Isuzu OBD II diagnostic interface pinout
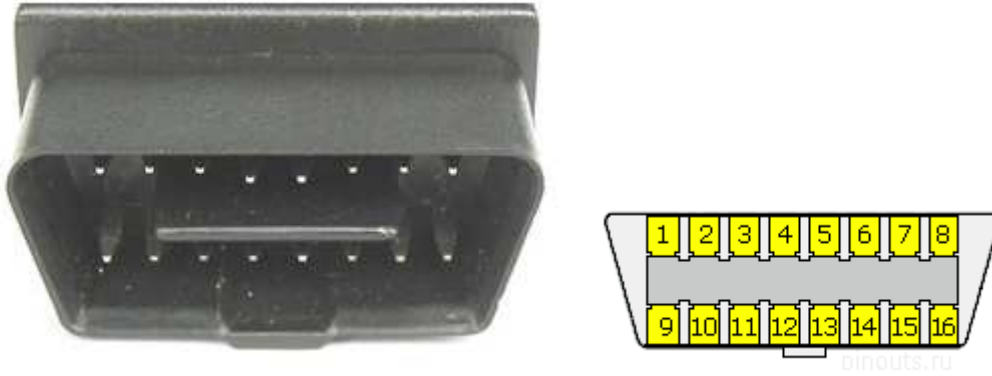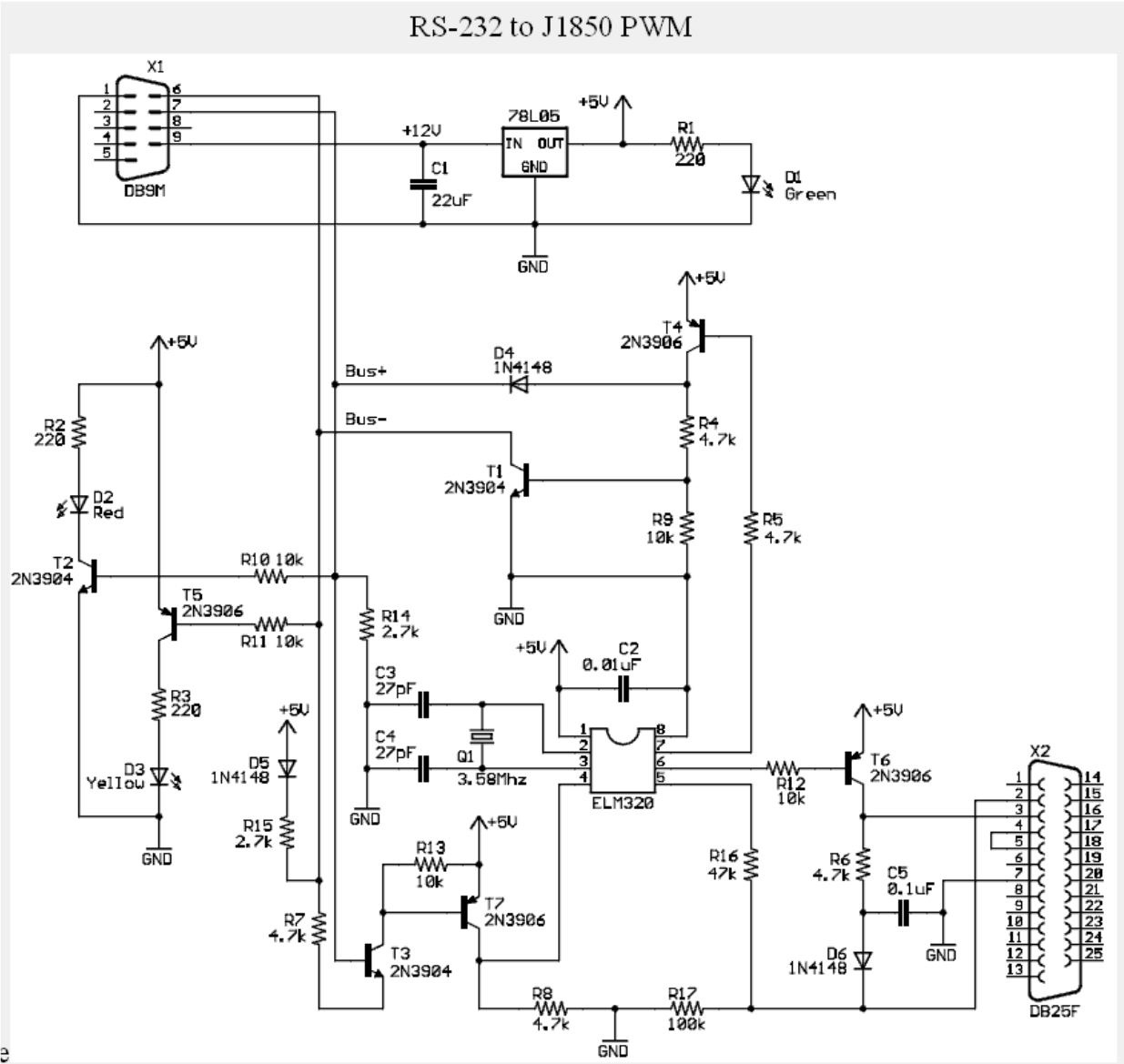

