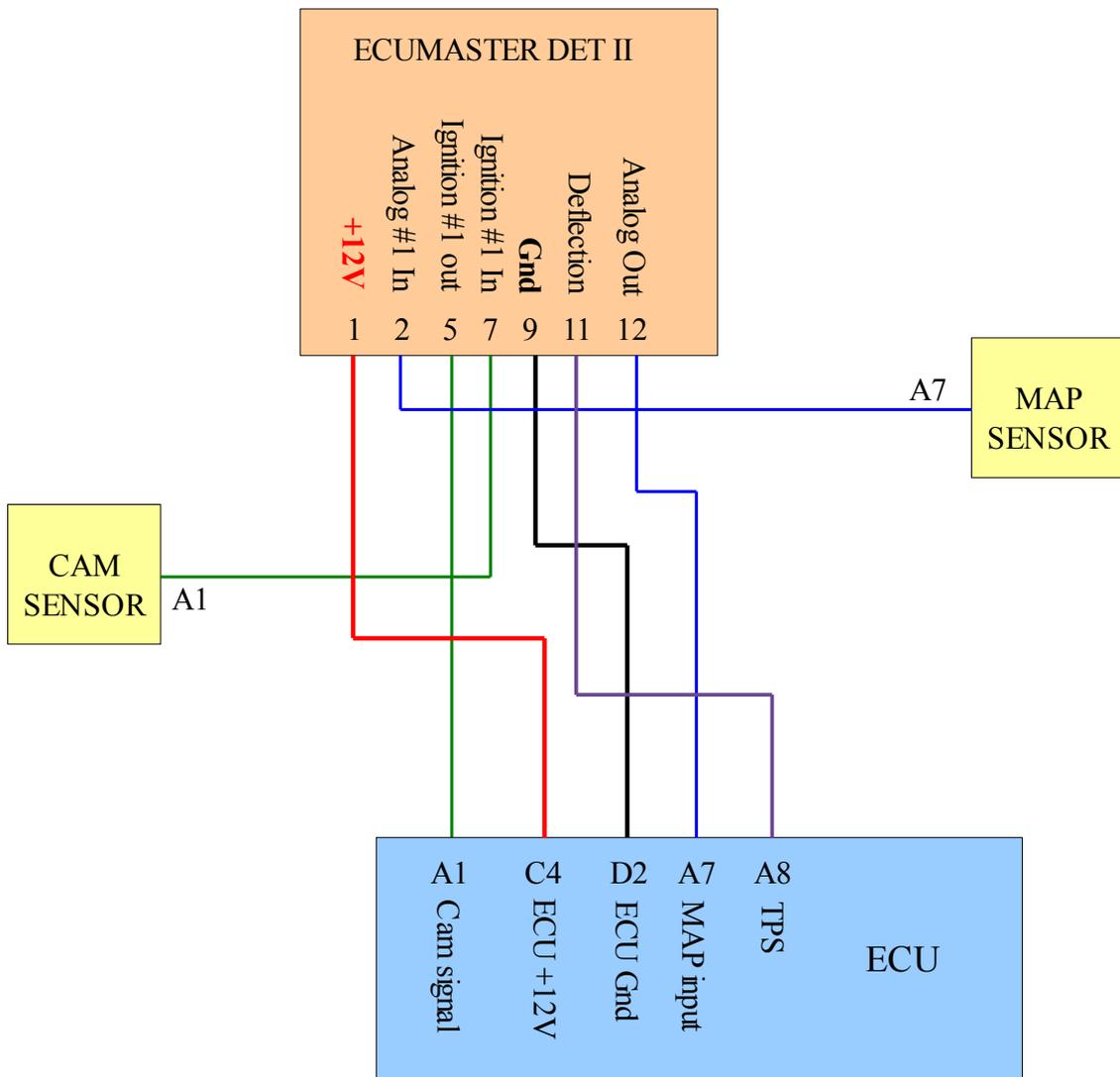
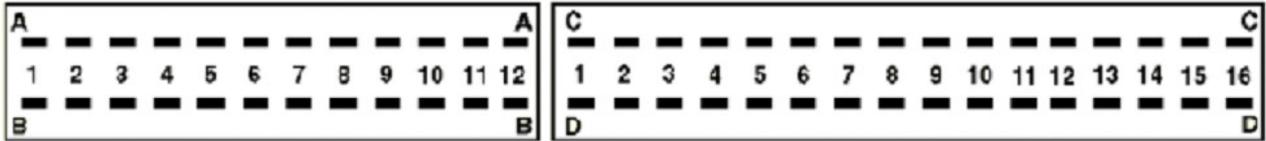
## BMW E30 325i, Bosch Motronic 1.1 / 1.3

<b>Firmware</b>	1.89_62_2
<b>Ignition Mode</b>	Retard / Advance 60-2 signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



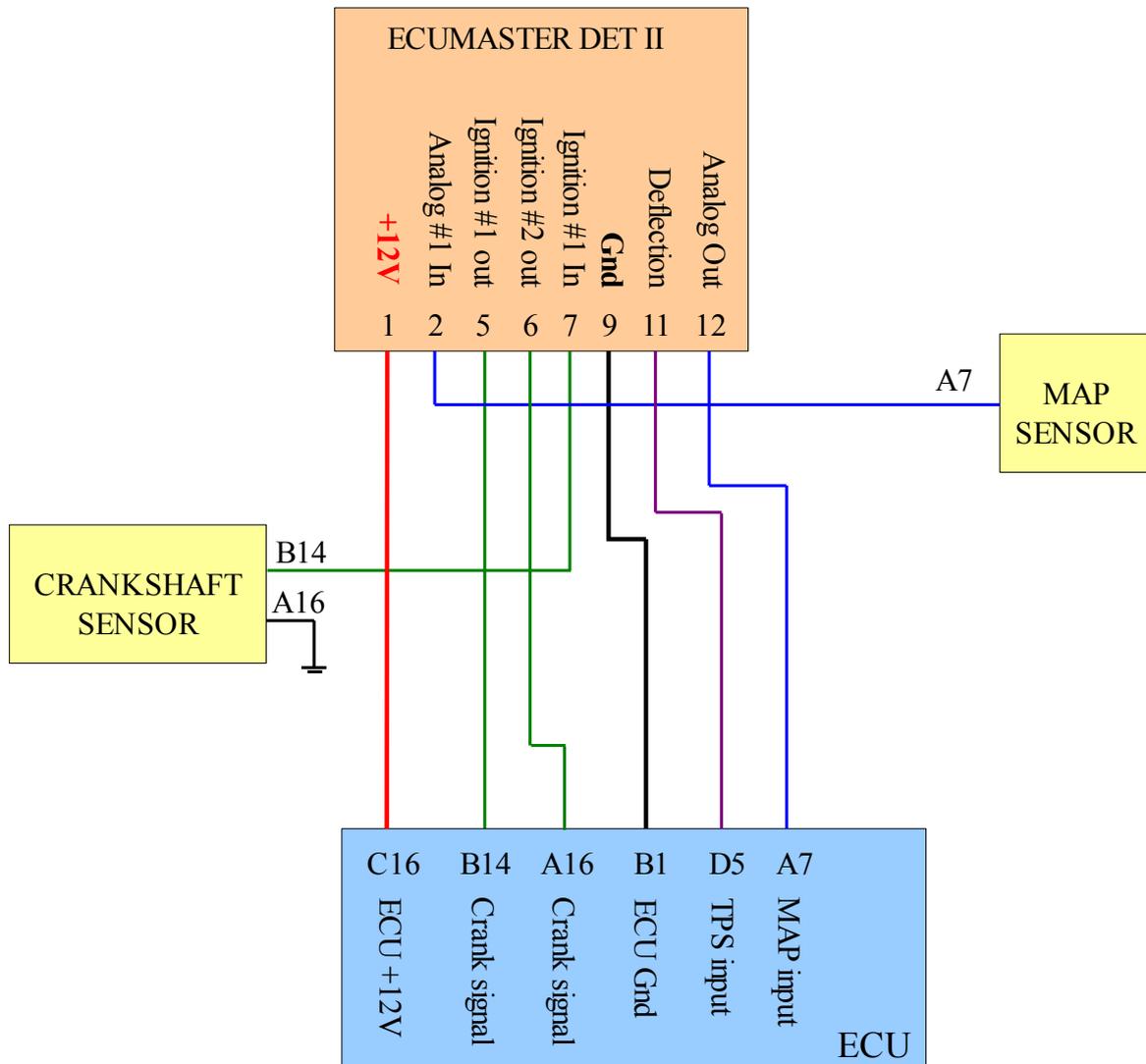
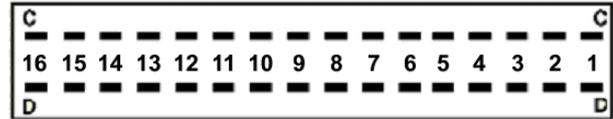
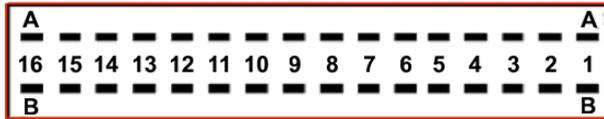
## Daewoo Espero 1.8, 2.0 Delco IEFI-6

<b>Firmware</b>	1.93
<b>Ignition Mode</b>	Retard single signal
<b>Ignition #1 level</b>	High
<b>Num signals per 720 degrees</b>	4



