

```
1 //DPA cool runner user constraint file
2 NET reset LOC = P96;
3 //debug nets
4 NET DAVE LOC = P66;
5 NET DAVE SLOW;
6 NET Select LOC = P56;
7 NET Select SLOW;
8 NET sreg0 LOC = P75;
9 NET sreg0 SLOW;
10 NET sreg1 LOC = P77;
11 NET sreg1 SLOW;
12 NET sreg2 LOC = P78;
13 NET sreg2 SLOW;
14 NET sreg3 LOC = P82;
15 NET sreg3 SLOW;
16 NET sreg4 LOC = P83;
17 NET sreg4 SLOW;
18 //32768 Hz Clock control
19 NET clk LOC = P125;
20 NET clk_enable LOC = P79;
21 NET clk_enable SLOW;
22 NET clk_power LOC = P74;
23 NET clk_power SLOW;
24 NET freq_select1 LOC = P81;
25 NET freq_select1 SLOW;
26 NET freq_select2 LOC = P80;
27 NET freq_select2 SLOW;
28 //SPI INTERFACE
29 NET spi_clk LOC = P112;
30 NET miso LOC = P107;
31 NET miso SLOW;
32 NET mosi LOC = P111;
33 NET spi_cs LOC = P106;
34 NET spi_intr LOC = P108;
35 NET spi_intr SLOW;
36 //NET spi_int_flag LOC = P98;
37 //ADC Control
38 NET adc_bus<0> LOC = P91;
39 NET adc_bus<0> SLOW;
40 NET adc_bus<1> LOC = P92;
41 NET adc_bus<1> SLOW;
42 NET adc_bus<2> LOC = P93;
43 NET adc_bus<2> SLOW;
44 NET adc_bus<3> LOC = P94;
45 NET adc_bus<3> SLOW;
46 NET adc_bus<4> LOC = P99;
47 NET adc_bus<4> SLOW;
48 NET adc_bus<5> LOC = P100;
49 NET adc_bus<5> SLOW;
50 NET adc_bus<6> LOC = P101;
51 NET adc_bus<6> SLOW;
52 NET adc_bus<7> LOC = P102;
53 NET adc_bus<7> SLOW;
54 NET adc_cs LOC = P84;
55 NET adc_cs SLOW;
56 NET adc_rd LOC = P87;
57 NET adc_rd SLOW;
```

```
58     NET adc_wr LOC = P86;
59     NET adc_wr SLOW;
60     NET adc_hben LOC = P103;
61     NET adc_hben SLOW;
62     NET adc_int LOC = P88;
63     //DPOT Control
64     NET dpot_clk LOC = P62;
65     NET dpot_clk SLOW;
66     NET dpot_ud LOC = P61;
67     NET dpot_ud SLOW;
68     NET dpot1_cs LOC = P97;
69     NET dpot1_cs SLOW;
70     NET dpot2_cs LOC = P55;
71     NET dpot2_cs SLOW;
72     //CH1 POWER CONTROL
73     NET ch1_pg LOC = P119;
74     NET ch1_status LOC = P114;
75     NET ch1_pwr LOC = P120;
76     NET ch1_pwr SLOW;
77     NET ch1_iso_instr LOC = P117;
78     NET ch1_iso_instr SLOW;
79     NET ch1_con_instr LOC = P118;
80     NET ch1_con_instr SLOW;
81     //CH1 COMMUNICATIONS CONTROL
82     NET ch1_485_term LOC = P132;
83     NET ch1_485_term SLOW;
84     NET ch1_485_noterm LOC = P131;
85     NET ch1_485_noterm SLOW;
86     NET ch1_fast LOC = P122;
87     NET ch1_fast SLOW;
88     NET ch1_mode LOC = P121;
89     NET ch1_mode SLOW;
90     NET ch1_duplex LOC = P113;
91     NET ch1_duplex SLOW;
92     NET ch1_serial_dir LOC = P110;
93     NET ch1_serial_dir SLOW;
94     NET ch1_iso_comm LOC = P133;
95     NET ch1_iso_comm SLOW;
96     NET ch1_com_comm LOC = P134;
97     NET ch1_com_comm SLOW;
98     NET ch1_comm_pwr LOC = P109;
99     NET ch1_comm_pwr SLOW;
100    //CH2 POWER CONTROL
101    NET ch2_pg LOC = P49;
102    NET ch2_status LOC = P54;
103    NET ch2_pwr LOC = P53;
104    NET ch2_pwr SLOW;
105    NET ch2_iso_instr LOC = P69;
106    NET ch2_iso_instr SLOW;
107    NET ch2_con_instr LOC = P67;
108    NET ch2_con_instr SLOW;
109    //CH2 COMMUNICATIONS CONTROL
110    NET ch2_485_term LOC = P41;
111    NET ch2_485_term SLOW;
112    NET ch2_485_noterm LOC = P45;
113    NET ch2_485_noterm SLOW;
114    NET ch2_fast LOC = P72;
```

```
115     NET ch2_fast SLOW;
116     NET ch2_mode LOC = P44;
117     NET ch2_mode SLOW;
118     NET ch2_duplex LOC = P43;
119     NET ch2_duplex SLOW;
120     NET ch2_serial_dir LOC = P71;
121     NET ch2_serial_dir SLOW;
122     NET ch2_iso_comm LOC = P42;
123     NET ch2_iso_comm SLOW;
124     NET ch2_com_comm LOC = P40;
125     NET ch2_com_comm SLOW;
126     NET ch2_comm_pwr LOC = P70;
127     NET ch2_comm_pwr SLOW;
128     //STATUS LEDs
129     NET ch1_oc LOC = P142;
130     NET ch1_oc SLOW;
131     NET ch1_485 LOC = P1;
132     NET ch1_485 SLOW;
133     NET ch1_232 LOC = P143;
134     NET ch1_232 SLOW;
135     NET ch2_oc LOC = P37;
136     NET ch2_oc SLOW;
137     NET ch2_485 LOC = P39;
138     NET ch2_485 SLOW;
139     NET ch2_232 LOC = P38;
140     NET ch2_232 SLOW;
141     NET lightsense LOC = P63;
142     NET ind_ctrl LOC = P136;
143     NET ind_ctrl SLOW;
144
145
146
```