Pinlayout ECU MS 7.8 V2

Analog Inputs

S	C	A	L	I/O Type	SIG_NAME	LEAD	DESCRIPTION	FUNCTION[1]
27				analog input	I_A_ANA01	AWG24	universal input 0-5V - pull up switchable	pedal a (fixed)
2				analog input	I_A_ANA02	AWG24	universal input 0-5V - pull up switchable	throttle 1a (fixed)
21				analog input	I_A_ANA03	AWG24	universal input 0-5V - pull up switchable	throttle 2a (fixed)
29				analog input	I_A_ANA04	AWG24	universal input 0-5V - pull up switchable	tamb
3				analog input	I_A_ANA05	AWG24	universal input 0-5V - pull up switchable	tfuel
20				analog input	I_A_ANA06	AWG24	universal input 0-5V - pull up switchable	pbrake_f
47				analog input	I_A_ANA07	AWG24	universal input 0-5V - pull up switchable	pbrake_r
46				analog input	I_A_ANA08	AWG24	universal input 0-5V - pull up switchable	poil
12				analog input	I_A_ANA09	AWG24	universal input 0-5V - pull up switchable	pwat
28				analog input	I_A_ANA10	AWG24	universal input 0-5V - pull up switchable	pclutch
53				analog input	I_A_ANA11	AWG24	universal input 0-5V - pull up switchable	utint
38				analog input	I_A_ANA12	AWG24	universal input 0-5V - pull up switchable	pfuel
45				analog input	I_A_ANA13	AWG24	universal input 0-5V - pull up switchable	toil
37				analog input	I_A_ANA14	AWG24	universal input 0-5V - pull up switchable	tmot2
7				analog input	I_A_ANA15	AWG24	universal input 0-5V - pull up switchable	tmot
8				analog input	I_A_ANA16	AWG24	universal input 0-5V - pull up switchable	prail
13				analog input	I_A_ANA17	AWG24	universal input 0-5V - pull up switchable	pedal b (fixed)
6				analog input	I_A_ANA18	AWG24	universal input 0-5V - pull up switchable	throttle 1b (fixed)
14				analog input	I_A_ANA19	AWG24	universal input 0-5V - pull up switchable	throttle 2b (fixed)
1				analog input	I_A_ANA20	AWG24	universal input 0-5V - pull up switchable	prail2
19				analog input	I_A_ANA21	AWG24	universal input 0-5V - pull up switchable	toil2
	60			analog input	I_A_ANA22	AWG24	universal input 0-5V - pull up switchable	gear
	46			analog input	I_A_ANA23	AWG24	universal input 0-5V - pull up switchable	pcrank
	28			analog input	I_A_ANA24	AWG24	universal input 0-5V - pull up switchable	pgear
	54			analog input	I_A_ANA25	AWG24	universal input 0-5V - pull up switchable	pservo
	39			analog input	I_A_ANA26	AWG24	universal input 0-5V - pull up switchable	shiftupsw
	38			analog input	I_A_ANA27	AWG24	universal input 0-5V - pull up switchable	shiftdnsw
	47			analog input	I_A_ANA28	AWG24	universal input 0-5V - pull up switchable	sdam_fl
	61			analog input	I_A_ANA29	AWG24	universal input 0-5V - pull up switchable	sdam_fr
	55			analog input	I_A_ANA30	AWG24	universal input 0-5V - pull up switchable	sdam_rl