Pill Number	Pill Name	Isuzii veliicle function
1		SIR (GM8192 Plot.)
9	J1850	n/a
3		ABS (KW81-Piot.)
4	GND	Chassis gioiuid
5	SGND	Signal Gioiuid
6	HS-CAN	тeм
n	K-Liiie	K-Line, Kl (engine)
8		n/a
9		ECM/TCM (GM8192 Plot.)
10	PWM	n/a
11		SIR
12		ABS
13		*ECU*
14	HS-CAN(-)	n/a
15	L-Liiie	n/a
16	Battery+	Batteiy +, imswitchecl

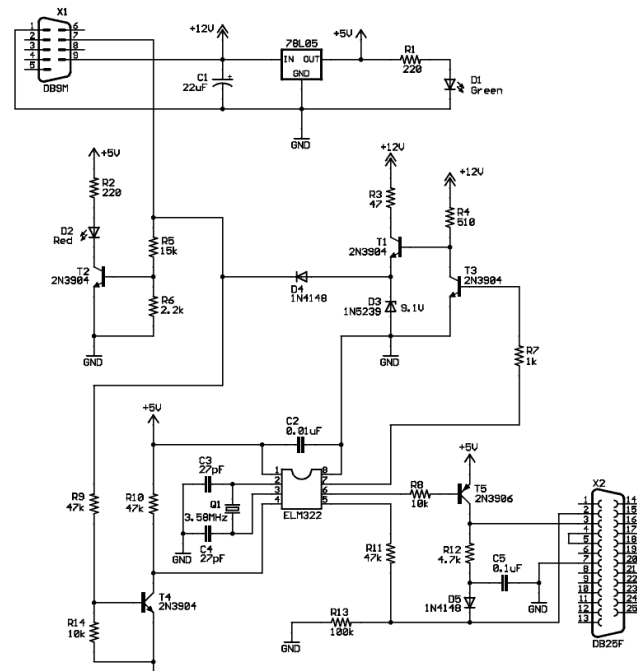# Some OBD-II cables schemes:

