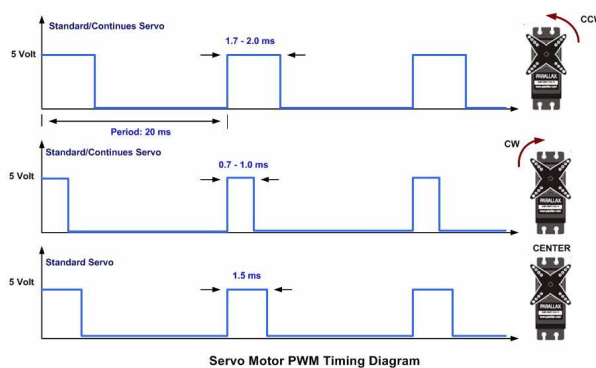
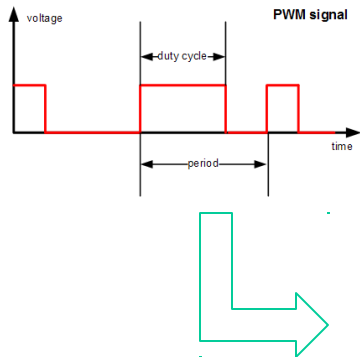




Xenomai: PWM signal generator

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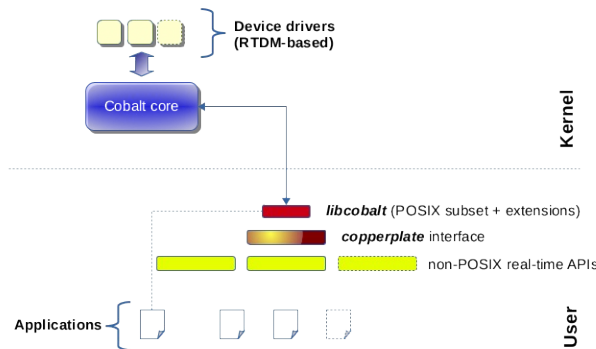
What is demonstrated



Servo motors: position controlled by duty cycle

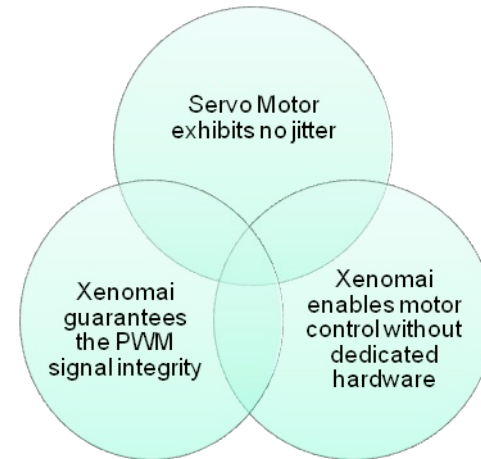
CPU driven servo control:

1. Xenomai enabled kernel
2. PWM RTDM driver
3. Realtime user application



What was improved

- ❑ Xenomai enables real-time support in Linux (kernel/user)
 - ❑ Without it the motor would **shake** noticeably



- ❑ PWM signal not affected by CPU load – deadlines met.
- ❑ Servo motor remains in position – no jitter

Source code or detail technical information availability

Source code: <http://git.xenomai.org> and Linaro RPB 16.03
 Blog entry: <https://www.96boards.org/blog/servo-motor-control>

Hardware Information



HiKey: HiSilicon Kirin 620 eight-core ARM Cortex A-53
<http://www.96boards.org/products/ce/hikey>