

GEN3 vs GEN4 ECU I/O Comparison

ECU HEADER 1 30-WAY (A-K)		
ECU Pin	GEN3 PRO SEFI	GEN4 PRO XTREME
A1	MAP SIGNAL	MAP SIGNAL
A2		TPS2 SGNL / FORD IAC OUT
A3	IPU CRANK (+)	IPU CRANK (+)
B1	TPS1 SIGNAL	TPS1 SIGNAL
B2	2-STEP / STARTING LINE TIMING	2-STEP / STARTING LINE TIMING
B3	IPU CRANK (-)	IPU CRANK (-)
C1	COOLANT TEMP SIGNAL	COOLANT TEMP SIGNAL
C2	COIL 6	COIL 6
C3	IPU CAM (+)	IPU CAM (+)
D1	AIR TEMP SIGNAL	AIR TEMP SIGNAL
D2	TACH OUT	TACH OUT
D3	IPU CAM (-)	IPU CAM (-)
E1	MAP & TPS 5VR	MAP & TPS 5VR
E2	MAP, TPS, AIR & COOLANT RTN	MAP, TPS, AIR & COOLANT RTN
E3	CAM HED SIGNAL	CAM HED SIGNAL
F1	NOS STAGE 3	8-TO-16 INJECTOR BIG DRIVE ENABLE
F2	RUEGOIP (LSU4.2)	RUEGOIP(LSU4.9)/RUEGOIP+ (NTK)
F3	RUEGOIA (LSU4.2)	RUEGOIA(LSU4.9)/RUEGOVS- (NTK)
G1	RUEGOH- (LSU4.2)	RUEGOH- (LSU4.9)/RUEGOH- (NTK)
G2	RUEGOUN (LSU4.2)	RUEGOUN (LSU4.9)
G3	RUEGOVM (LSU4.2)	RUEGOVM(LSU4.9)/RUEGOVS+ (NTK)
H1	H.S. FUEL PUMP ENABLE	H.S. FUEL PUMP ENABLE
H2	COIL 7	COIL 7
H3	COIL 2	COIL 2
J1	COIL 3	COIL 3
J2	HEI GND / LOW CURRENT GND	HEI GND / LOW CURRENT GND
J3	HEI REF. / CRANK HED SGNL	HEI REF. / CRANK HED SGNL
K1	COIL 1	COIL 1
K2	HEI BYPASS	HEI BYPASS
K3	HEI / TFI EST	HEI / TFI EST

ECU HEADER 2 30-WAY (A-K)		
ECU Pin	GEN3 PRO SEFI	GEN4 PRO XTREME
A1	INJ 17 / ACCEL SGNL / DUMB COIL1	SPARE A/D 1
A2		SPARE INJECTOR DRIVER
A3		A/C CLUTCH OVERRIDE
B1	INJECTOR 24 / DUMB COIL 8	A/C BUMP INPUT
B2	INJ 18 / TLP & BOOST SGNL / DUMB COIL 2	WG PRESSURE SGNL (BOOST)
B3		TRANS LINE PRESSURE SGNL
C1		RIGHT FRONT SHOCK SGNL
C2	PWRGND1	WHEELIE CONTROL SGNL
C3	INJECTOR 19 / DUMB COIL 3	SHIFT LIGHT
D1		LEFT FRONT SHOCK SGNL
D2	INJECTOR 20 / DUMB COIL 4	DAE2 SENSOR RTN
D3		DBW PEDAL1 SIGNAL
E1	INJECTOR 21 / DUMB COIL 5	DBW PEDAL2 SIGNAL
E2	INJECTOR 22 / DUMB COIL 6	SPARE A/D 2 / DIGISET 6
E3	INJECTOR 23 / DUMB COIL 7	DAE2 SENSOR 5VR
F1		SPARE A/D 3 / DIGISET 5
F2	LUEGOIP (LSU4.2)/LUEGOIP+ (NTK)	LUEGOIP (LSU4.9)/LUEGOIP+ (NTK)
F3	LUEGOIA (LSU4.2)/LUEGOVS- (NTK)	LUEGOIA (LSU4.9)/LUEGOVS- (NTK)
G1	LUEGOH- (LSU4.2)/LUEGOH- (NTK)	LUEGOH- (LSU4.9)/LUEGOH- (NTK)
G2	LUEGOUN (LSU4.2)	LUEGOUN (LSU4.9)
G3	LUEGOVM (LSU4.2)/LUEGOVS+ (NTK)	LUEGOVM (LSU4.9)/LUEGOVS+ (NTK)
H1		LEFT REAR SHOCK SGNL
H2	PWRGND2	SPARE A/D 4 / DIGISET 4
H3		RIGHT REAR SHOCK SIGNAL
J1	TRANS LP / ACCEL/BOOST 5VR	DAE3 SENSOR 5VR
J2		KNOCK RIGHT BANK (+)
J3		KNOCK RIGHT BANK (-)
K1		KNOCK LEFT BANK (+)
K2	TRANS LP / ACCEL/BOOST RTN	DAE3 SENSOR RTN
K3		KNOCK LEFT BANK (-)