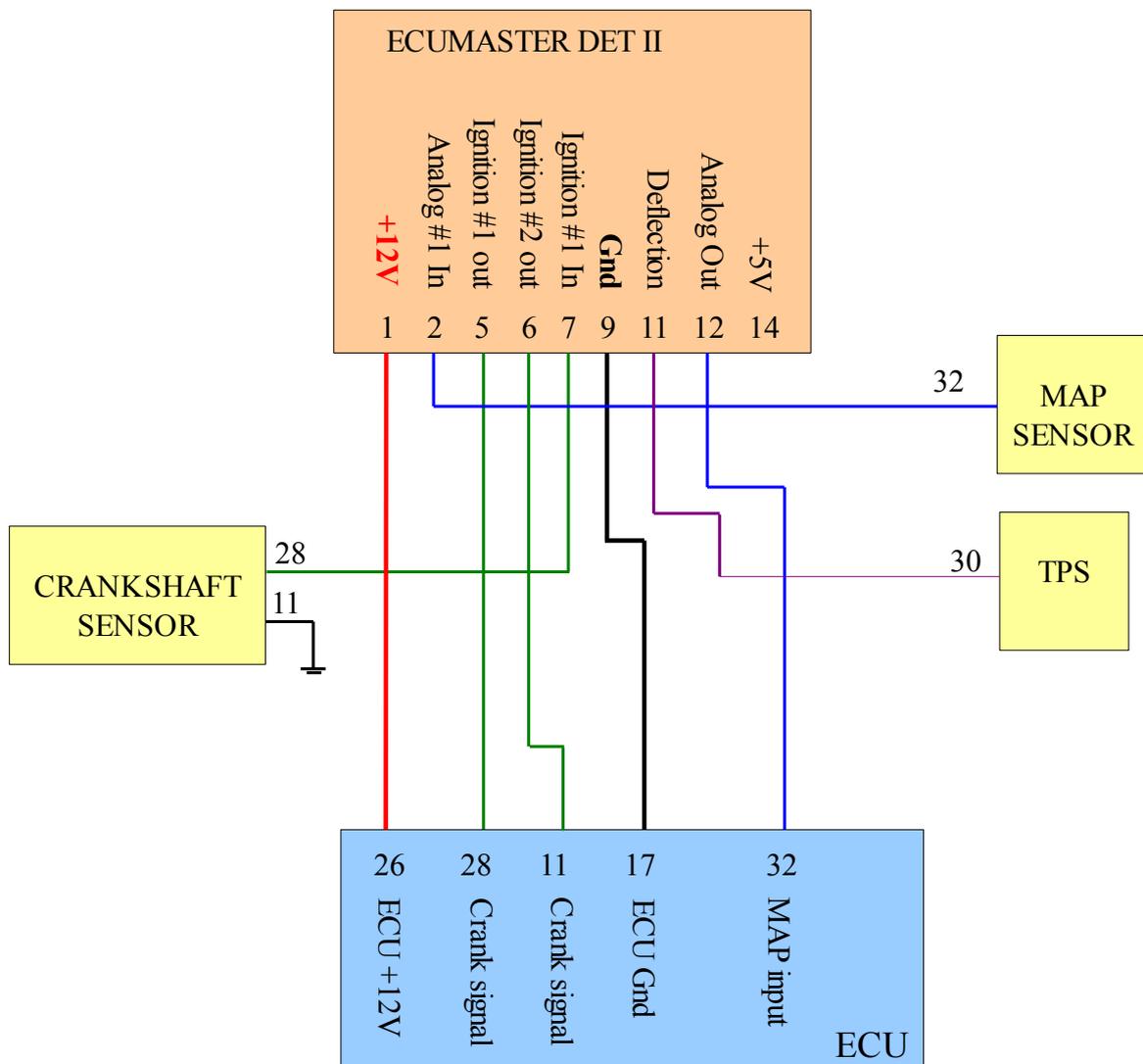
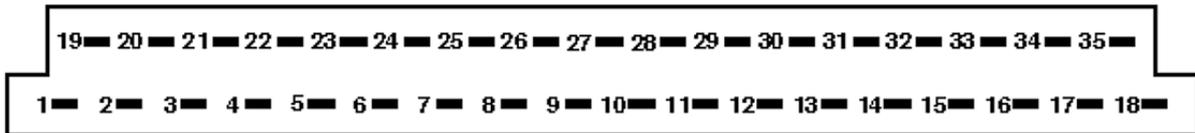
## Daewoo Lanos 1.6 16V Delco

<b>Firmware</b>	1.93_62_2
<b>Ignition Mode</b>	Retard / Advance 60-2 balanced signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



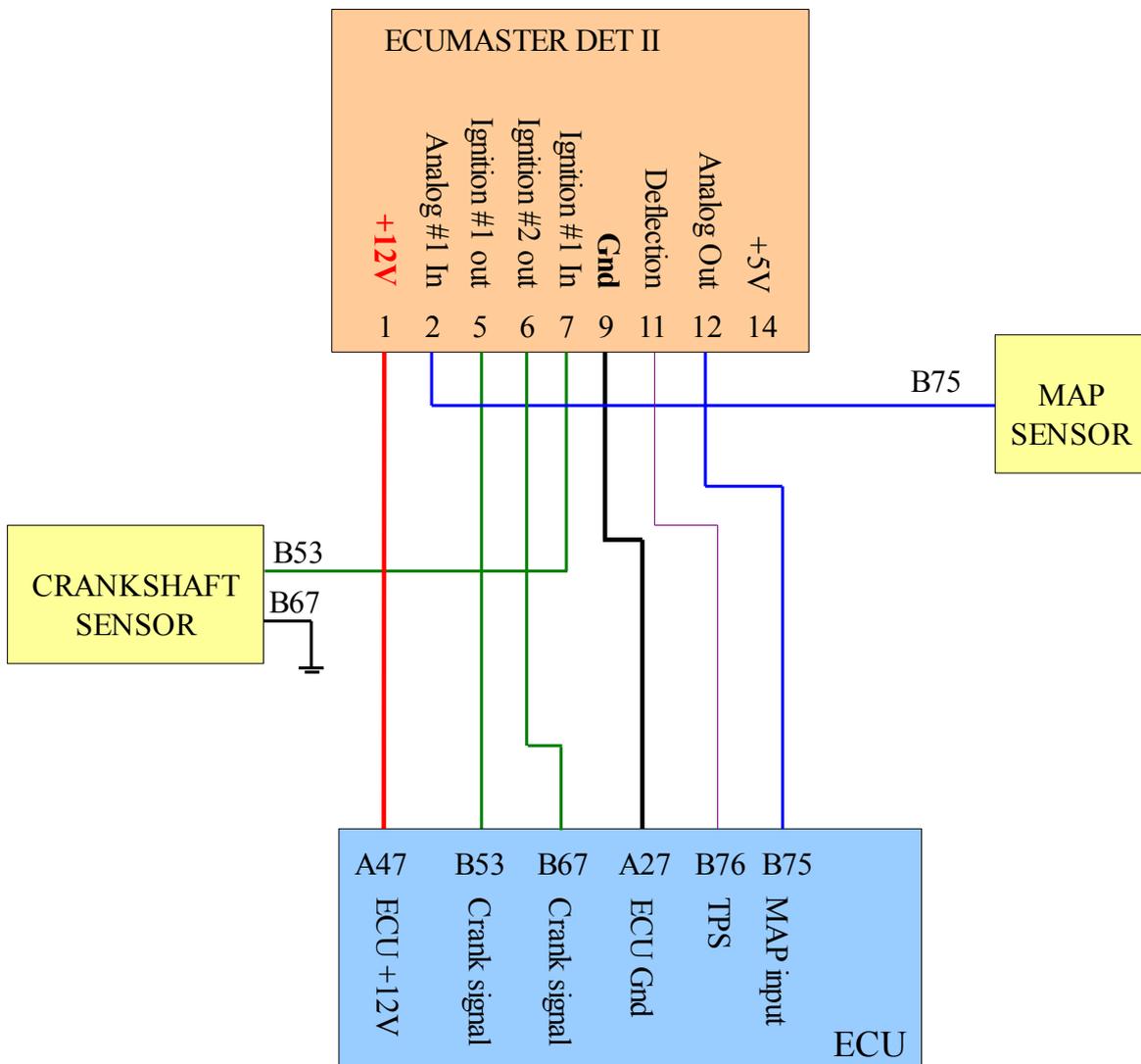
## Fiat Seicento 1.1 Sporting Weber-Marelli IAW 16F

<b>Firmware</b>	1.93_60_2
<b>Ignition Mode</b>	Retard / Advance 60-2 balanced signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



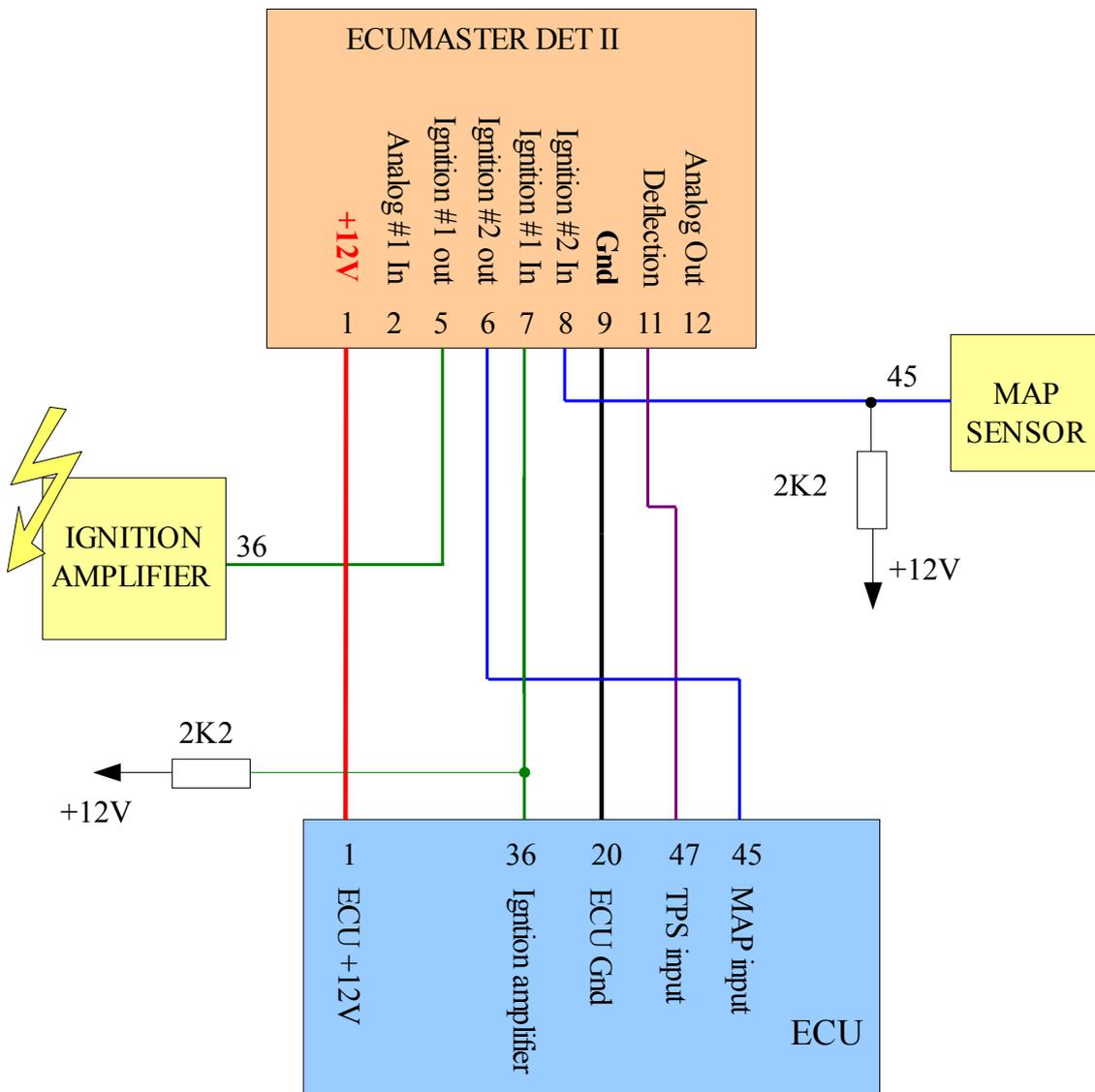
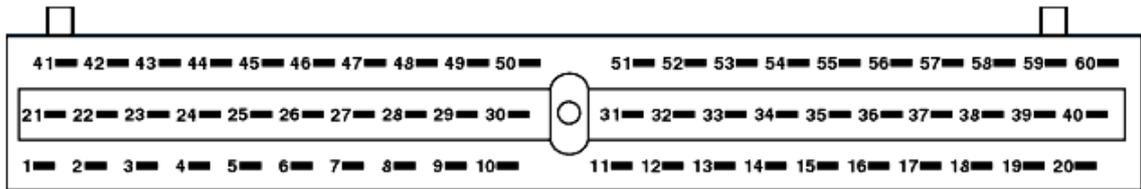
## Fiat Seicento 1.1 Weber-Marelli IAW 4AF.M9