## OBD-2 ISO 9141-2 (14230-4, KWP2000) simple RS-232 cable schematic pinout
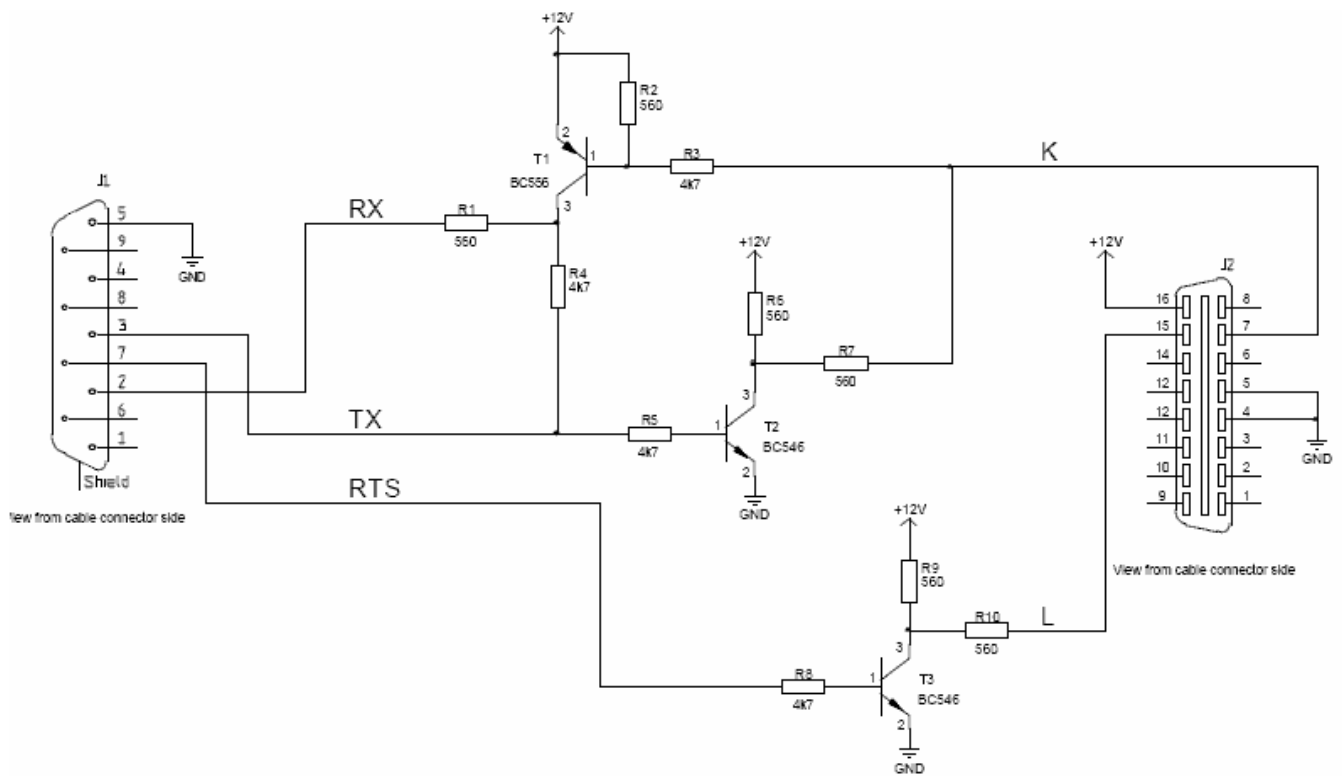
**OBD-2 J1850 PWM, J1850 VPW RS-232 cables schematics pinout**

RS-232 to J1850 PWM

RS-232 to J1850 VPW

X1
DB9M
+12V
78L05
IN OUT
GND
+5V
R1 220
C1 22uF
D1 Green
GND

+5V
R2 220
D2 Red
T2 2N3904
R5 15k
R6 2.2k
GND

+12V
R3 47
D4 1N4148
T1 2N3904
D3 1N5239 9.1V
GND

+12V
R4 510
T3 2N3904
R7 1k

+5V
C2 0.01uF
C3 27pF
R9 47k
R10 47k
Q1 3.58MHz
ELM322
C4 27pF
GND
R8 10k
+5V
T5 2N3906
R11 47k
R12 4.7k
C5 0.1uF
D5 1N4148
GND

X2
DB25F

T4 2N3904
R14 10k
R13 100k
GND

OBD-2 universal diagnostic cable scheme for ISO 15765-4 CAN, SAE J1850 PWM, SAE J1850 VPW, ISO 9141-2, ISO 14230-4 and SAE J1939 pinout

