

## **Chun Che, Hu (Smith, Hu)**

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### **Firmware Applications 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 Explorer, 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>