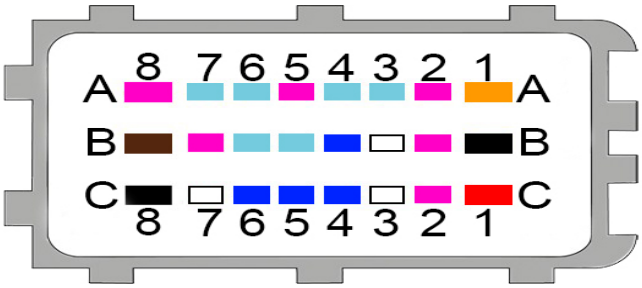
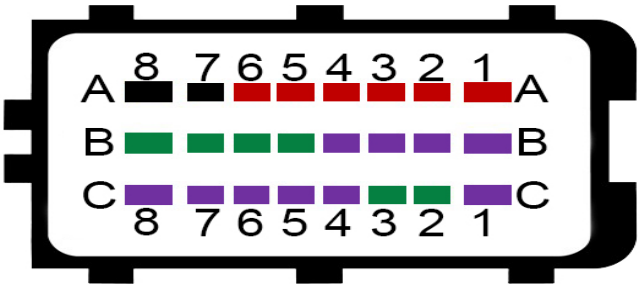
SPARK V1.1 PIN DIAGRAM (SPEEDUINO COMPATIBLE)





GRAY CONNECTOR			
	ARDUINO	I/O	FUNCTION
A1=	-	-	(+5V) SUPPLY OUTPUT
A2=	A1	A.IN	CLT SENSOR INPUT
A3=	D2	D.IN	FLEX FUEL SENSOR INPUT
A4=	D20	D.IN	WHEEL SPEED SENSOR INPUT
A5=	A8	A.IN	O2 SENSOR INPUT (NRWB&WIDE)
A6=	-	-	CRANK(-) SENSOR INPUT
A7=	-	-	CAM(-) SENSOR INPUT
A8=	A9	A.IN	SPARE ANALOG INPUT 1
B1=	-	-	ECU GND
B2=	A0	A.IN	IAT SENSOR INPUT
B3=	D13	D.IN	DIGITAL SWITCH INPUT 1
B4=	-	-	IDLE AIR STEP.B1
B5=	D19	VR/HALL	CRANK(+) SENSOR INPUT
B6=	D18	VR/HALL	CAM(+) SENSOR INPUT
B7=	A10	A.IN	SPARE ANALOG INPUT 2
B8=	-	-	SENSOR GND
C1=	-	-	(+12V) POWER INPUT
C2=	A2	A.IN	TPS SENSOR INPUT
C3=	D51	D.IN	DIGITAL SWITCH INPUT 2
C4=	-	-	IDLE AIR STEP.B2
C5=	-	-	IDLE AIR STEP.A1
C6=	-	-	IDLE AIR STEP.A2
C7=	D23	D.IN	SPARE DIGITAL INPUT 1
C8=	-	-	ECU GND

BLACK CONNECTOR			
	ARDUINO	I/O	FUNCTION
A1=	D34	D.OUT	IGNITION OUTPUT.6 (+5V-12V-TTL)
A2=	D36	D.OUT	IGNITION OUTPUT.5 (+5V-12V-TTL)
A3=	D40	D.OUT	IGNITION OUTPUT.1 (+5V-12V-TTL)
A4=	D38	D.OUT	IGNITION OUTPUT.2 (+5V-12V-TTL)
A5=	D48	D.OUT	IGNITION OUTPUT.4 (+5V-12V-TTL)
A6=	D52	D.OUT	IGNITION OUTPUT.3 (+5V-12V-TTL)
A7=	-	-	POWER GND
A8=	-	-	POWER GND
B1=	D44	OUT	SPARE 1 OUTPUT (14A)
B2=	D45	OUT	FUEL PUMP RELAY OUTPUT (14A)
B3=	D47	OUT	FAN RELAY OUTPUT (14A)
B4=	D49	OUT	TACHOMETER (14A) - PULLUP
B5=	D12	OUT	INJECTOR OUTPUT.5 (14A)
B6=	D11	OUT	INJECTOR OUTPUT.4 (14A)
B7=	D10	OUT	INJECTOR OUTPUT.3 (14A)
B8=	D50	OUT	INJECTOR OUTPUT.6 (14A)
C1=	D53	OUT	SPARE 2 OUTPUT (14A)/N2O.2
C2=	D9	OUT	INJECTOR OUTPUT.2 (14A)
C3=	D8	OUT	INJECTOR OUTPUT.1 (14A)
C4=	D7	OUT	SPARE 3 OUTPUT (14A)/BOOST
C5=	D6	OUT	SPARE 4 OUTPUT (14A)/IDLE.2
C6=	D3	OUT	SPARE 5 OUTPUT (14A)/N2O.1
C7=	D5	OUT	SPARE 6 OUTPUT (14A)/IDLE.1
C8=	D4	OUT	SPARE 7 OUTPUT (14A)/VVT

MUST READ BEFORE INSTALLATION IMPORTANT !

1-To connect via USB, the Bluetooth module inside the device must be removed! You cannot use bluetooth and usb at the same time.

2-Spark EFI 2021-11-Custom software is installed. With the existing software, 6-cylinder full sequential fuel injection and 6-cylinder wasted spark ignition are used. Speeduino mode 6+3. To change, please edit the firmware from Spark EFI github download.

3-If you are using custom Spark EFI software, select Spark EFI V1.1 on the board. If you are going to use the original Speeduino software, choose the BMW PNP board.

4-You can access Speeduino software and custom Spark EFI software from the addresses below. Please send a mail to info@sparkefi.net for your questions.

Spark EFI GitHub : https://github.com/emretunali/SparkEFI-V1.1-Firmware
Spark EFI WebSite : https://www.sparkefi.net
Speeduino GitHub : https://github.com/noisymime/speeduino