PIN OUT TABLE - IP078

Table 108

PIN	I/O	FUNCTION	A/D or SERIAL	COMMENTS
1	—	Not used	—	Not used
2	P	SSP	D	SSP relay via 10amp fuse F28 PJB
3	P	Ignition feed	D	Via 10amp fuse F1 in PJB
4	O	Compressor solenoid +ve	D	400hz (more +ve duty = more refrigeration)
5	O	Compressor solenoid -ve	D	Ground reference (monitors solenoid current)
6	I/O	CAN in +ve	S	
7	I/O	CAN in -ve	S	
8	I	Smog sensor HC	A	Ohms to SG1 varies with HC/CO concentration
9	O	HFS relays	D	FPDB - coils ignition fed from fuse F1 in PJB - ground switched by RCCM (HWP has only one relay)
10	O	Blower relay control	D	RPDB - coil fed from SSP via 10amp fuse F16 - ground switched by RCCM
11	I	Illumination PWM	S	100hz signal from FEM indicating illumination requirement (more +ve = more illumination)
12	Not used	Not used	Not used	Not used
13	P	Power ground	D	
14	Not used	Not used	Not used	Not used
15	Reserved	CAN shield	Reserved	Reserved
16	I/O	CAN out +ve	S	
17	I/O	CAN out -ve	S	
18	O	Sensor ground at SG1	A	For Ambient and Smog sensors only
19	I	Ambient temperature sensor	A	Ohms to SG1 (hotter = fewer ohms = lower volts)
20	I	Smog sensor NOx	A	Ohms to SG1 varies with NOx concentration
21	O	HRW / Mirror relay	D	RPDB - Ignition fed and RCCM grounded
22	P	System ground	D	

PIN OUT TABLE - AC100

Table 109

PIN	I/O	FUNCTION	A/D or SERIAL	COMMENTS
1	I	In-car temperature sensor	A	Ohms to SG2 (hotter = fewer ohms = lower volts)
2	I	Evaporator temperature sensor	A	Ohms to SG2 (hotter = fewer ohms = lower volts)
3	I	Solar sensor LHS	A	Current source = 5+ve reference (more light = more current = more volts) see notes below. If general signal = 0volts then CM spikes to 5.7volts every 30 seconds for diagnostics; if the sensor = O/C then spike will reach 12v
4	I	Solar sensor RHS	A	
5	I	RH air mix servo feedback	A	Ratiometric from +5v reference and SG2
6	I	RH mode servo feedback	A	Ratiometric from +5v reference and SG2
7	I	RH cool air by-pass feedback	A	Ratiometric from +5v reference and SG2
8	O	+5volt sensor reference	A	Feeds potentiometers, solar and humidity sensors
9	O	Panel illumination		Signal from RCCM to panel for illumination requirement
10	I	LH discharge air temperature sensor	A	Ohms to SG2 (hotter = fewer ohms = lower volts)
11	I	RH discharge air temperature sensor	A	Ohms to SG2 (hotter = fewer ohms = lower volts)
12	I	Fresh / Recirc servo feedback	A	Ratiometric from +5v reference and SG2
13	I	LH air mix servo feedback	A	Ratiometric from +5v reference and SG2
14	I	LH mode servo feedback	A	Ratiometric from +5v reference and SG2
15	I	LH cool air by-pass feedback	A	Ratiometric from +5v reference and SG2
16	O	Sensor ground SG2	A	Reference for all potentiometers and sensors except ambient, smog and solar

PIN OUT TABLE - AC101

Table 110

PIN	I/O	FUNCTION	A/D or SERIAL	COMMENTS
1	O	Blower power MOS drive	A	More volts means MOS transistor provides more power to blower
2	O	Panel comms CLOCK	S	Synchronisation pulse (1kHz - 50% duty)
3	I	Panel comms SWITCH DATA	S	Indicates switches being selected
4	O	Panel comms BLANK	S	RCCM indicates to panel to blank (serial comms could be un-reliable when cranking)
5	Not Used	Not Used	Not Used	Not Used
6	O	Panel BUZZER drive	D	RCCM indicates to panel that it has to provide audible warning beep
7	O	RH air mix servo motor +ve	D	When +12v (air gets hotter)
8	O	LH air mix servo +ve	D	When +12v (air gets hotter)
9	O	Air intake servo motor +ve	D	When +12v (door moves to fresh)
10	O	RH mode sevo motor +ve	D	When +12v (door moves to face)
11	O	LH mode servo motor +ve	D	When +12v (door moves to face
12	O	RH cool air by-pass motor +ve	D	When +12v (defrost shuts and then by-pass opens)
13	O	LH cool air by-pass	D	When +12v (defrost shuts and then by-pass opens)
14	I	Humidity sensor	A	0.7v at 10% humidity = dry 2.5v at 60% humidity = typical 3.0v at 90% humidity = damp
15	I	Blower motor MOS feedback	A	0v when relay open. When relay closed then lower volts indicates more blower voltage
16	O	Panel comms COMM DATA	S	RCCM indicates to panel which segments and LED's to illuminate
17	O	Panel comm STX	S	Synchronisation pulse (30hz - 3% duty)
18	O	Panel comms ground	A	Reference line for panel communications
19	O	LCD backlighting signal	D	RCCM indicates to panel to backlight LCD display
20	O	RH air mix servo motor -ve	D	When +12v (air gets colder)
21	O	LH air mix servo motor -ve	D	When +12v (air gets colder)
22	O	Air intake servo motor -ve	D	When +12v (door moves to recirc)
23	O	RH mode servo motor -ve	D	When +12v (door moves to foot and then closes)
24	O	LH mode servo motor -ve	D	When +12v (door moves to foot and then closes)
25	O	RH cool air by-pass motor -ve	D	When +12v (By-pass closes, then defrost opens)
26	O	LH cool air by-pass motor -ve	D	When +12v (By-pass closes, then defrost opens)