<b>Firmware</b>	1.93_60_2
<b>Ignition Mode</b>	Retard / Advance 60-2 balanced signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



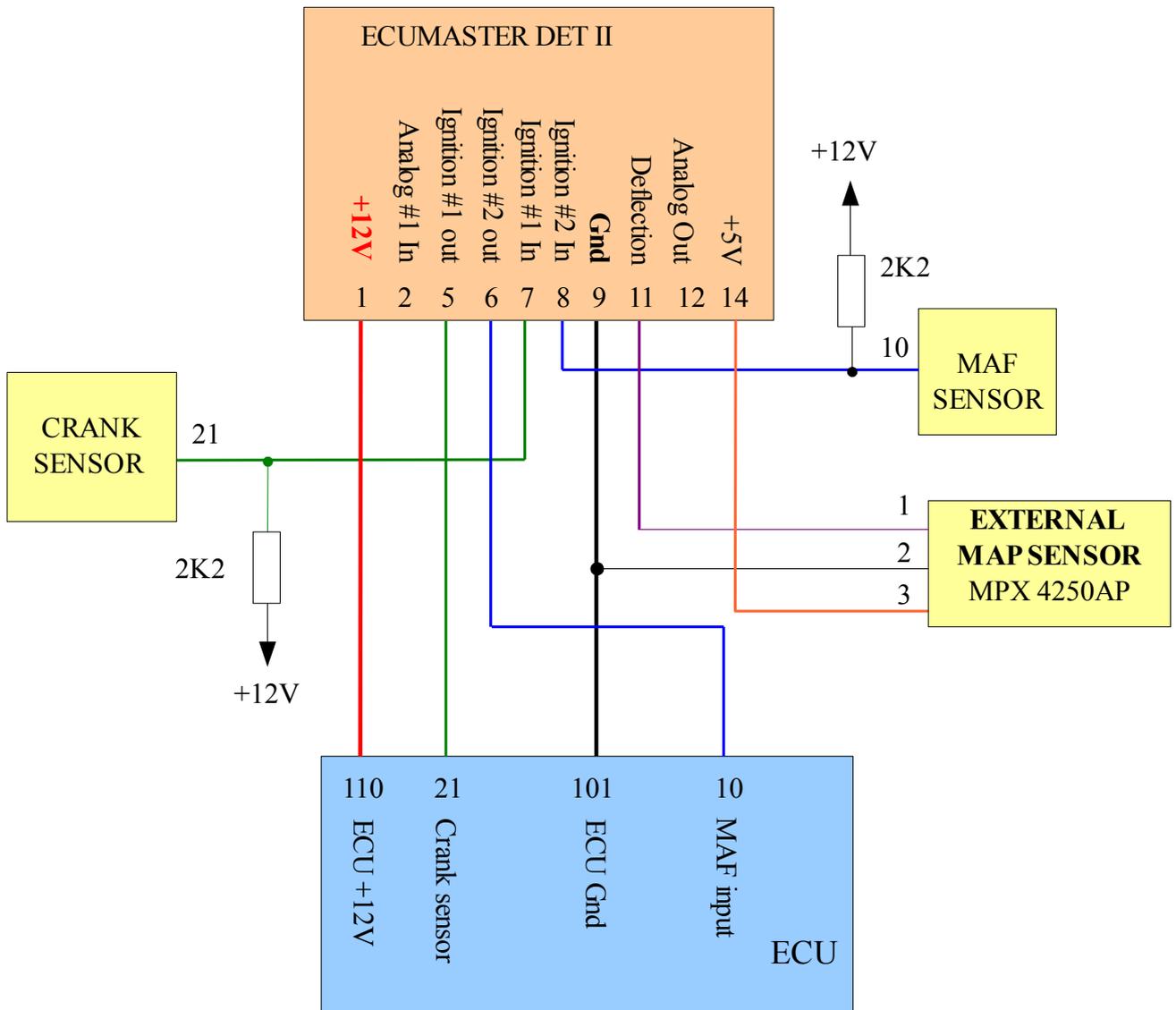
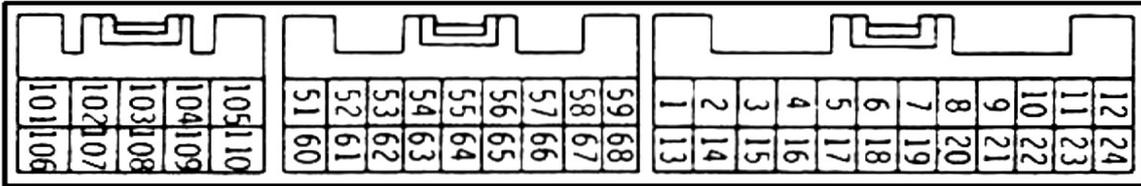
## Ford Sierra 2.9 (B4B/B4C)

<b>Firmware</b>	1.93	<b>Freq Min (Hz)</b>	10
<b>Ignition Mode</b>	Retard single ign. module signal	<b>Freq Max(Hz)</b>	200
<b>Ignition #1 level</b>	HIGH	<b>Base unit (Hz)</b>	1
<b>Num signals per 720 degrees</b>	6	<b>Enable frequency modification</b>	True



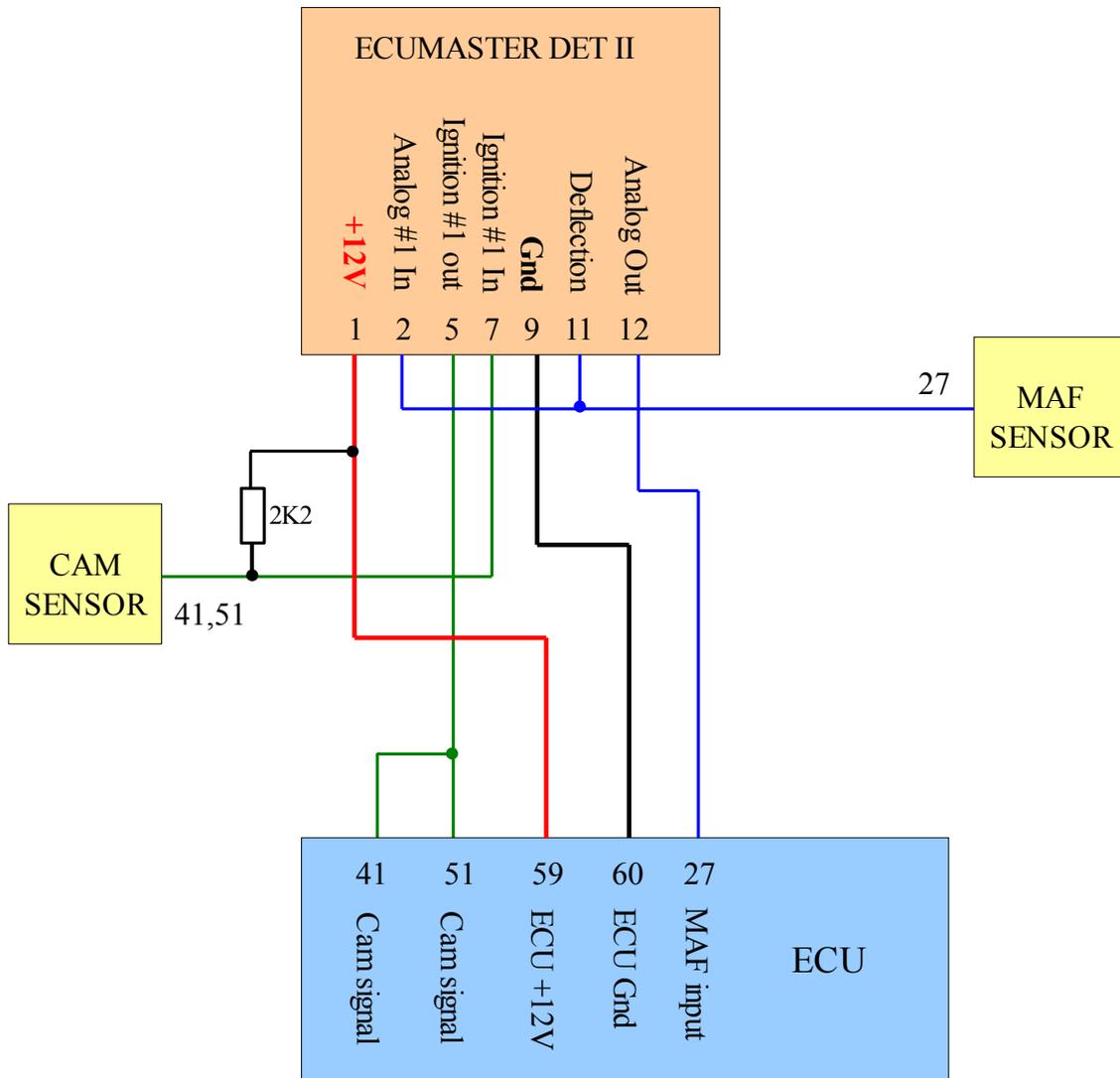
## Mitsubishi Eclipse GSX 1G

<b>Firmware</b>	1.93	<b>Freq Min (Hz)</b>	10
<b>Ignition Mode</b>	Retard single 2.5V signal	<b>Freq Max(Hz)</b>	2000
<b>Ignition #1 level</b>	HIGH	<b>Base unit (Hz)</b>	4
<b>Num signals per 720 degrees</b>	4	<b>Enable frequency modification</b>	True