Analog Inputs

S	C	A	L	I/O Type	SIG_NAME	LEAD	DESCRIPTION	FUNCTION[1]
	48			analog input	I_A_ANA31	AWG24	universal input 0-5V - pull up switchable	sdam_rr
	62			analog input	I_A_ANA32	AWG24	universal input 0-5V - pull up switchable	steer
	53			analog input	I_A_ANA33	AWG24	universal input 0-5V - pull up switchable	p1
	45			analog input	I_A_ANA34	AWG24	universal input 0-5V - pull up switchable, Voltage devider switchable to 0-26V	tgear
	37			analog input	I_A_ANA35	AWG24	universal input 0-5V - pull up switchable, Voltage devider switchable to 0-26V	tservo
			14	analog input	I_A_ANA50	AWG24	universal input 0-5V - pull up switchable	spare
	9			analog input	I_A_ANA51	AWG24	universal input 0-5V - pull up switchable, switchable gain for PT1000	
	64			analog input	I_A_ANA52	AWG24	universal input 0-5V - pull up switchable, switchable gain for PT1000	
		39		analog input	I_A_ANA53	AWG24	universal input 0-5V - pull up switchable, switchable gain for PT1000	
		48		analog input	I_A_ANA54	AWG24	universal input 0-5V - pull up switchable, switchable gain for PT1000	
5				analog input	I_A_ANA36_PCYL	AWG24	fast analog input 0-5V - pull up switchable	cylinder pressure recognition 1
10				analog input	I_A_ANA37_PCYL	AWG24	fast analog input 0-5V - pull up switchable	cylinder pressure recognition 2
11				analog input	I_A_ANA38_PCYL	AWG24	fast analog input 0-5V - pull up switchable	cylinder pressure recognition 3
17				analog input	I_A_ANA39_PCYL	AWG24	fast analog input 0-5V - pull up switchable	cylinder pressure recognition 4
25				analog input	I_A_ANA40_PCYL	AWG24	fast analog input 0-5V - pull up switchable	cylinder pressure recognition 5
26				analog input	I_A_ANA41_PCYL	AWG24	fast analog input 0-5V - pull up switchable	cylinder pressure recognition 6
34				analog input	I_A_ANA42_PCYL	AWG24	fast analog input 0-5V - pull up switchable	cylinder pressure recognition 7
4				analog input	I_A_ANA43_PCYL	AWG24	fast analog input 0-5V - pull up switchable	cylinder pressure recognition 8
44				analog input	I_A_ANA44_FADC	AWG24	analog input 0-5V, pull up switch., time or angular synchronism measurement	up21
64				analog input	I_A_ANA45_FADC	AWG24	analog input 0-5V, pull up switch., time or angular synchronism measurement	up21_2
43				analog input	I_A_ANA46_FADC	AWG24	analog input 0-5V, pull up switch., time or angular synchronism measurement	up22
59				analog input	I_A_ANA47_FADC	AWG24	analog input 0-5V, pull up switch., time or angular synchronism measurement	up22_2
52				analog input	I_A_ANA48_FADC	AWG24	analog input 0-5V, pull up switch., time or angular synchronism measurement	spare
36				analog input	I_A_ANA49_FADC	AWG24	analog input 0-5V, pull up switch., time or angular synchronism measurement	
51				thermocouple	I_A_TEXH1P	twisted pair (AWG24) shielded	Thermocouple 1 +	utexh
58					I_A_TEXH1N		Thermocouple 1 -	
65				thermocouple	I_A_TEXH2P	twisted pair (AWG24) shielded	Thermocouple 2 +	utexh2
60					I_A_TEXH2N		Thermocouple 2 -	
35					G_C_SENSCR			
	19				G_C_SENSCR			

Combined Analog/Digital Inputs

S	C	A	L	I/O Type	SIG_NAME	LEAD	DESCRIPTION	FUNCTION[1]
	21			analog / dig / SENT input	I_AD_ANADIG01	AWG24	selectable universal input 0-5V / digital input 0-12V / SENT - pull up switchable	mapsw
	22			analog / dig / SENT input	I_AD_ANADIG02	AWG24	selectable universal input 0-5V / digital input 0-12V / SENT - pull up switchable	pitspeedsw
	29			analog / dig / SENT input	I_AD_ANADIG03	AWG24	selectable universal input 0-5V / digital input 0-12V / SENT - pull up switchable	launchsw
	30			analog / dig / SENT input	I_AD_ANADIG04	AWG24	selectable universal input 0-5V / digital input 0-12V / SENT - pull up switchable	tcsw
	31			analog / dig / SENT input	I_AD_ANADIG05	AWG24	selectable universal input 0-5V / digital input 0-12V / SENT - pull up switchable	wetsw
	40			analog / dig / SENT input	I_AD_ANADIG06	AWG24	selectable universal input 0-5V / digital input 0-12V / SENT - pull up switchable	chressw
	49			analog / dig / SENT input	I_AD_ANADIG07	AWG24	selectable universal input 0-5V / digital input 0-12V / SENT - pull up switchable	spare
	56			analog / dig / SENT input	I_AD_ANADIG08	AWG24	selectable universal input 0-5V / digital input 0-12V / SENT - pull up switchable	spare

