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1
2 <controller name="system_controller" value="AR-B5230">
3   <connector name="COM1" value="DB9">
4     <pin name="1" value="DCD"></pin>
5     <pin name="2" value="RXD">level_converter_1_RX_host</pin>
6     <pin name="3" value="TXD">level_converter_1_TX_host</pin>
7     <pin name="4" value="DTR">level_converter_1_DTR_host</pin>
8     <pin name="5" value="GND">level_converter_1_GND</pin>
9     <pin name="6" value="DSR"></pin>
10    <pin name="7" value="RTS">level_converter_1_RTS_host</pin>
11    <pin name="8" value="CTS"></pin>
12    <pin name="9" value="RI"></pin>
13  </connector>
14  <connector name="COM1" value="DB9">
15    <pin name="1" value="DCD"></pin>
16    <pin name="2" value="RXD">level_converter_2_RX_host</pin>
17    <pin name="3" value="TXD">level_converter_2_TX_host</pin>
18    <pin name="4" value="DTR">level_converter_2_DTR_host</pin>
19    <pin name="5" value="GND">level_converter_2_GND</pin>
20    <pin name="6" value="DSR"></pin>
21    <pin name="7" value="RTS">level_converter_2_RTS_host</pin>
22    <pin name="8" value="CTS"></pin>
23    <pin name="9" value="RI"></pin>
24  </connector>
25  <connector name="USB1" value="TYPE_A">
26    <pin name="1" value="VCC">bluetooth_dongle</pin>
27    <pin name="2" value="D-">bluetooth_dongle</pin>
28    <pin name="3" value="D+">bluetooth_dongle</pin>
29    <pin name="4" value="GND">bluetooth_dongle</pin>
30  </connector>
31  <connector name="USB2" value="TYPE_A">
32    <pin name="1" value="VCC">web_camera</pin>
33    <pin name="2" value="D-">web_camera</pin>
34    <pin name="3" value="D+">web_camera</pin>
35    <pin name="4" value="GND">web_camera</pin>
36  </connector>
37  <connector name="USB3" value="TYPE_A">
38    <pin name="1" value="VCC">wifi_dongle</pin>
39    <pin name="2" value="D-">wifi_dongle</pin>
40    <pin name="3" value="D+">wifi_dongle</pin>
41    <pin name="4" value="GND">wifi_dongle</pin>
42  </connector>
43 </controller>
44
45 <controller name="navigation_controller">
46   <connector name="J1">
47     <pin name="1" value="RESETn"></pin>
48     <pin name="2" value="V33"></pin>
49     <pin name="3" value="V5"></pin>
50     <pin name="4" value="analog_GND"></pin>
51     <pin name="5" value="analog_GND"></pin>
52     <pin name="6" value="Vin"></pin>
53  </connector>
54  <connector name="J2">
55    <pin name="1" value="AD00">accelerometer_x_axis</pin>
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56     <pin name="2" value="AD01">accelerometer_y_axis</pin>
57     <pin name="3" value="AD02">accelerometer_z_axis</pin>
58     <pin name="4" value="AD03">rate_gyro_x_axis</pin>
59     <pin name="5" value="AD04">rate_gyro_x_axis</pin>
60     <pin name="6" value="AD05"></pin>
61 </connector>
62 <connector name="J3" value="PWRJACK">
63     <pin name="1" value="Vin"></pin>
64     <pin name="2" value="analog_GND"></pin>
65     <pin name="3" value="analog_GND"></pin>
66 </connector>
67 <connector name="J4" value="CON2">
68     <pin name="1" value="Vin"></pin>
69     <pin name="2" value="analog_GND"></pin>
70 </connector>
71 <connector name="J5">
72     <pin name="1" value="DTR">level_converter_1_reset_arm</pin>
73     <pin name="2" value="TXD0">level_converter_1_TX_arm</pin>
74     <pin name="3" value="RXD0">level_converter_1_RX_arm</pin>
75     <pin name="4" value="V5">level_converter_1_5V</pin>
76     <pin name="5" value="RTS">level_converter_1_loadC_arm</pin>
77     <pin name="6" value="analog_GND">level_converter_1_GND</pin>
78 </connector>
79 <connector name="J6" value="CON8A">
80     <pin name="1" value="P18"></pin>
81     <pin name="2" value="V33"></pin>
82     <pin name="3" value="P17"></pin>
83     <pin name="4" value="PWM13"></pin>
84     <pin name="5" value="RESETn"></pin>
85     <pin name="6" value="analog_GND"></pin>
86     <pin name="7" value="PWM12"></pin>
87     <pin name="8" value="PWM30"></pin>
88 </connector>
89 <connector name="J7" value="JST S2B">
90     <pin name="1" value="BAT"></pin>
91     <pin name="2" value="analog_GND"></pin>
92 </connector>
93 <connector name="J8" value="CON2">
94     <pin name="1" value="BAT"></pin>
95     <pin name="2" value="analog_GND"></pin>
96 </connector>
97 <connector name="J9" value="CON8">
98     <pin name="1" value="PWM33" alt="digital_8">radio_controller_steering_PULSIN
</pin>
99     <pin name="2" value="EINT0" alt="digital_9">radio_controller_throttle_PULSIN
</pin>
100     <pin name="3" value="PWM20" alt="digital_10">plat_out_nav_in</pin>
101     <pin name="4" value="PWM11" alt="digital_11">plat_rts_nav_dsr</pin>
102     <pin name="5" value="P04" alt="digital_12">plat_cts_nav_dtr</pin>
103     <pin name="6" value="P06" alt="digital_13"></pin>