## Nissan 200SX S13 CA18DET

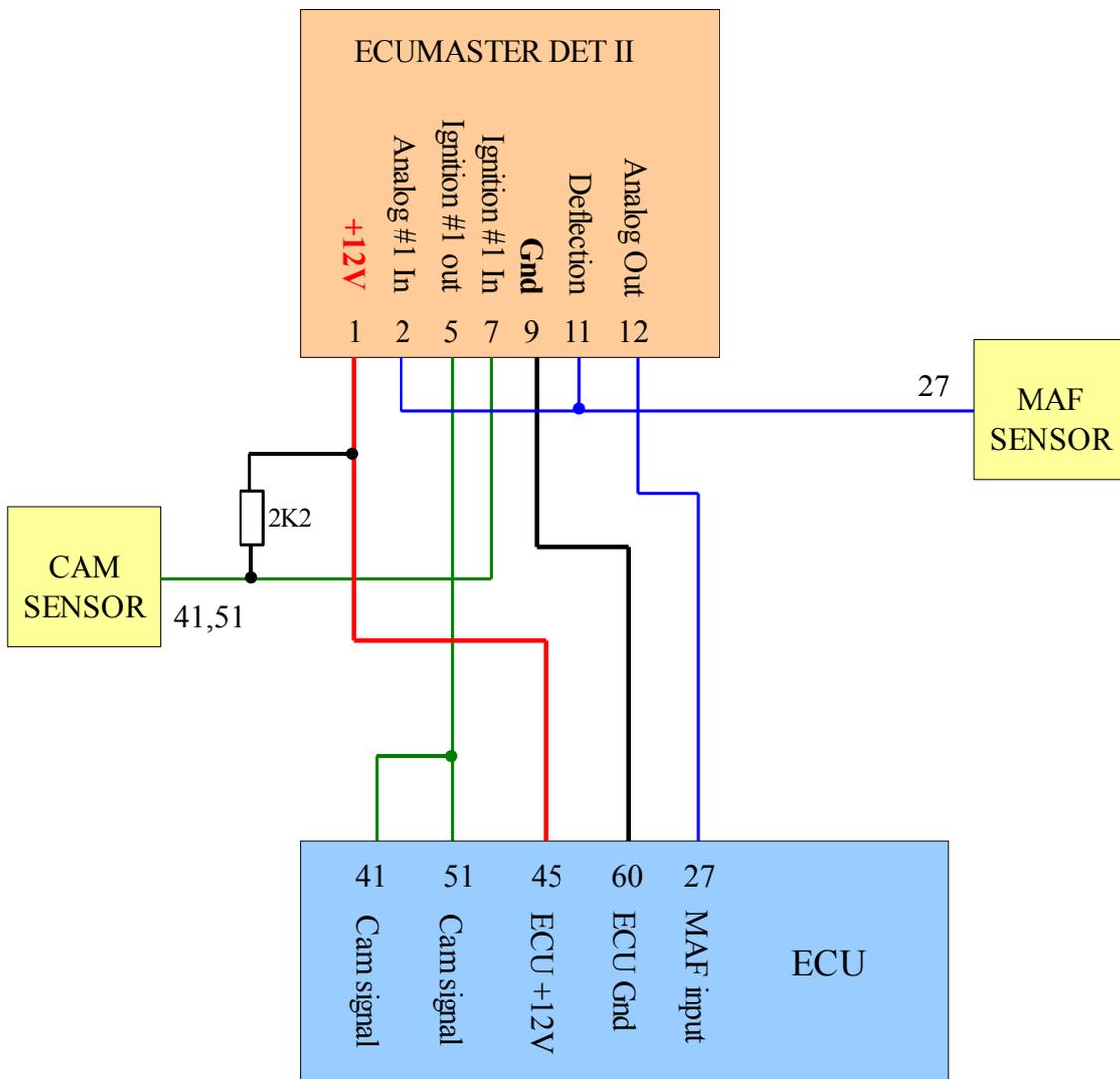
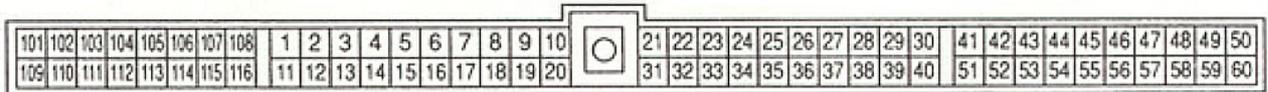
<b>Firmware</b>	1.93
<b>Ignition Mode</b>	Retard single signal
<b>Ignition #1 level</b>	High
<b>Num signals per 720 degrees</b>	4



**Comment:** Wires from pin 41 and 51 are connected together about 30cm from ECU. Connect DET 2 ignition input / output to the common wire of these pins. It is suggested to use external map sensor as deflection.

## Nissan 200SX S14 SR20DET

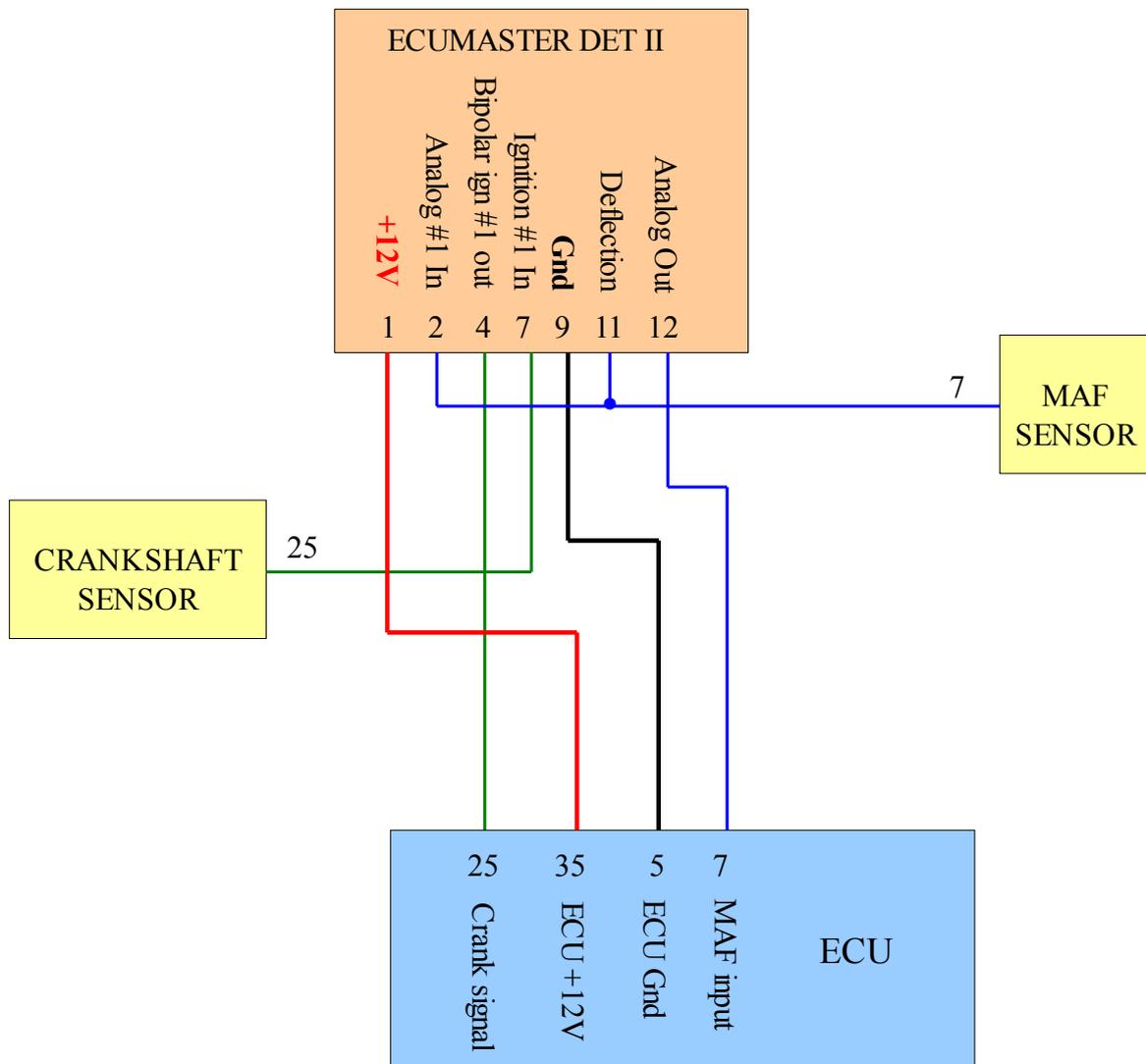
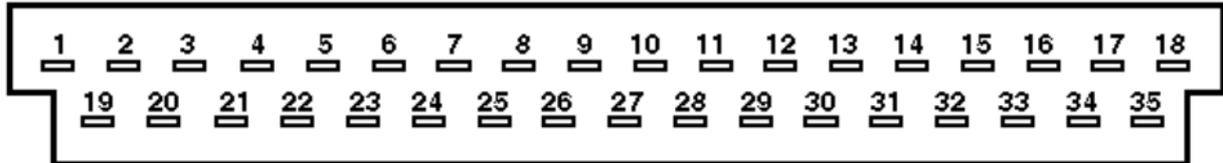
<b>Firmware</b>	1.93
<b>Ignition Mode</b>	Retard single 2.5V signal
<b>Ignition #1 level</b>	High
<b>Num signals per 720 degrees</b>	4



**Comment:** Wires from pin 41 and 51 are connected together about 30cm from ECU. Connect DET 2 ignition input / output to the common wire of these pins. It is suggested to use external map sensor as deflection.