Further Inputs

S	C	A	L	I/O Type	SIG_NAME	LEAD	DESCRIPTION	FUNCTION[1]
			43	digital input	I_F_DIG01P_HALL_IND	twisted pair (AWG24) shielded	hall or inductive sensor selectable	CRANK_1+
			44		I_F_DIG01N_HALL_IND			CRANK_1-
			10	digital input	I_F_DIG02P_HALL_IND	twisted pair (AWG24) shielded	hall or inductive sensor selectable	CRANK_2+
			19		I_F_DIG02N_HALL_IND			CRANK_2-
			37	digital input	I_F_DIG03_HALL	AWG24	hall sensor	CAM_1
			3	digital input	I_F_DIG04_HALL	AWG24	hall sensor	CAM_2
			11	digital input	I_F_DIG05_HALL	AWG24	hall sensor	CAM_3
			6	digital input	I_F_DIG08_HALL	AWG24	hall sensor	CAM_4
			47	digital input	I_F_DIG07P_HALL_IND	twisted pair (AWG24) shielded	hall or inductive sensor circuit selectable	TURBO_1+
			46		I_F_DIG07N_HALL_IND			TURBO_1-
			8	digital input	I_F_DIG08P_HALL_IND	twisted pair (AWG24) shielded	hall or inductive sensor circuit selectable	TURBO_2+
			7		I_F_DIG08N_HALL_IND			TURBO_2-
		46		digital input	I_F_DIG09_HALL_DF11	AWG24	hall or DF11 sensor selectable	WHEEL1
		38		digital input	I_F_DIG10_HALL_DF11	AWG24	hall or DF11 sensor selectable	WHEEL2
		54		digital input	I_F_DIG11_HALL_DF11	AWG24	hall or DF11 sensor selectable	WHEEL3
		47		digital input	I_F_DIG12_HALL_DF11	AWG24	hall or DF11 sensor selectable	WHEEL4
			21	digital input	I_S_LAPTRIG	AWG24	laptrigger input	LAPTRIGGER
			57	digital input	I_S_ENGRUN	AWG24	digital input, pull down	Engine Switch
61				knock sensor input	I_A_KS1A	twisted pair (AWG24) shielded	KCSENCYL	knock sensor 1, bank 1
54				knock sensor input	I_A_KS1B	twisted pair (AWG24) shielded	KCSENCYL	knock sensor 2, bank 1
62				knock sensor input	I_A_KS2A	twisted pair (AWG24) shielded	KCSENCYL	knock sensor 1, bank 2

Further Inputs

S	C	A	L	I/O Type	SIG_NAME	LEAD	DESCRIPTION	FUNCTION[1]
55				knock sensor input	I_A_KS2B	twisted pair (AWG24) shielded	KCSENCYL	knock sensor 2, bank 2
66				knock sensor ground	G_R_KS			
32				Lambda_IA	I_A_LSU1IA	AWG24	fixed function to pin allocation	Lambda
31				Lambda_IP	I_A_LSU1IP	AWG24		
40				Lambda_UN	I_A_LSU1UN	AWG24		
39				Lambda_VM	I_A_LSU1VM	AWG24		
33				Lambda_IA	I_A_LSU2IA	AWG24	fixed function to pin allocation	Lambda bank 2
23				Lambda_IP	I_A_LSU2IP	AWG24		
30				Lambda_UN	I_A_LSU2UN	AWG24		
22				Lambda_VM	I_A_LSU2VM	AWG24		