104     <pin name="7" value="analog_GND">ground for sensors and output devices</pin>
105     <pin name="8" value="AD06"></pin>
106 </connector>
107 <connector name="J10" value="CON8">
108     <pin name="1" value="PWM22" alt="digital_0">electronic_compass_I2C_SCL</pin>

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109     <pin name="2" value="PWM21" alt="digital_1">electronic_compass_I2C_SDA</pin>
110     <pin name="3" value="X27" alt="digital_2">encoder_counter_SPI_SCLK</pin>
111     <pin name="4" value="PWM12" alt="digital_3">encoder_counter_SPI_SS</pin>
112     <pin name="5" value="X28" alt="digital_4">encoder_counter_SPI_MOSI</pin>
113     <pin name="6" value="PWM30" alt="digital_5">encoder_counter_SPI_MISO</pin>
114     <pin name="7" value="P05" alt="digital_6">steering_control_PULSOUT</pin>
115     <pin name="8" value="P29" alt="digital_7">throttle_control_PULSOUT</pin>
116 </connector>
117 </controller>
118
119 <controller name="platform_controller">
120     <connector name="J1">
121         <pin name="1" value="RESETn"></pin>
122         <pin name="2" value="V33"></pin>
123         <pin name="3" value="V5"></pin>
124         <pin name="4" value="analog_GND"></pin>
125         <pin name="5" value="analog_GND"></pin>
126         <pin name="6" value="Vin"></pin>
127     </connector>
128     <connector name="J2">
129         <pin name="1" value="AD00">system_battery</pin>
130         <pin name="2" value="AD01">microcontroller_battery</pin>
131         <pin name="3" value="AD02">infrared_left</pin>
132         <pin name="4" value="AD03">infrared_right</pin>
133         <pin name="5" value="AD04">temperature_sensor_1</pin>
134         <pin name="6" value="AD05"></pin>
135     </connector>
136     <connector name="J3" value="PWRJACK">
137         <pin name="1" value="Vin"></pin>
138         <pin name="2" value="analog_GND"></pin>
139         <pin name="3" value="analog_GND"></pin>
140     </connector>
141     <connector name="J4" value="CON2">
142         <pin name="1" value="Vin"></pin>
143         <pin name="2" value="analog_GND"></pin>
144     </connector>
145     <connector name="J5">
146         <pin name="1" value="DTR">level_converter_2_reset_arm</pin>
147         <pin name="2" value="TXD0">level_converter_2_TX_arm</pin>
148         <pin name="3" value="RXD0">level_converter_2_RX_arm</pin>
149         <pin name="4" value="V5">level_converter_2_5V</pin>
150         <pin name="5" value="RTS">level_converter_2_loadC_arm</pin>
151         <pin name="6" value="analog_GND">level_converter_2_GND</pin>
152     </connector>
153     <connector name="J6" value="CON8A">
154         <pin name="1" value="P18"></pin>
155         <pin name="2" value="V33"></pin>
156         <pin name="3" value="P17"></pin>
157         <pin name="4" value="PWM13"></pin>
158         <pin name="5" value="RESETn"></pin>
159         <pin name="6" value="analog_GND"></pin>
160         <pin name="7" value="PWM12"></pin>
161         <pin name="8" value="PWM30"></pin>
162     </connector>
163     <connector name="J7" value="JST S2B">

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164     <pin name="1" value="BAT"></pin>
165     <pin name="2" value="analog_GND"></pin>
166 </connector>
167 <connector name="J8" value="CON2">
168     <pin name="1" value="BAT"></pin>
169     <pin name="2" value="analog_GND"></pin>
170 </connector>
171 <connector name="J9" value="CON8">
172     <pin name="1" value="PWM33" alt="digital_8">reset_switch</pin>
173     <pin name="2" value="EINT0" alt="digital_9">manual_override_switch</pin>
174     <pin name="3" value="PWM20" alt="digital_10">plat_out_nav_in</pin>
175     <pin name="4" value="PWM11" alt="digital_11">plat_rts_nav_dsr</pin>
176     <pin name="5" value="P04" alt="digital_12">plat_cts_nav_dtr</pin>
177     <pin name="6" value="P06" alt="digital_13"></pin>
178     <pin name="7" value="analog_GND">ground for sensors and output devices</pin>
179     <pin name="8" value="AD06"></pin>
180 </connector>
181 <connector name="J10" value="CON8">
182     <pin name="1" value="PWM22" alt="digital_0">sonar_left_PULSIN</pin>
183     <pin name="2" value="PWM21" alt="digital_1">sonar_center_PULSIN</pin>
184     <pin name="3" value="X27" alt="digital_2">sonar_right_PULSIN</pin>
185     <pin name="4" value="PWM12" alt="digital_3">sonar_rear_PULSIN</pin>
186     <pin name="5" value="X28" alt="digital_4">bumper_switch_left</pin>
187     <pin name="6" value="PWM30" alt="digital_5">bumper_switch_right</pin>
188     <pin name="7" value="P05" alt="digital_6">status_indicator_red</pin>
189     <pin name="8" value="P29" alt="digital_7">status_indicator_green</pin>
190 </connector>
191 </controller>
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