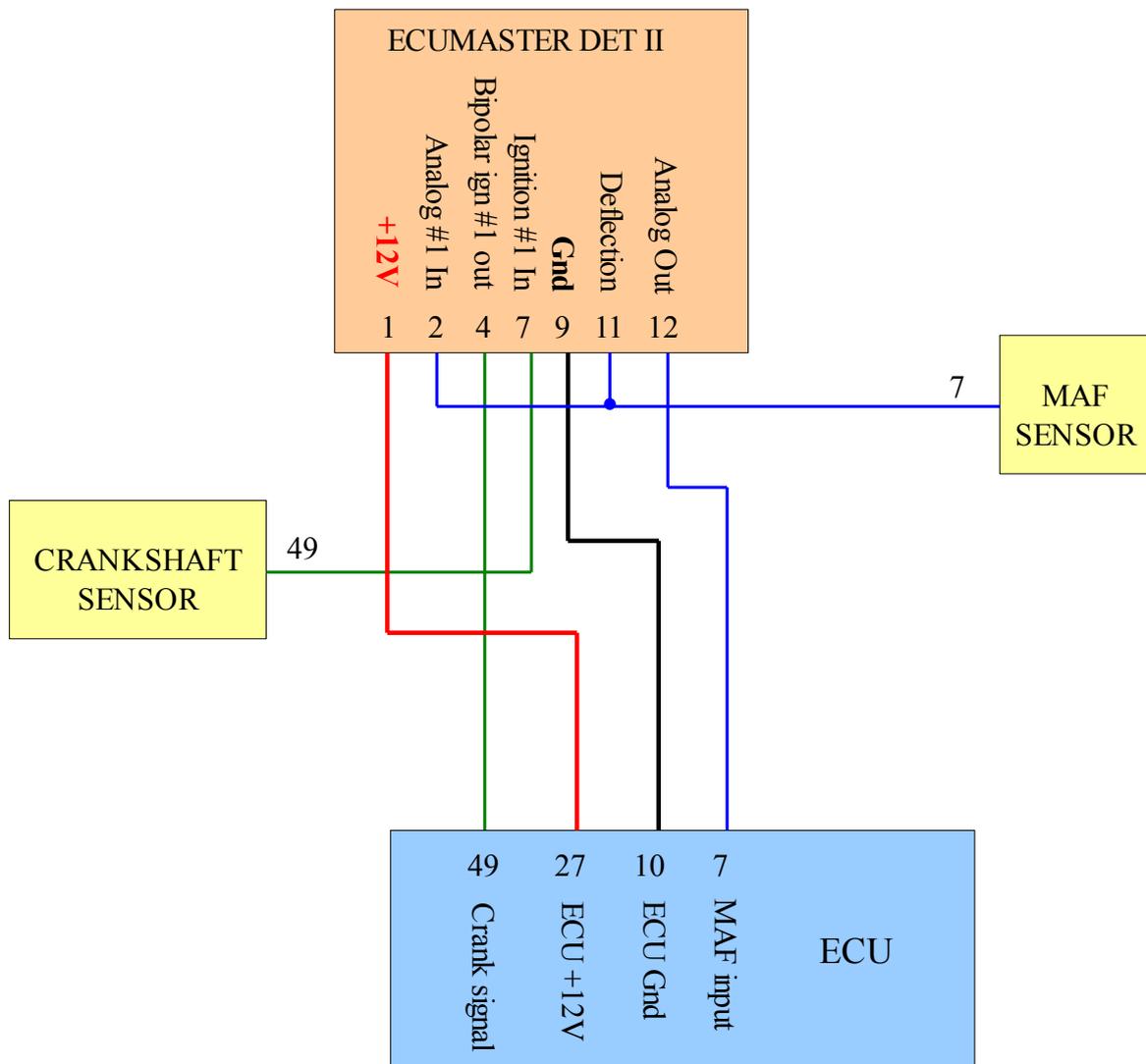
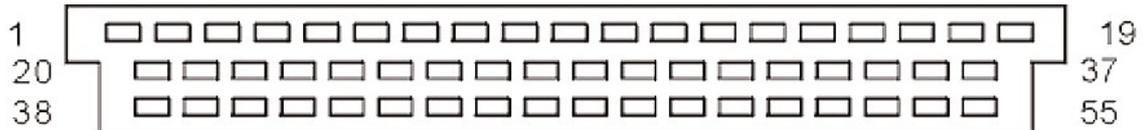
## Opel / Vauxhall C20NE, 20NE, Bosch Motronic ML4.1

<b>Firmware</b>	1.93_62_2
<b>Ignition Mode</b>	Retard / Advance 60-2 signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



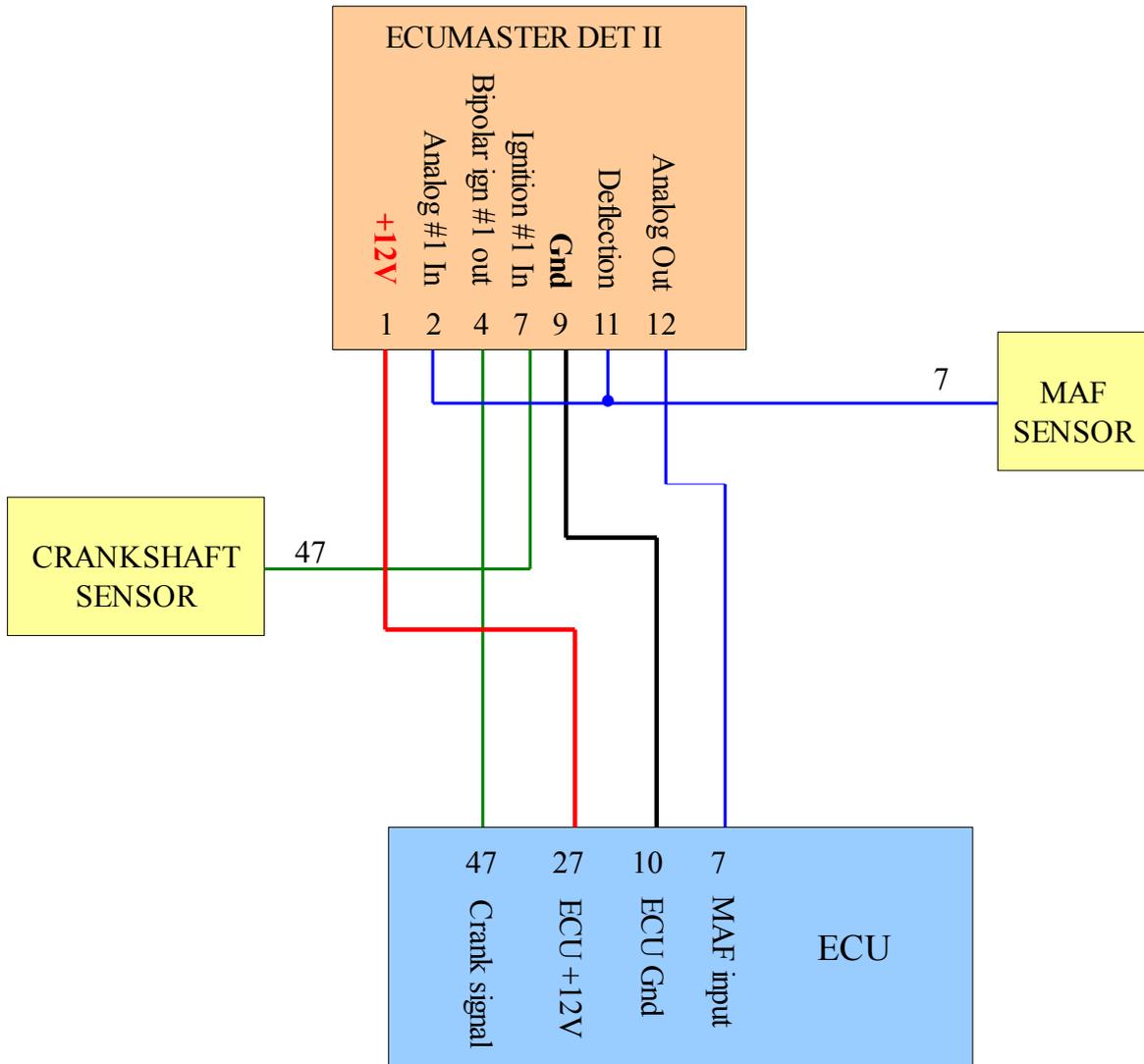
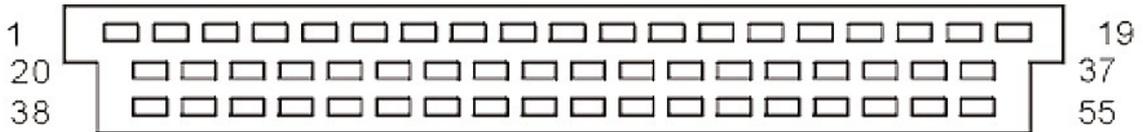
## Opel / Vauxhall C20NE, 20NE, Bosch Motronic 1.5

<b>Firmware</b>	1.93_60_2
<b>Ignition Mode</b>	Retard / Advance 60-2 signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