Outputs

S	C	A	L	I/O Type	SIG_NAME	LEAD	DESCRIPTION	FUNCTION[1]
		12		lowside switch 4A	O_S_LS01	AWG20		SHIFT_UP
		34		lowside switch 4A	O_S_LS02	AWG20		SHIFT_DN
		17		lowside switch 3A	O_S_LS03	AWG20		WGC_INC
		59		lowside switch 3A	O_S_LS04	AWG20		WGC_DEC
		6		lowside switch 3A	O_S_LS05	AWG20		CAMCTRL_IN
		51		lowside switch 3A	O_S_LS06	AWG20		CAMCTRL_IN2
		43		lowside switch 3A	O_S_LS07	AWG20		CAMCTRL_OUT
		65		lowside switch 3A	O_S_LS08	AWG20		CAMCTRL_OUT2
		19		lowside switch 2.2A or INJ1	O_S_LS09	AWG20	to be used as low side switch or high imp. Injectors, no freewheeling, runs only with engine speed	
		52		lowside switch 2.2A or INJ2	O_S_LS10	AWG20	to be used as low side switch or high imp. Injectors, no freewheeling, runs only with engine speed	
		18		lowside switch 2.2A or INJ3	O_S_LS11	AWG20	to be used as low side switch or high imp. Injectors, no freewheeling, runs only with engine speed	
		60		lowside switch 2.2A or INJ4	O_S_LS12	AWG20	to be used as low side switch or high imp. Injectors, no freewheeling, runs only with engine speed	
		10		lowside switch 2.2A or INJ5	O_S_LS13	AWG20	to be used as low side switch or high imp. Injectors, no freewheeling, runs only with engine speed	
		53		lowside switch 2.2A or INJ6	O_S_LS14	AWG20	to be used as low side switch or high imp. Injectors, no freewheeling, runs only with engine speed	
		27		lowside switch 2.2A or INJ7	O_S_LS15	AWG20	to be used as low side switch or high imp. Injectors, no freewheeling, runs only with engine speed	
		61		lowside switch 2.2A or INJ8	O_S_LS16	AWG20	to be used as low side switch or high imp. Injectors, no freewheeling, runs only with engine speed	
		5		lowside switch 2.2A or INJ9	O_S_LS17	AWG20	to be used as low side switch or high imp. injectors or control of external HDEV 9-12, no freewheeling, runs only with engine speed	

Outputs

S	C	A	L	I/O Type	SIG_NAME	LEAD	DESCRIPTION	FUNCTION[1]
		44		lowside switch 2.2A or INJ10	O_S_LS18	AWG20	to be used as low side switch or high imp. injectors or control of external HDEV 9-12, no freewheeling, runs only with engine speed	
		25		lowside switch 2.2A or INJ11	O_S_LS19	AWG20	to be used as low side switch or high imp. injectors or control of external HDEV 9-12, no freewheeling, runs only with engine speed	
		45		lowside switch 2.2A or INJ12	O_S_LS20	AWG20	to be used as low side switch or high imp. injectors or control of external HDEV 9-12, no freewheeling, runs only with engine speed	
		11		lowside switch 2.2A	O_S_LS21	AWG20		MIL
		36		lowside switch 2.2A	O_S_LS22	AWG20		FUELPUMP
		35		lowside switch 2.2A	O_S_LS23	AWG20		WGC_INC2
		64		lowside switch 2.2A	O_S_LS24	AWG20		WGC_DEC2
		26		lowside switch 1A	O_S_LS25	AWG20		MAINRELAY
		4		lowside switch 3A	O_S_LSH1	AWG20	Lambda Heater Output	LAM_1_HEATER
		58		lowside switch 3A	O_S_LSH2	AWG20	Lambda Heater Output	LAM_2_HEATER
	26			MSV controller	O_P_MSV1P	AWG20		MSV_1P
	35				O_P_MSV1N	AWG20		MSV_1N
	18			MSV controller	O_P_MSV2P	AWG20		MSV_2P
	11				O_P_MSV2N	AWG20		MSV_2N
		66		H-Bridge 8.5A	O_S_HBR1P	AWG20	for EGAS	EGAS_1P
		62			O_S_HBR1N	AWG20		EGAS_1N
		63		H-Bridge 8.5A	O_S_HBR2P	AWG20	for EGAS	EGAS_2P
		57			O_S_HBR2N	AWG20		EGAS_2N
		2		H-Bridge 8.5A	O_S_HBR3P	AWG20		HBRIDGE_3P
		1			O_S_HBR3N	AWG20		HBRIDGE_3N
		40		H-Bridge 8.5A	O_S_HBR4P	AWG20		HBRIDGE_4P
		31		H-Bridge 8.5A	O_S_HBR4N	AWG20		HBRIDGE_4N
	34			High Pressure Injection	O_P_INJ1P	AWG20	High Pressure Injection +	INJ_1P
	25				O_P_INJ1N	AWG20	High Pressure Injection -	INJ_1N
	58			High Pressure Injection	O_P_INJ2P	AWG20	High Pressure Injection +	INJ_2P
	59				O_P_INJ2N	AWG20	High Pressure Injection -	INJ_2N
	52			High Pressure Injection	O_P_INJ3P	AWG20	High Pressure Injection +	INJ_3P
	44				O_P_INJ3N	AWG20	High Pressure Injection -	INJ_3N
	5			High Pressure Injection	O_P_INJ4P	AWG20	High Pressure Injection +	INJ_4P
	4				O_P_INJ4N	AWG20	High Pressure Injection -	INJ_4N
	10			High Pressure Injection	O_P_INJ5P	AWG20	High Pressure Injection +	INJ_5P
	17				O_P_INJ5N	AWG20	High Pressure Injection -	INJ_5N

