```
1  #pragma once
2  #include "BBB.h"
3  #include <dirent.h>
4
5  #define OCP_PATH "/sys/devices/ocp.3/"
6  #define P8_13_FIND "bs_pwm_test_P8_13"
7  #define P8_19_FIND "bs_pwm_test_P8_19"
8  #define P9_14_FIND "bs_pwm_test_P9_14"
9  #define P9_16_FIND "bs_pwm_test_P9_16"
10
11 #define PWM_CAPE "am33xx_pwm"
12 #define P8_13_CAPE "bspwm_P8_13" //_14
13 #define P8_19_CAPE "bspwm_P8_13" //_14
14 #define P9_14_CAPE "bspwm_P9_14" //_16
15 #define P9_16_CAPE "bspwm_P9_16" //_16
16
17 #define P8_13_CAPE_LOAD "bspwm_P8_13_14"
18 #define P8_19_CAPE_LOAD "bspwm_P8_13_14"
19 #define P9_14_CAPE_LOAD "bspwm_P9_14_16"
20 #define P9_16_CAPE_LOAD "bspwm_P9_16_16"
21
22 namespace Hardware
23 {
24     class PWM :
25         public BBB
26     {
27     public:
28         enum Pin // Four possible PWM pins
29         {
30             P8_13,
31             P8_19,
32             P9_14,
33             P9_16
34         };
35         enum Run // Signal generating
36         {
37             On = 1,
38             Off = 0
39         };
40         enum Polarity // Inverse duty polarity
41         {
```

```
42          Normal = 1,
43          Inverted = 0
44      };
45
46      Pin pin; // Current pin
47
48      uint8_t GetPixelValue() { return pixelvalue; }
49      void SetPixelValue(uint8_t value);
50
51      float GetIntensity() { return intensity; };
52      void SetIntensity(float value);
53
54      int GetPeriod() { return period; };
55      void SetPeriod(int value);
56
57      int GetDuty() { return duty; };
58      void SetDuty(int value);
59      void SetIntensity();
60
61
62      Run GetRun() { return run; };
63      void SetRun(Run value);
64
65      Polarity GetPolarity() { return polarity; };
66      void SetPolarity(Polarity value);
67
68      PWM(Pin pin);
69      ~PWM();
70
71  private:
72      int period; // current period
73      int duty; // current duty
74      float intensity; // current intensity
75      uint8_t pixelvalue; // current pixelvalue
76      Run run; // current run state
77      Polarity polarity; // current polaity
78
79      string basepath; // the basepath ocp.3
80      string dutypath; // base + duty path
81      string periodpath; // base + period path
82      string runpath; // base + run path
```

```
83          string polaritypath; // base + polarity path
84
85          void calcIntensity();
86          string FindPath(string value);
87
88      };
89  }
90
```