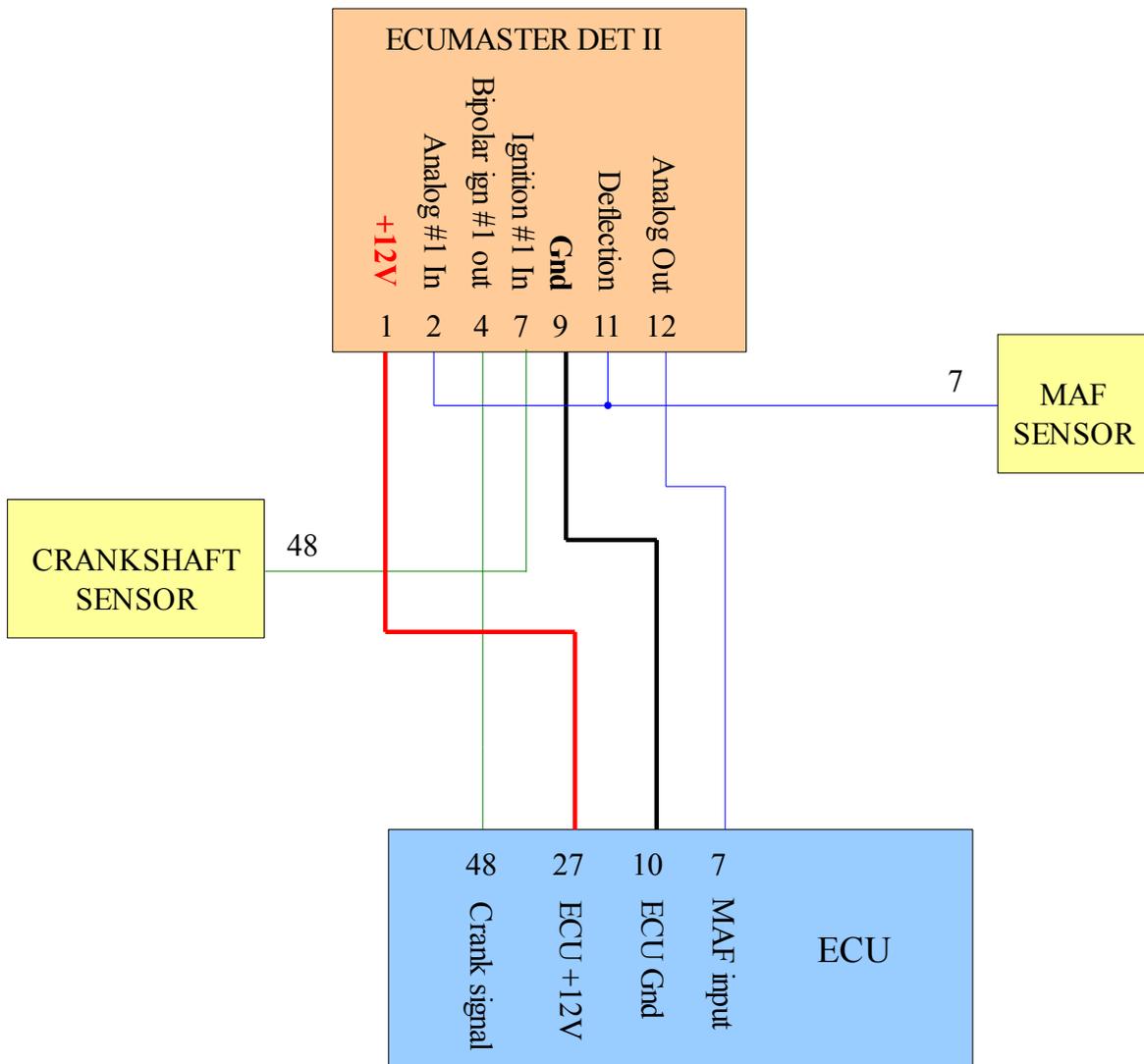
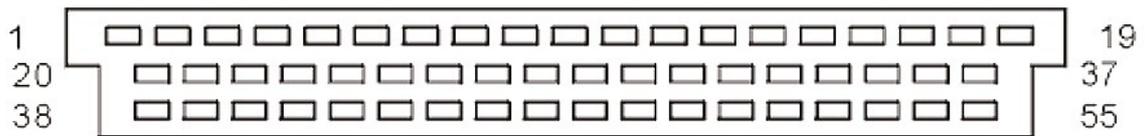
## Opel / Vauxhall C20XE, Bosch Motronic 2.5

<b>Firmware</b>	1.93_60_2
<b>Ignition Mode</b>	Retard / Advance 60-2 signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



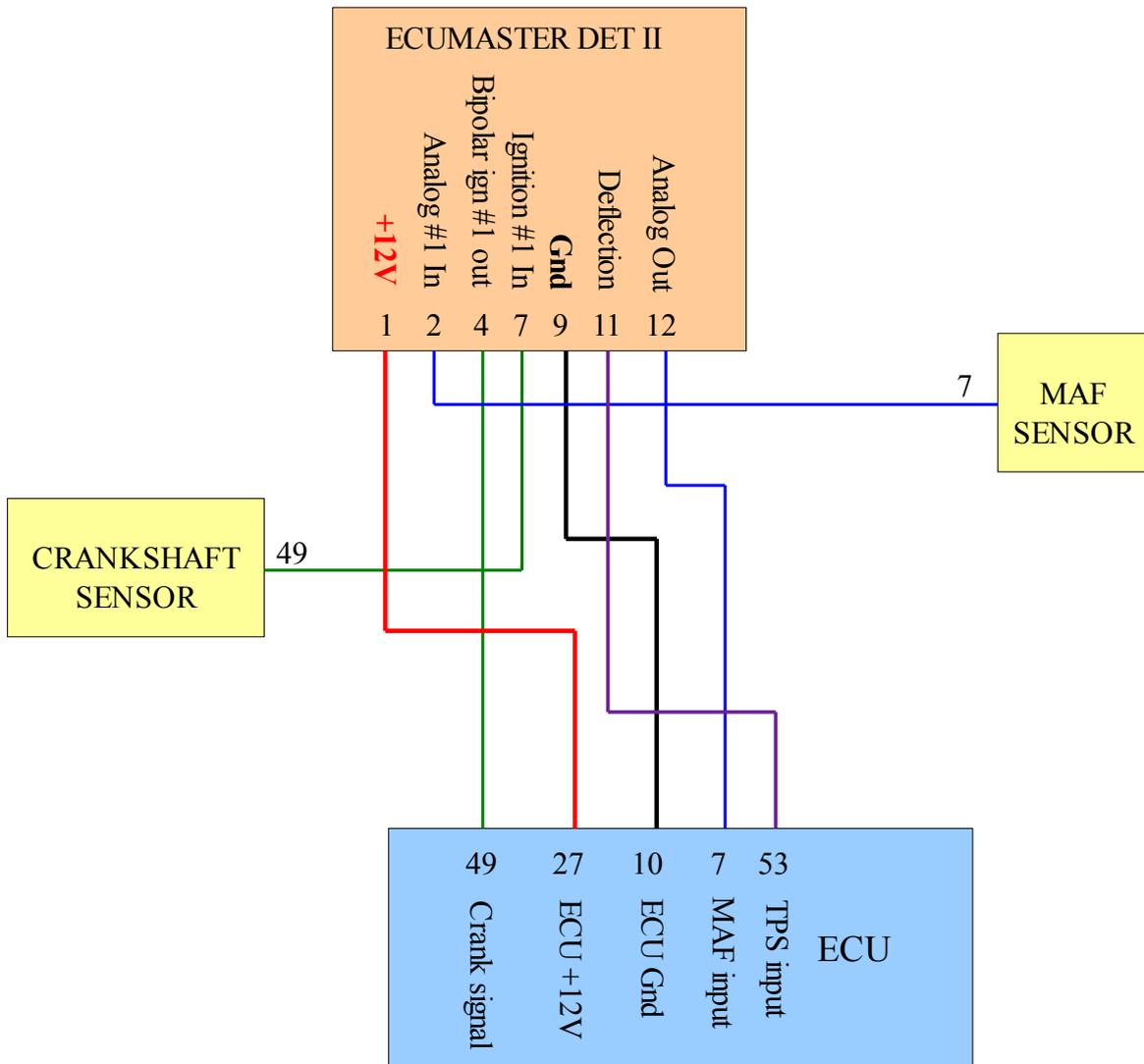
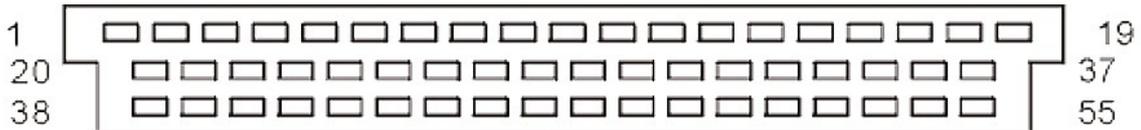
## Opel / Vauxhall C20LET, Bosch Motronic 2.7

<b>Firmware</b>	1.93_60_2
<b>Ignition Mode</b>	Retard / Advance 60-2 signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



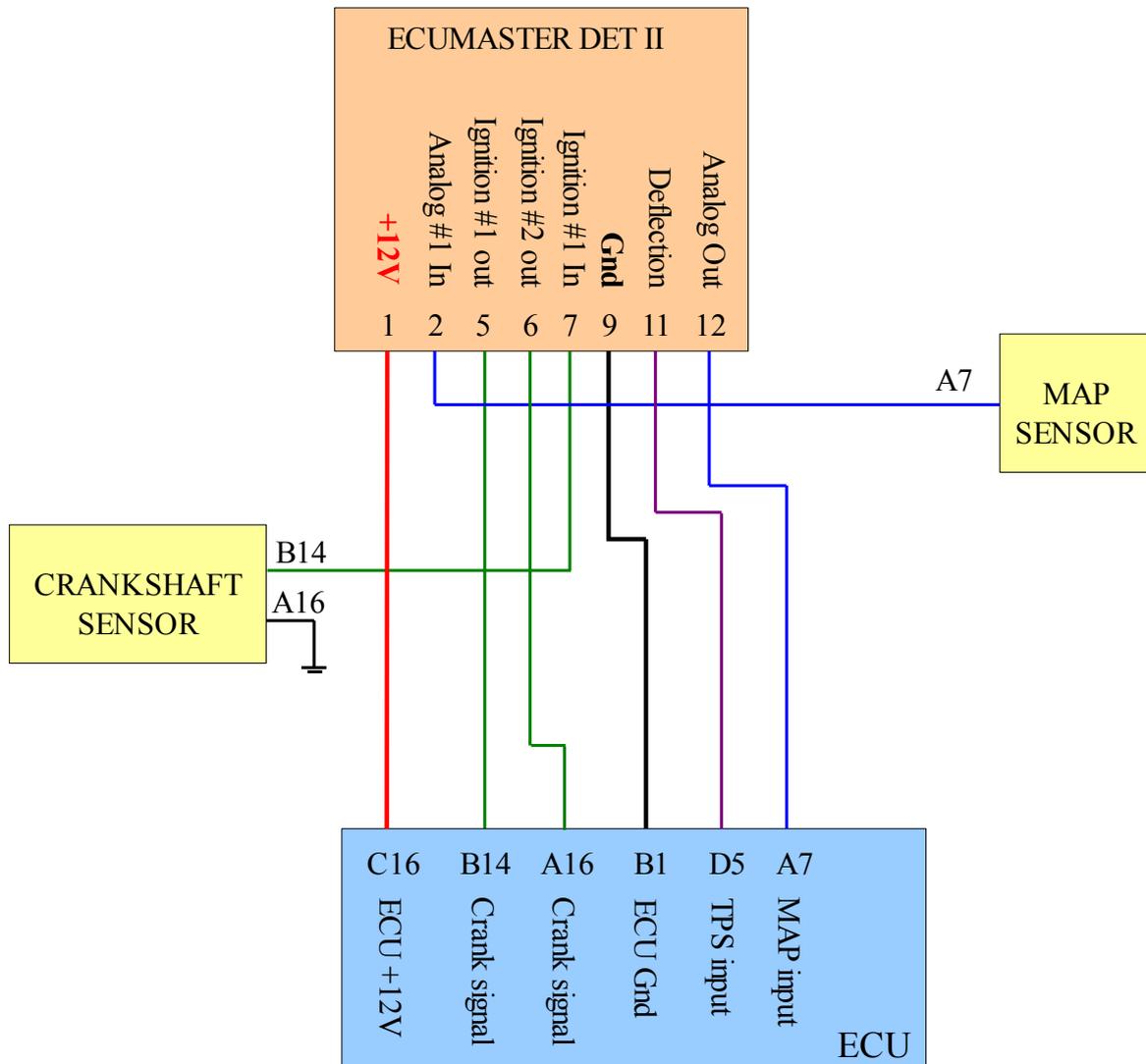
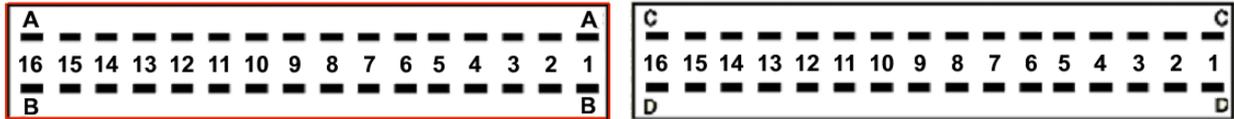
## Opel / Vauxhall C20XE, C25XE, Bosch Motronic 2.8

