No.1618 Yishan St, Shanghai China	Ding Soung	+86-17097762778 DingSoung@gmail.com		
EMPLOYMENT & TECHNICAL EXPERENCE				
Embeded Software Engineer	PointLine	Late 2012		

- Sample and analyze module of acquisition: Programming MCU with C language to drive peripherals. Instead of RTOS, I improved performance and stability by using designed state machine, witch greatly simplify system, saves more memory and time for data process.
- Design Algorithm: Simulate via Matlab, by studying papers making experiments, a more suitable algorithm witch has optimization of sampling signal processing algorithm, adapt to the wider frequency and amplitude dynamic range was designed, this keep the calculation error in ppm, and final result reduce from the original 0.5% to 0.2%.

Software Engineer	Dediprog	Late 2013
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- IC support: Write kinds of communication IO and protocols with assembly language, and use C language control process, FLASH, EEPROM and varieties of programmable MCU such as power control, touch screen, motors controller ware supported, as well as AVR, ARM7, cortex M MCU, theses amplified series helped to expand the customer source and get more orders.
- Optimize burning method: adjust the timing to make it works faster and more stable, especially for OTP series chip with JTAG interface, witch usually unstable and has complex protocol, by using IAP, ping-pong cache technology to improve performance close to theoretical value, speeded up to 2.5x than usual, fail rate controlled in 0.05%.
- Upgrade Framework: Worked on new framework with 5 other RD, support more complex programmable areas and types of IC, promoted highest burning speed, programmer works offline, and reduced dependence on PC. Support the XML configuration option dialog IC support, this saves supporting time. The Firmware layer coordinate bus layer's works, reserved memory for bus layer, make it possible to do data phrase, verification, comparison real-time and accurately.

Education Xiangnan university 2009.9~2012.12

- *B.S.E, Electronic information & science technology,2009 NCRE2 CET4 Undergraduate Coursework: Data structure, Digital signal processing, Signal and system, Embedded system, Digital communication principle
- *Research, Competition, Awards, Papers & Graduation Design: In 2010, I started a project. As team leader of 5 selected members, I design the framework and detailed functions of each part. After realizing the hardware and Linux kernel modules, I improved the stability and efficiency, by taking full use of peripheral hardware of ARM, system memory and time are greatly saved for multi-threaded program. In 2011, we won the fund form schools, at the beginning of 2012 my papers about sampling signal processing was published, at the same time, my graduation project was assessed A.

LANGUAGE AND TECHNIOGIES

- C/C++; Assembly; Lua; SQL; XML; Markdown;
- ARM; MCU; Firmware; Linux; Kernel; BSP;
- Git; Makefile; Visual Studio; Matlab; IAR; MAC OS; Linux;

中国上海	丁松	+86-17097762778 DingSoung@gmail.com
履历与技术经验		
嵌入式软件工程师	武汉点线科技	2012末

- •设计电力分析采集模块,使用C语言控制MCU IO以驱动存储器,时钟,通讯,AD采集等外设。使用查询状态的方式替代RTOS控制整个系统,使任务之更加稳定和高效。
- 使用Matlab仿真分析,设计和优化采样信号处理的算法,适应更宽的频率和幅度动态范围, 计算误差控制在百万分之一,误差由原来的0.5%提升到0.2%。

软件工程师 上海锝镨电子 2013末

- 支援IC: 使用汇编语言编写各种通讯协议,C语言控制烧录流程,支持各厂商不同容量的 EEPROM, FLASH, 各种可编程电源, 触摸屏IC, 微控制器, 以及AVR, ARM7, cortex M 等MCU, 扩增了多少个系列的IC烧录,帮助业务扩展客户源并获得更多订单。
- 优化烧录方法:调整时序使烧录快速和稳定,尤其针对对OTP存储类型和JTAG接口这类不稳定并可协议复杂的IC,利用IAP,双缓冲等方法使烧录速度接近理论最快速度,有效控制不良率,例如AT的一颗烧录速度较直接访问FLASH快约2.5倍,IRMCK3xxx系列OTP经调校户fail率不到千分之0.5,远低于要求的千分之3.
- 升级架构: 新架构的设计使支持更复杂的ROM区域和类型的IC称为可能,同时硬件不变的情况也,最大烧录数度提升,此外还支持脱机烧录,减少对PC的依赖。新架构对使支援IC变的更加灵活,支持XML配置可选对话框,节省IC支援时间,Firmware层加载不同的ramfunction来转发命令参数和FIFO,协调buslayer完成烧录,为buslayer预留内存,使之能够实时准确地做数据解析,校验,比对等。

教育

湘南学院	2009.9~2012.12

- 电子信息工程学士学位, 电子信息科学与技术专业, 2009年获得NCRE2 CET4,
- 专业课程:数据结构,数字型号处理,信号与系统,嵌入式系统,数字通信原理
- 研究课题,竞赛,奖项,毕业设计:2010年,我启动"ASG"项目并成立小组,成功申请实验室,作为成员组组长,我设计的框架和各部分的详细功能,编写超声波传感器,马达和伺服的他们的Linux内核模块,并通过充分利用ARM的,优化系统内存和时间,大大提高稳定性和效率。在2011年,该项目获得了学校的资助,并且在"挑战杯"获奖。在2012年,基于此项目一个分支进一步研究,关于采样信号准同步处理的毕业设计和论文被评估优秀。

编程语言与技术

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- ARM; MCU; Firmware; Linux; Kernel; BSP;
- Git; Makefile; Visual Studio; Matlab; IAR; MAC OS; Linux;