Outputs

S	C	A	L	I/O Type	SIG_NAME	LEAD	DESCRIPTION	FUNCTION[1]
	51			High Pressure Injection	O_P_INJ6P	AWG20	High Pressure Injection +	INJ_6P
	43				O_P_INJ6N	AWG20	High Pressure Injection -	INJ_6N
	6			High Pressure Injection	O_P_INJ7P	AWG20	High Pressure Injection +	INJ_7P
	27				O_P_INJ7N	AWG20	High Pressure Injection -	INJ_7N
	2			High Pressure Injection	O_P_INJ8P	AWG20	High Pressure Injection +	INJ_8P
	1				O_P_INJ8N	AWG20	High Pressure Injection -	INJ_8N
		50		Ignition	O_P_IGN01	AWG20/AWG24	selectable int. ignition power stage or ignition driver	IGN_1
		3		Ignition	O_P_IGN02	AWG20/AWG24	selectable int. ignition power stage or ignition driver	IGN_2
		33		Ignition	O_P_IGN03	AWG20/AWG24	selectable int. ignition power stage or ignition driver	IGN_3
		9		Ignition	O_P_IGN04	AWG20/AWG24	selectable int. ignition power stage or ignition driver	IGN_4
		24		Ignition	O_P_IGN05	AWG20/AWG24	selectable int. ignition power stage or ignition driver	IGN_5
		8		Ignition	O_P_IGN06	AWG20/AWG24	selectable int. ignition power stage or ignition driver	IGN_6
		42		Ignition	O_P_IGN07	AWG20/AWG24	selectable int. ignition power stage or ignition driver	IGN_7
		16		Ignition	O_P_IGN08	AWG20/AWG24	selectable int. ignition power stage or ignition driver	IGN_8
		7		Ignition	O_P_IGN09	AWG24	ignition driver cyl 9-12	IGN_9
		20		Ignition	O_P_IGN10	AWG24	ignition driver cyl 9-12	IGN_10
		13		Ignition	O_P_IGN11	AWG24	ignition driver cyl 9-12	IGN_11
		14		Ignition	O_P_IGN12	AWG24	ignition driver cyl 9-12	IGN_12
			29	DIAG_MUX	O_A_MUX1	AWG24 shielded	PushPull driver, Diagnosis Multiplexer (KS1A, eng. speed, int. Signals)	MUX_OUT_CH1
			30		O_A_MUX2	AWG24 shielded	PushPull driver, Diagnosis Multiplexer (KS1B, cam speed, int. Signals)	MUX_OUT_CH2
			38		O_A_MUX3	AWG24 shielded	PushPull driver, Diagnosis Multiplexer (KS2A, cam speed, int. Signals)	MUX_OUT_CH3
			39		O_A_MUX4	AWG24 shielded	PushPull driver, Diagnosis Multiplexer (KS2B, cam speed, int. Signals)	MUX_OUT_CH4
			31		O_A_MUX5	AWG24 shielded	PushPull driver, Diagnosis Multiplexer (MF1, MF2, MF combined, cam speed, int. Signals)	MUX_OUT_CH5
		37			G_C_ACTSCR			

