

Pin	Name (New TIM)	Circuit (Old TIM)	Function (New TIM)
1	NC		NC
2	MTMP-	3708 (BN) Motor Temp sensor	Motor Temp sensor Input -
3	DIS_DRV	3404 (YE) Chg cord plugged in	Charge cable plugged in (12V, Motor PWM inhibit when low)
4	USART_TX	3017 (DG/WH) SIADIS RXD	Serial comm. Or WiFi module
5	CAN_H	914 (TN/OG) J1850 bus plus	CAN BUS
6	STOP_RLY	3235 (YE/LG) Stop lamp RLY	Stop signal when regen (Active, GND. Inactive, Z)
7	VSS_OUT	679 (GY/BK) Vehicle speed signal	Vehicle Speed Signal, to IAA and Power steering (12v PWM)
8	SIG_MAIN_C	3986 (DG) Main contactor	DC contactor and oil pump relay (Active, GND. Inactive, Z)
9	12V_ALL_T	276 (BN) Power hot all time	12V all time (used for relay protection diode)
10	12V_RUN_START	640 (RD/YE) Power run/start	12v in RUN, START, ACC
11	MTMP+	3757 (BK/WH) Motor Temp sensor	Motor Temp sensor Input +
12	NC		NC
13	3.3V_USART	3018 (WH) SIADIS d/I	Serial comm. Or WiFi module
14	USART_RX	3016 (LG/BK) SIADIS TXD	Serial comm. Or WiFi module
15	CAN_L	915 (PK/LB) J1850 bus minus	CAN BUS
16	NC		NC
17	NC		NC
18	PRECHG_RLY	3991 (TN) Precharge RLY contr	Precharge relay (Active, GND. Inactive, Z)
19	12V_ALL_T	276 (BN) Power hot all time	12V all time (used for relay protection diode)
20	12V_RUN_START	640 (RD/YE) Power run/start	12v in RUN, START (this will power up the inverter ECU)
21	NC		NC
22	NC		NC
23	GND_USART	3019 (GY/BK) SIADIS GND	Serial comm. Or WiFi module
24	NC		NC
25	NC		NC
26	SIG_VSS_B	3701 (DB/WH) VSS B signal	Encoder channel B
27	NC		NC
28	NC		NC
29	GND	3233 (BK/LB) GND	GND
30	5V_VSS	3707 (OG) VSS +12 ref	Encoder PWR +5V
31	CH_GND	57 (BK) Chassis GND	Chassis GND
32	NC		NC
33	NC		NC
34	NC		NC
35	EMCY_PWR	3997 (DG) Emergency PWR Off	EPO Emergency Power Off (Active, Z. Inactive, 12V)
36	SIG_VSS_A	3700 (LB/RD) VSS A signal	Encoder channel A
37	OIL_P_RLY	3005 (VT/LG) Oil pump RLY	DC contactor and oil pump relay (Active, GND. Inactive, Z)
38	NC		NC
39	GND	3233 (BK/LB) GND	GND
40	GND_VSS	3659 (BK/PK) VSS GND	Encoder GND

1	NC	224 (TN/WH) ABS fault in	ABS_FAULT (Active, GND. Inactive, 12V)
2	NC		NC
3	GND_APS1	3837 (GY/YE) APS1 GND	Trottle pot GND
4	SIG_APS1	3835 (YE/WH) APS1 Signal	Trottle pot signal
5	5V_APS1	3836 (YE/LB) APS1 +5V	Trottle pot PWR
6	ABS_ACT_IN	491 (OG/LB) ABS active in	ABS input. Limit torque and regen. (Active, 12V. Inactive, GND)
7	GND_DIR_SW	3500 (RD) DTR TR1 Signal	Gear switch GND
8	SW_START	33 (WH/PK) PWR (Hot in start)	Key in start pos (Active, 12V)
9	SW_CRUISE	3011 (BK/OG) APS2 GND	Cruise control switch/button (Active, 12V)
10	SIG_PWR_L	3012 (WH) APS2 Signal	BMS input. Limit torque and regen. (Active, 12V. Inactive, Z)
11	SIG_OIL_PS	3010 (TN) APS2 +5V	Analog/lamp oil P indicator (0-5V/Active, GND. Inactive, Z)
12	OIL_P_SENS	3605 DB/WH) Oil P switch	Analog/switch oil P sensor (0-5V/Active, GND. Inactive, Z)
13	NC	3503 (YE) DTR TR4 Signal	Goes to DTR switch and "old" BCM C1987 pin 18
14	SW_BRAKE	810 (RD/LG) Brake pedal sw	Brake pedal switch (Active, 12V)
15	NC	3014 (BK/WH) APS3 GND	Spare wire
16	5V_OIL_PS	3015 (WH/RD) APS3 Signal	Only if analog 5V oil pressure sensor is used
17	ERROR_OUT	3013 (GY/BK) APS3 +5V	Error output (open collector 0.5A)
18	SW_REV	3502 (DG) DTR TR3A Signal	Cut at DTR switch pin3 and tie to pin11 140 (BK/PK)
19	NC		NC
20	NC	3501 (DB) DTR TR2 Signal	Goes to DTR switch and "old" BCM C1987 pin 17
21	GND_BRK_PS	3601 (WH/RD) Brake P sens	Brake pressure sensor GND
22	PS_BRAKE	3600 (RD/WH) Brake P sens	Brake pressure sensor signal ~ 0.5-5V
23	5V_BRK_PS	3603 (RD) Brake P sens	Brake pressure sensor PWR
24	SW_FWD	3504 (BK/OG) DTR GND	Gear switch (Active, Z. Inactive, GND)