Chun Che, Hu (Smith, Hu)

886986211886

Smith.a1672@gmail.com

Firmware Engineer

Technical Experience

- *Coding Tool: C/ linux shell script/ Verilog/ VHDL*
- *CHIP debugging tool: JTEG/ xtensa GDB*
- *Common connectivity: (I2C, RS-232/UART, SPI, ADC, I2S, etc...)*
- *Operating Systems: microprocessor RTOS(FreeRtos), Embedded Linux*
- *Firmware Development Platform:*
  - *STM32 ARM Cortex-M3/ AMTEL/ REALTEK DSP/ 96 Boards HIKEY(android 7 AOSP)*
  - *MCU bootloader and application section firmware upgrade*
  - *SRAM data corruption.*
- *Project Design:*
  - *Audio processing system software/hardware architecture(RTOS)*
  - *Driver Porting and Debug (SPDIF to I2S, ADC, Digital AMP, HDMI repeater, sensor…etc)*
  - *Experience Specification: HDMI 1.4b HDCP/EDID/CEC/ HDCP 1.4b repeater CTS/ VESA/ CEA 861/ IEC61937/ IEC60958*
- *Hardware debugging tool Digital multimeters, Oscilloscope, Logic analyzer*
- *Project Control:GIT, SVN, Redmine, JIAR*
- *IDE: Linux VIM, Xtensa Xplorer, IAR, Eclipse, Keil C*

Professional Experience

Staff Engineer, <08/2015> to Present <CyweeMotion, Taipei, Taiwan>

- In charge of wearable product, design and port MEMS sensors driver in ARM cortex M4
- Integrated human activity recognition algorithm in particular platform.
- Porting sensor HAL and sensor driver in particular platform (w AOSP; w/o AOSP).
- Optimized firmware executed efficiency to reduce power consumption.
- Designed physical and virtual sensors streaming with SOC and sensor hub.

Project Lead Engineer, <12/2009> to <07/2015> <AMTRAN, New Taipei, Taiwan>

- In charge of audio system project (VIZIO SB4451 Sound Bar-CES Best Home Theater)
- Integrated ADC, SPIF, class D amplifiers and bluetooth A2DP ...etc in audio system
- In charge of HDMI 1.4b such as CEC protocol and HDCP repeater CTS.
- survey solution and review supervisor schematic design
- Coordinate cross departments that include HW, PM, QA, factory and customer for project schedule and specification.
- Design and develop sound bar audio system architecture with FreeRTOS on STM32 ARM CORTEX-M3.
- Customize embedded LINUX system (MTK platform) to enrich TV functionality ATSC/DVB-T

Education

TAMKANG University – New Taipei City, Taiwan

Bachelor of Science, Department of Electrical Engineering <Jan/2005>