<b>Firmware</b>	1.93_60_2
<b>Ignition Mode</b>	Retard / Advance 60-2 signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



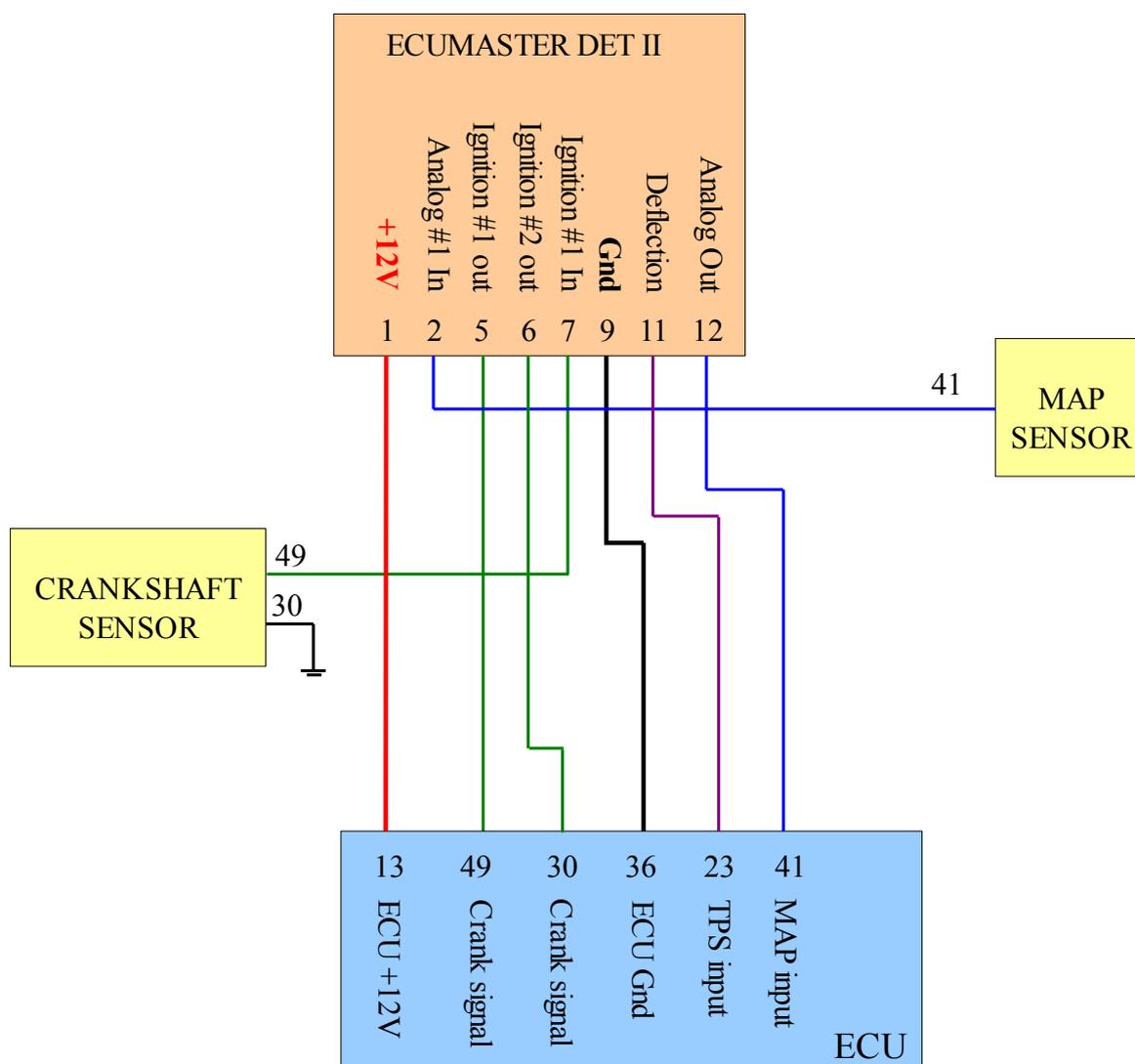
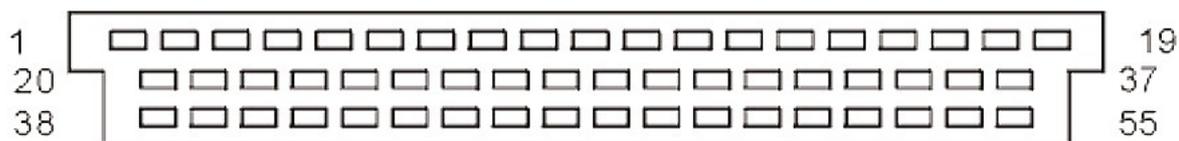
## Opel / Vauxhall Astra 1.6 X16XEL

<b>Firmware</b>	1.93_60_2
<b>Ignition Mode</b>	Retard / Advance 60-2 balanced signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



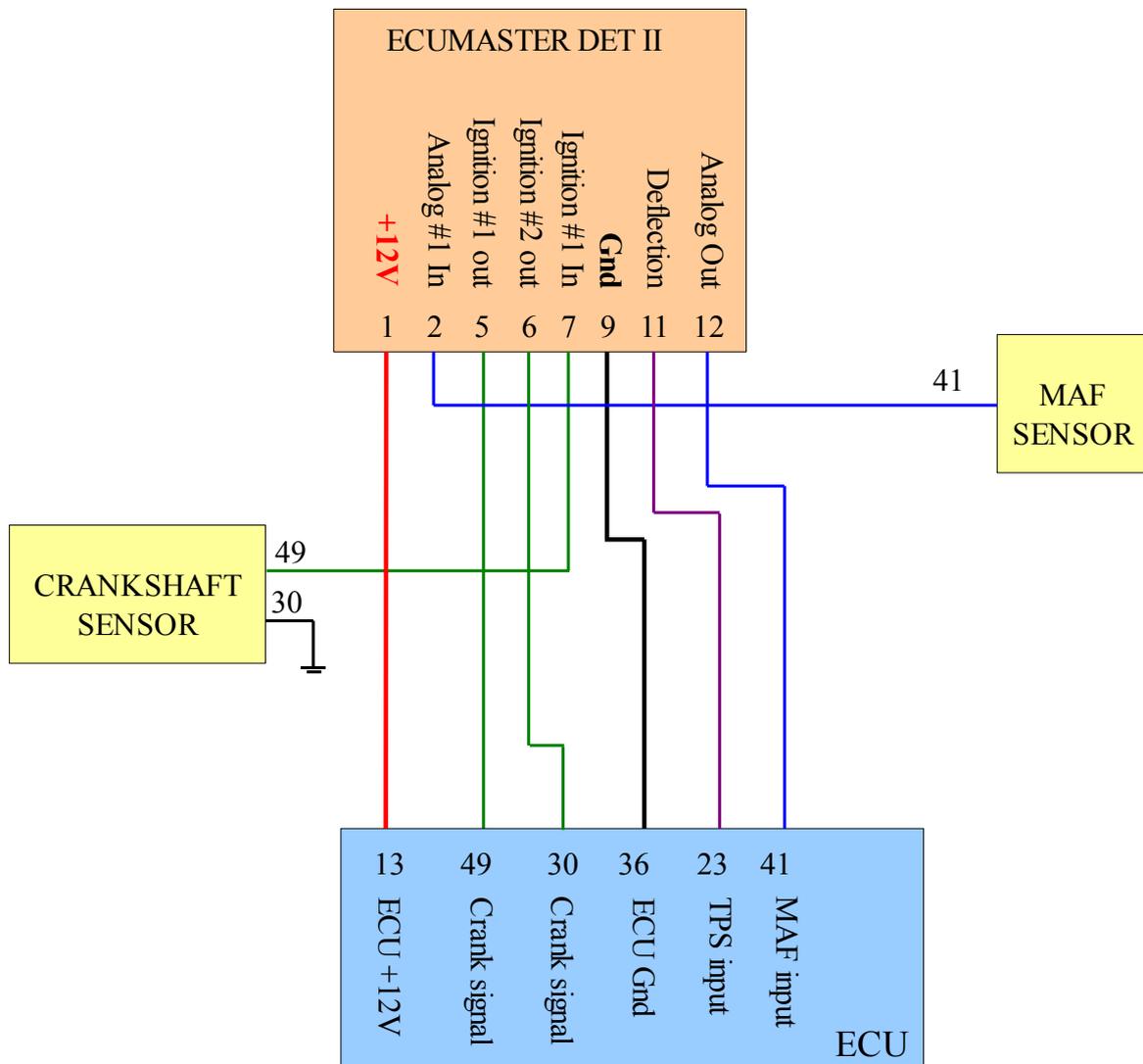
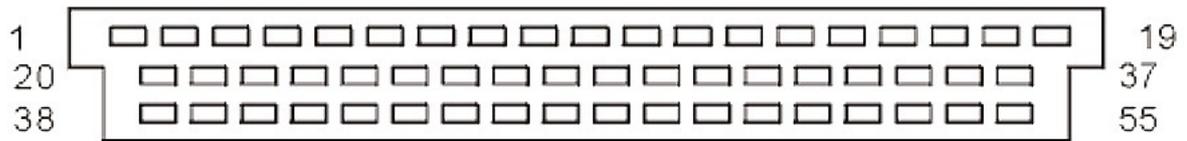
## Peugeot 106 1.6 16V TUJP4 MM 1AP41

