

LAOS Laser - Feature #14

Change laser PWM control: rewrite using own PWM function

2012-07-19 23:06 - peter

Status:	Closed	Start date:	2012-07-19
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:	firmware	Estimated time:	0.00 hour
Target version:			
Description			
<p>The Laser PWM control currently uses the MBED library PWM functions: http://mbed.org/handbook/PwmOut</p> <p>The PWM function has some limitations: It is limited to the PWM1 outputs, The initial state of the output cannot be set and floating point is used in the implementation to set the PWM duration.</p> <p>A new object LaosPWM() should be implemented, that allows more flexibility.</p> <p>Constructor: LaosPWM(pin,freq,initialpwm) methods: write(pwm), read()</p> <p>Requirements;</p> <ul style="list-style-type: none">• it should use CMSIS and the NXP peripheral library.• Initially it should function for PWM1 peripheral (similar to current PWM), pin can be p21..p26• PWM value should be in range of 0 to 10000 for 0 to 100%• Writing should be fast (low overhead),inline function• Clipping of set value between 0 and 100%• Writing should be double buffered (no glitches)			

History

#1 - 2012-07-19 23:07 - peter

- Category set to firmware

#2 - 2014-08-17 20:42 - peteruithoven

- Status changed from New to Closed

Moved: <https://github.com/LaosLaser/Firmware/issues/30>