Communication

S	C	A	L	I/O Type	SIG_NAME	LEAD	DESCRIPTION	FUNCTION
			48	CAN Bus 1	BI_CAN1_H	CAN-Ltg	up to 1Mbit/s, switchable Terminator	CAN_1_H, Motronic, Powerbox, HPI and ABS control functions
			56		BI_CAN1_L			CAN_1_L
			62	CAN Bus 2	BI_CAN2_H	CAN-Ltg	up to 1Mbit/s, switchable Terminator	CAN_2_H, external ECU / gearbox control
			55		BI_CAN2_L			CAN_2_L
			12	CAN-FD Bus 3	BI_CAN3_H	CAN-Ltg	up to 8Mbit/s, switchable Terminator	CAN_3_H, measurement purposes

Communication

S	C	A	L	I/O Type	SIG_NAME	LEAD	DESCRIPTION	FUNCTION
			13		BI_CAN3_L			CAN_3_L
			1	CAN-FD Bus 4	BI_CAN4_H	CAN-Ltg	up to 8Mbit/s, switchable Terminator	CAN_4_H, measurement purposes
			2		BI_CAN4_L			CAN_4_L
			15	CAN-FD Bus 5	BI_CAN5_H	CAN-Ltg	up to 8Mbit/s, switchable Terminator	CAN_5_H, measurement purposes
			16		BI_CAN5_L			CAN_5_L
			66	Gigabit Ethernet	BI_GETH_D1+_TX+	Ethernet Ltg. (CAT6), shielded to G_C_COMSCR	1000 Mbit/s	GETH_0P (Application Interface)
			61		BI_GETH_D1-_TX-			GETH_0N (Application Interface)
			65		BI_GETH_D2+_RX+			GETH_1P (Application Interface)
			54		BI_GETH_D2-_RX-			GETH_1N (Application Interface)
			64		BI_GETH_D3+			GETH_2P (Application Interface)
			60		BI_GETH_D3-			GETH_2N (Application Interface)
			59		BI_GETH_D4+			GETH_3P (Application Interface)
			53	Gigabit Ethernet	BI_GETH_D4-	Ethernet Ltg. (CAT6), shielded to G_C_COMSCR	1000 Mbit/s	GETH_3N (Application Interface)
			26	100 Mbit Ethernet	BI_ETH1_RX+	Ethernet Ltg. (CAT5), shielded to G_C_COMSCR	100 Mbit/s	ETH1RX+
			25		BI_ETH1_RX-			ETH1RX-
			18		BI_ETH1_TX+			ETH1TX+
			17		BI_ETH1_TX-			ETH1TX-
			35	100 Mbit Ethernet	BI_ETH2_RX+	Ethernet Ltg. (CAT5), shielded to G_C_COMSCR	100 Mbit/s	ETH2RX+
			34		BI_ETH2_RX-			ETH2RX-
			36		BI_ETH2_TX+			ETH2TX+
			27		BI_ETH2_TX-			ETH2TX-
			42	100 Mbit Ethernet	BI_ETH3_RX+	Ethernet Ltg. (CAT5), shielded to 100 Mbit/s G_C_COMSCR	100 Mbit/s	ETH3RX+
			41		BI_ETH3_RX-			ETH3RX-
			50		BI_ETH3_TX+			ETH3TX+
			49		BI_ETH3_TX-			ETH3TX-
			51	USB	BI_USB_DP	USB Ltg.	USB interface, supply 5V/500mA	USB_DP
			45		BI_USB_DN			USB_DN
			58		G_R_USBGND			USB_GND
			52		O_V_USB5V			USB_5V
			9	LIN Bus	BI_LIN	AWG24, shielded	LIN interface	LIN
			22	TIMEBASE	BI_TIMESYNC	AWG24	Timesync line between Bosch devices	SYNC
			23					reserved for future communication interface
			24					