ECU HEADER 1 30-WAY (L-Y)		
ECU Pin	GEN3 PRO SEFI	GEN4 PRO XTREME
L1	COIL 4	COIL 4
L2	BOOST ENABLE / TIMER ENABLE	TIMER ENABLE
L3	+12V SWITCH	+12V SWITCH
M1	ECU VBATT	ECU VBATT
M2	COIL 5	COIL 5
M3	COIL 8	COIL 8
N1	RS232 TxD	CAN HIGH
N2	RS232 RxD	CAN LOW
N3	RS232 RTN	FAN2 ENABLE
P1	IAC A-LOW	IAC A-LOW
P2	IAC A-HIGH	IAC A-HIGH
P3	PWRGND1	PWRGND1
R1	IAC B-LOW	IAC B-LOW / FORD IAC
R2	IAC B-HIGH	IAC B-HIGH
R3	FAN1 ENABLE	FAN1 ENABLE
S1	INJECTOR 8	INJECTOR 8
S2	INJECTOR 4	INJECTOR 4
S3	L.S. FUEL PUMP ENABLE	L.S. FUEL PUMP ENABLE
T1	INJECTOR 7	INJECTOR 7
T2	INJECTOR 3	INJECTOR 3
T3	BOOST INCREMENT / NOS STAGE 1	BOOST INCREMENT
W1	INJECTOR 6	INJECTOR 6
W2	INJECTOR 2	INJECTOR 2
W3	BOOST DECREMENT / NOS STAGE 2	BOOST DECREMENT
X1	INJECTOR 5	INJECTOR 5
X2	INJECTOR 1	INJECTOR 1
X3	POINTS OUTPUT	POINTS OUTPUT
Y1	ECU VBATT	ECU VBATT
Y2	ECU VBATT	ECU VBATT
Y3	PWRGND2	PWRGND2

ECU HEADER 2 30-WAY (L-Y)		
ECU Pin	GEN3 PRO SEFI	GEN4 PRO XTREME
L1	INJECTOR 16	PWM SOLENOID (NOS)
L2	ECU VBATT	NOS BOTTLE PRESSURE
L3	INJECTOR 14	STAGE 5 NOS
M1	INJECTOR 12	STAGE 3 NOS
M2	SHIFT SOLENOID B	SHIFT SOLENOID B / GPIO_1
M3		TRANSMODE A / DIGISET_1 / GPIO_2
N1	INJECTOR 13	STAGE 4 NOS
N2	TCC PWM	TCC PWM / GPIO_3
N3	FORCE MOTOR HIGH	FORCE MOTOR HIGH / GPIO_4
P1	INJECTOR 11	STAGE 2 NOS
P2	SHIFT SOLENOID A / NOS STAGE 4	SHIFT SOLENOID A / GPIO_5
P3		TRANSMODE B / DIGISET_2 / GPIO_6
R1	INJECTOR 15	STAGE 6 NOS
R2	INJECTOR 9	TURBO SHAFT SPEED_1 SGNL
R3	INJECTOR 10	STAGE 1 NOS
S1	TOSS (+) / DRIVE SHAFT HED SGNL	TOSS (+) / DRIVESHAFT HED SGNL
S2		TRANSMODE C / DIGISET_3 / GPIO_7
S3	TOSS (-) / DRIVE SHAFT (-)	TURBO SHAFT SPEED_2 SGNL
T1	TISS (+) / INPUT SHAFT HED SGNL	TISS (+) / INPUT SHAFT HED SGNL
T2	FUEL PRESSURE SIGNAL	FUEL PRESSURE SIGNAL
T3	TISS (-) / INPUT & TURBO SHAFT (-)	TRANS SENSOR RTN
W1	TURBO SHAFT (+) / 3-STEP ENABLE	3-STEP ENABLE
W2	ECU VBATT	GM FLEX FUEL SENSOR SGNL
W3	FORCE MOTOR LOW / SENSOR RTN	DAE SENSOR RTN
X1	TRANSM D A, TBP SGNL, NOS STG2 DS	TURBO BACK PRESSURE SGNL
X2	TRANSM D B, OP SGNL, NOS STG3 DS	OIL PRESSURE SIGNAL
X3	TRANSM D C, OP VAC SGNL, NOS STG4 DS	OIL PAN VACUUM SIGNAL
Y1	TRANS TEMP SIGNAL	TRANS TEMP SIGNAL
Y2	DATA LOG TRIGGER	DATA LOG TRIGGER
Y3	PAN VAC, OIL, TBB, FP 5VR	DAE SENSOR 5VR