Data Path: PWM HW to Control Output

Project TFS path: $/FW SVI FF Releases/Release1/FIRMWARE

Project changeset version: 34879

Starting point: PWM hardware interface

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| --- | --- | --- | --- | --- |
| Containing file | | FIRMWARE\framework\tasks\control\control.c | Review Date | Reviewer |
| Function or data | | Control\_PID( ), IsIControl( ), Proportional\_Control( ) | 14-03-07 | VICTORIA |
|  | | | | |
| TFS wit |  | All the functions with Magic numbers. | | |
| Impact | | maintenance | | |
| Resolution | | **USE MNCB wrapper.** | | |
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| Containing file | | FIRMWARE\framework\sysio\sysio.c | Review Date | Reviewer |
| Function or data | | wsSignature | 14-03-07 | VICTORIA |
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| TFS wit |  | NO SIGNIFICANT FINDINGS | | |
| Impact | |  | | |
| Resolution | |  | | |
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| Function or data | | pwm\_DoWarmstart( ), wsValue | 14-03-07 | VICTORIA |
|  | | | | |
| TFS wit |  | NO SIGNIFICANT FINDINGS | | |
| Impact | |  | | |
| Resolution | | wsValue is not checksum-protected, it should be, along with wsSignature. Pwm\_DoWaemstart( ) should add a return at the end of function. | | |
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| Function or data | | isWarmstart | 14-03-07 | VICTORIA |
|  | | | | |
| TFS wit |  | NO SIGNIFICANT FINDINGS | | |
| Impact | |  | | |
| Resolution | | isWarmstart is not checksum-protected, it should be. | | |
|  | | | | |
| Function or data | | sysio\_InitPwm | 14-03-07 | VICTORIA |
|  | | | | |
| TFS wit |  | NO SIGNIFICANT FINDINGS | | |
| Impact | |  | | |
| Resolution | | Add return at the end of the function. | | |
|  | | | | |
| Function or data | | sysio\_CtlOut2PWMdomain | 14-03-07 | VICTORIA |
|  | | | | |
| TFS wit |  | NO FINDINGS | | |
| Impact | |  | | |
| Resolution | |  | | |
|  | | | | |
| Function or data | | sysio\_WritePwm | 14-03-07 | VICTORIA |
|  | | | | |
| TFS wit |  | The line 180 uses MAX\_DA\_VALUE to define the CTLOUTPUT\_LIMITED\_HIGH.  In line 159and line 164, the highPWMlimit with no type changes. | | |
| Impact | |  | | |
| Resolution | | Use the highPWMlimit to replace the MAX\_DA\_VALUE in line 180.  In line 159and line 164, the highPWMlimit should use (s32) to type change. | | |
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| Containing file | | FIRMWARE\framework\services\sysiolopwr.c | Review Date | Reviewer |
| Function or data | | sysio\_GetPWMHightLimit( ), m\_n2PWMHighLimit, LocalPWMHighLimit,  sysio\_Handle\_LowPowerLimiting( ) | 14-03-07 | VICTORIA |
|  | | | | |
| TFS wit |  | NO SIGNIFICANT FINDINGS | | |
| Impact | |  | | |
| Resolution | | m\_n2PWMHighLimit is not checksum-protected. | | |
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| Containing file | | FIRMWARE\framework\bios\stm\_timer.c | Review Date | Reviewer |
| Function or data | | bios\_WritePwm( ) | 14-03-07 | VICTORIA |
|  | | | | |
| TFS wit |  | NO FINDINGS | | |
| Impact | |  | | |
| Resolution | |  | | |
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| Function or data | | set3( ) | 14-03-07 | VICTORIA |
|  | | | | |
| TFS wit |  | NO SIGNIFICANT FINDINGS | | |
| Impact | |  | | |
| Resolution | |  | | |
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| Function or data | | bios\_InitPWM( ) | 14-03-07 | VICTORIA |
|  | | | | |
| TFS wit |  | NO FINDINGS | | |
| Impact | |  | | |
| Resolution | |  | | |
|  | | | | |
| Function or data | | WritePWM( ) | 14-03-07 | VICTORIA |
|  | | | | |
| TFS wit |  | NO FINDINGS | | |
| Impact | |  | | |
| Resolution | |  | | |
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| Function or data | | lastVal, pwm\_GetValue( ) | 14-03-07 | VICTORIA |
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| TFS wit |  | NO SIGNIFICANT FINDINGS | | |
| Impact | |  | | |
| Resolution | |  | | |
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| Containing file | | | FIRMWARE\framework\bios\project\_FFAP\gpio\_key.c | Review Date | Reviewer |
| Function or data | | | gpio\_BitSet | 14-03-07 | VICTORIA |
|  | | | | | |
| TFS wit |  | | NO FINDINGS | | |
| Impact | | |  | | |
| Resolution | | |  | | |
|  | | | | | |
| Function or data | | | gpio\_BitReset | 14-03-07 | VICTORIA |
|  | | | | | |
| TFS wit | |  | NO FINDINGS | | |
| Impact | | |  | | |
| Resolution | | |  | | |
|  | | | | | |
| Function or data | | | bios\_SetEnableIP | 14-03-07 | VICTORIA |
|  | | | | | |
| TFS wit | |  | NO SIGNIFICANT FINDINGS | | |
| Impact | | |  | | |
| Resolution | | | Should add the return; | | |
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