1 2 3 4 5 6 7 8
9 10 11 12 13 14 15 16
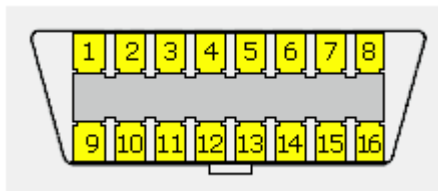
This device is a microcontroller which is designed to interface a personal computer or laptop with a vehicle's On Board Diagnostic (OBD II) interface. It is intended to function with all protocols used by vehicle manufacturers to implement the OBD II system as defined by SAE and ISO specifications. The OBD II system became mandatory for 1996 and up vehicles, but some vehicles were already fully or partially compatible with OBD II requirements prior to 1996. The chip is not suitable for the earlier vehicles such as OBD I. The device is intended to function as a simple scan tool and is capable of sending and receiving any OBD II message defined in SAE J1979 for any of the three types of OBDII bus implementations (PWM, VPW, ISO 9141-2). It can also be used as an inexpensive interface for custom instrumentation monitoring various vehicle parameters such as speed, RPM, coolant or intake air temperature, engine load
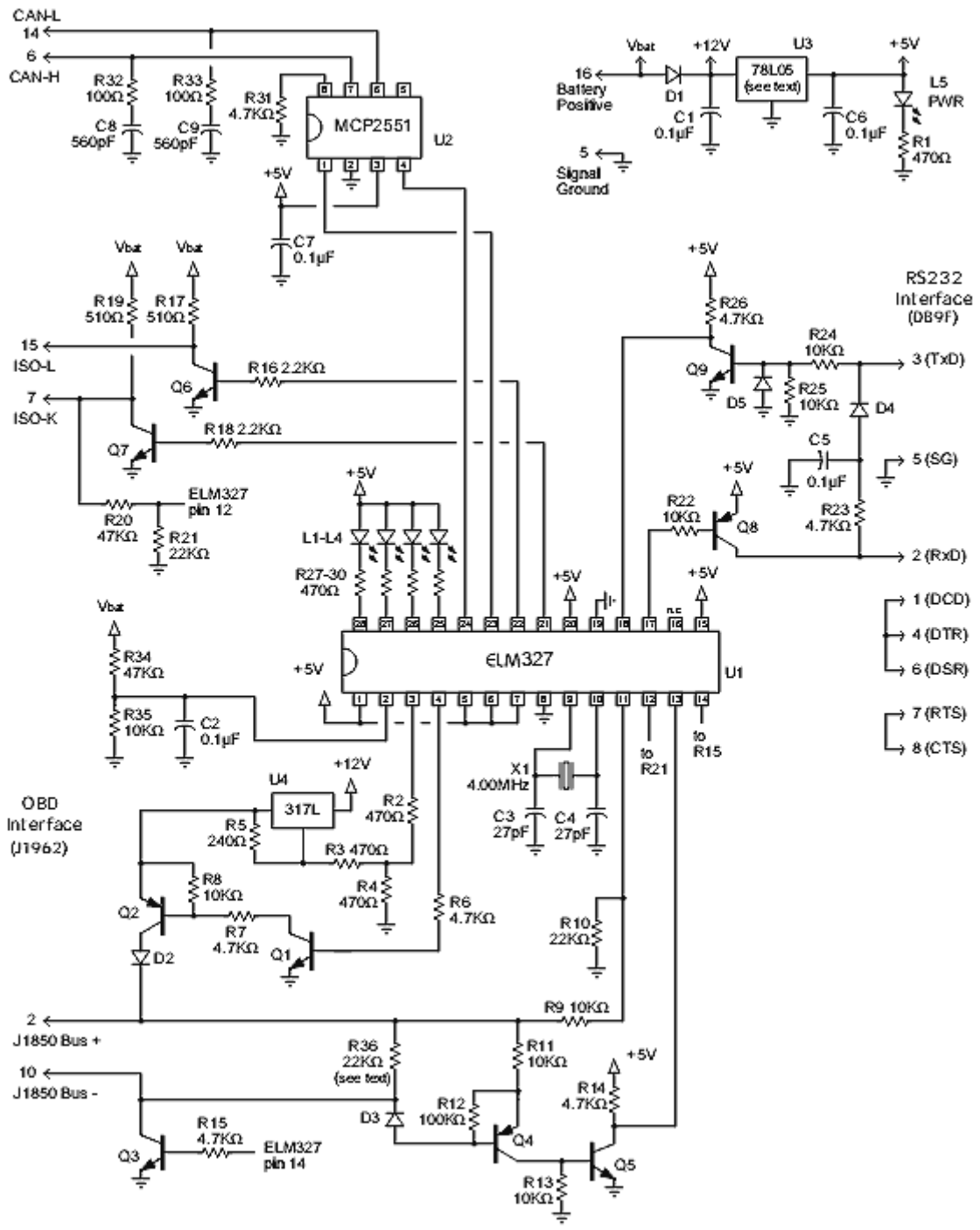
Components:

D1=1N4001

D2,S3,D4,D5=1N4148

L1,L2,L3,L4=Yellow   LED

L5=Green   LED

Q1,Q3,Q5,Q6,Q7,Q9=2N3904(NPN)

Q2,Q4,Q8=2N3906(PNP)

U1=ELM327

U2=MCP2551

U3=78L05(5V, 100mA regulator)

U4=317L (adj. 100 mA regulator)

C1,C2,C5,C6,C7=0.1uF 16V

C3,C4=27p

C8,C9=560pF

R32,R33=100 Ohm

R5=240 Ohm

R1,R2,R3,R4,R27,R28,R29,R30=470 Ohm

R17,R19=510 Ohm 1/2W

R16,R18=2.2 KOhm

R6,R7,R14,R15,R23,R26,R31=4.7 KOhm

R8,R9,R11,R13,R22,R24,R25,R35=10 KOhm

R10,R21,R36=22 KOhm

R20,R34=47 KOhm

R12=100 KOhm

X1=4.000MHz crystal

RS232 conn=DB-9 female

IC Socket=28 pin 0.3 (or 2x14 pin)