Communication

S	C	A	L	I/O Type	SIG_NAME	LEAD	DESCRIPTION	FUNCTION
			32					
			33					
			40		G_C_COMSCR			

Supply

S	C	A	L	I/O Type	SIG_NAME	LEAD	DESCRIPTION	FUNCTION
			63	Supply In	V_UBAT	AWG20	ECU Processor Supply	
			5	Supply In	V_DYNPWR	AWG20	ECU Supply	
		28		Supply In	V_DYNPWR	AWG20	ECU Supply	
		30		Supply In	V_DYNPWR	AWG20	ECU Supply	
	13			Supply In	V_DYNPWR_BOOST	AWG20	ECU Booster Supply	
	15			Supply In	V_DYNPWR_BOOST	AWG20	ECU Booster Supply	
	32			Supply In	V_DYNPWR_BOOST	AWG20	ECU Booster Supply	
	33			Supply In	V_DYNPWR_BOOST	AWG20	ECU Booster Supply	
	36			Supply In	V_DYNPWR_BOOST	AWG20	ECU Booster Supply	
	41			Supply In	V_DYNPWR_BOOST	AWG20	ECU Booster Supply	
	42			Supply In	V_DYNPWR_BOOST	AWG20	ECU Booster Supply	
	50			Supply In	V_DYNPWR_BOOST	AWG20	ECU Booster Supply	
			4	Ground In	G_DYNGND	AWG20	DYN Ground	
	3			Ground In	G_DYNGND	AWG20	DYN Ground	
		22		Ground In	G_DYNGND	AWG20	DYN Ground	
		29		Ground In	G_DYNGND	AWG20	DYN Ground	
		32		Ground In	G_DYNGND	AWG20	DYN Ground	
		56		Ground In	G_DYNGND	AWG20	DYN Ground	
	7			Ground In	G_DYNGND_BOOST	AWG20	ECU Booster Ground	
	8			Ground In	G_DYNGND_BOOST	AWG20	ECU Booster Ground	
	9			Ground In	G_DYNGND_BOOST	AWG20	ECU Booster Ground	
	12			Ground In	G_DYNGND_BOOST	AWG20	ECU Booster Ground	
	14			Ground In	G_DYNGND_BOOST	AWG20	ECU Booster Ground	
	16			Ground In	G_DYNGND_BOOST	AWG20	ECU Booster Ground	
	20			Ground In	G_DYNGND_BOOST	AWG20	ECU Booster Ground	
	23			Ground In	G_DYNGND_BOOST	AWG20	ECU Booster Ground	

Supply

S	C	A	L	I/O Type	SIG_NAME	LEAD	DESCRIPTION	FUNCTION
	24			Ground In	G_DYNGND_BOOST	AWG20	ECU Booster Ground	
		15		Ground In	G_DYNGND_IGN	AWG20	ECU Ignition Ground	
		21		Ground In	G_DYNGND_IGN	AWG20	ECU Ignition Ground	
		23		Ground In	G_DYNGND_IGN	AWG20	ECU Ignition Ground	
		41		Ground In	G_DYNGND_IGN	AWG20	ECU Ignition Ground	
		49		Ground In	G_DYNGND_IGN	AWG20	ECU Ignition Ground	
		55		Ground In	G_DYNGND_IGN	AWG20	ECU Ignition Ground	
			20	Ground In	G_ECUGND	AWG20	ECU Ground	
24				Supply Out	O_V_SENS_1	AWG24	switchable sensor supply 5V / VBAT, 400mA	
9					O_V_SENS_2		switchable sensor supply 5V / VBAT, 400mA	
	66				O_V_SENS_3		switchable sensor supply 5V / VBAT, 400mA	
	63				O_V_SENS_4		switchable sensor supply 5V / VBAT, 400mA	
42					O_V_SENS_5		switchable sensor supply 5V / VBAT, 400mA supply for APS1	
50					O_V_SENS_6		switchable sensor supply 5V / VBAT, 400mA supply for APS2	
56					O_V_SENS_7		switchable sensor supply 5V / VBAT, 400mA supply for THR1	
48					O_V_SENS_8		switchable sensor supply 5V / VBAT, 400mA supply for THR2	
16				Ground Out	G_R_SENS_1		sensor ground	
15					G_R_SENS_2			
	65				G_R_SENS_3			
	57				G_R_SENS_4			
41					G_R_SENS_5		sensor ground Supply GND for APS1	
49					G_R_SENS_6		sensor ground Supply GND for APS2	
63					G_R_SENS_7		sensor ground Supply GND for THR1	
57					G_R_SENS_8		sensor ground Supply GND for THR2	
18					G_R_PCYL		reference ground for cylinder pressure inputs	

[1] Pin to function allocation is configurable for selected ECU pins. For details, please refer to chapter ECUPINS of the software function sheet.