<b>Firmware</b>	1.93_60_2
<b>Ignition Mode</b>	Retard / Advance 60-2 balanced signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



## Peugeot 306 2.0 16V MM 1AP10

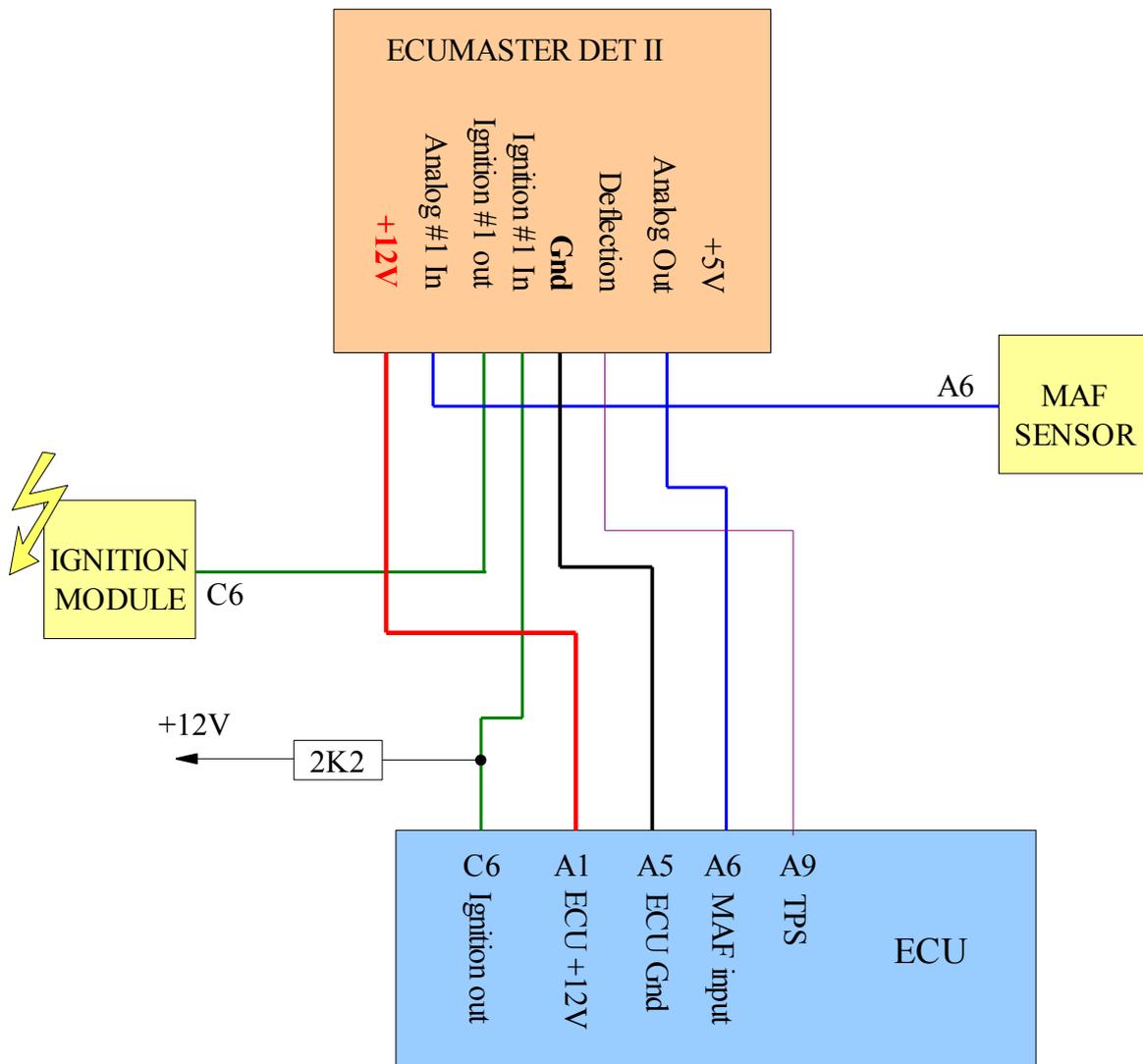
<b>Firmware</b>	1.93_60_2
<b>Ignition Mode</b>	Retard / Advance 60-2 balanced signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A





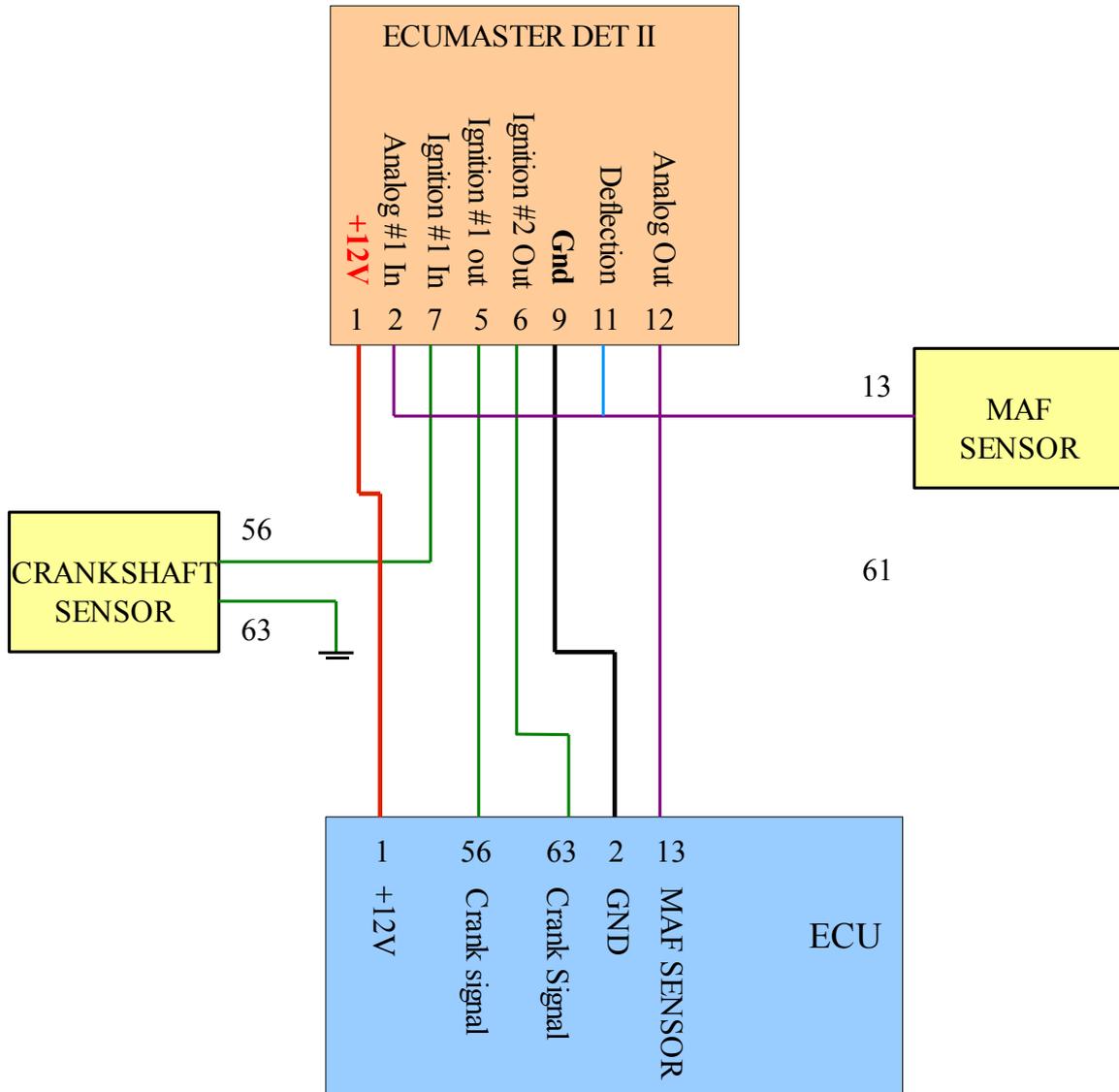
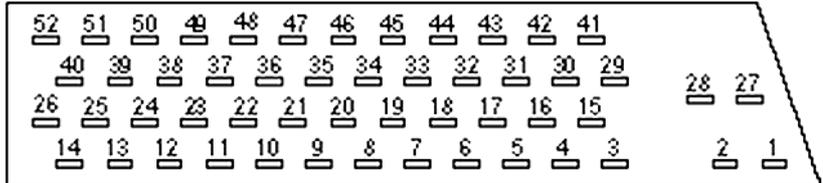
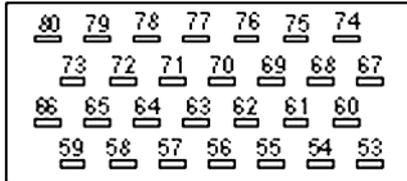
## Suzuki Swift GTI 1.3

<b>Firmware</b>	1.93
<b>Ignition Mode</b>	Retard single signal
<b>Ignition #1 level</b>	High
<b>Num signals per 720 degrees</b>	4



# Volkswagen Golf (98-06) 1.8T (AGU) Bosch Motronic 3.8.5

<b>Firmware</b>	1.93_60_2
<b>Ignition Mode</b>	Retard / Advance 60-2 balanced signal
<b>Ignition #1 level</b>	Low
<b>Num signals per 720 degrees</b>	N/A



**Comment:** It is advised to use external map sensor as deflection

## Contributors

Zoltar – Fix for Daewoo Espero Diagram  
Grifter – Fix for Opel Motronic 2.8 vr sensor