

BODDU VIJAYA KUMAR

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CAREER OBJECTIVE:

To work as an embedded software developer in an organization where I can utilize my existing skills and knowledge and develop new skills to contribute in the accomplishment of organizational goals.

SUMMARY OF SKILLS

- Having **4.3 years of working experience** in embedded software development.
- Good programming skills in C programming and embedded C programming.
- Having experience on UART, I2C, SPI and I2S communication protocols.
- Having hands on experience on embedded C programming on STM32, NXP and TI controllers.
- Having hands on experience of using various IDE's such as IAR embedded work bench, Renesas CS++, VM virtual box, Visual studio code and Keil.
- Having experience on development of SAR ADC and SD ADC drivers.
- Having experience on hardware debugging using ICDI debugger and emulators like J-link and ST Link.
- Having experience on basic linux, linux system programming and IPC mechanisms.
- Having knowledge on shell scripting language.
- Having experience on linux debugging techniques like GDB and GNU Make files.
- Having experience on audio codes for playback and recording applications on AMD chipset.
- Having hands on experience on source version control tool GIT.

WORK EXPERIENCE:

- 1.0 year of working experience in embedded C & linux programming.
Organization: Mepage Technologies Pvt Ltd, Hyderabad.
Designation: Embedded Software Engineer.
Duration: From October 2022 to Present.
- 2.10 Years of working experience in Embedded Software Development.
Organization: Link well Tele Systems Pvt Ltd, Hyderabad.
Designation: Trainee Engineer, R&D.
Duration: From December 2019 to October 2022

PROJECTS:

Project: For playback and recording applications, development and integrated audio firmware for AMD platforms into SOF framework.

Development Tools: Visual studio code, Xtensa Xplorer and Audacity.

Protocols used: I2C and I2S Protocols.

Description:

An audio player and recorder has been thus implemented for playing the wave audio file stored in a USB Flash Drive and recording audio in the same format on the USB flash drive. For playing the audio file from USB Key firstly, wav data is transferred from the USB flash drive to internal SRAM of the microcontroller block by block in the first DMA buffer.

Responsibilities:

- Implementing the probe feature for AMD platforms.
- Development and testing the TDM feature for AMD platforms
- Testing and debugging ensure they are functioning correctly.
- Handling the IPC communication between the host and DSP.
- Handling the functionality DMA and I2S Peripheral buffers data which transfers it to external audio codec (DAC).
- Developed and integrated audio firmware into SOF framework.

Project: Single phase and three phase energy meters with Uni and Bi-Directional configurable feature.

Hardware Platform: NXP ARM Cortex-M0 Controller and TI Controller.

Development Tools: IAR Embedded Workbench and Keil IDE'S.

Description:

Measuring the RMS voltage and current values using SAR and SD ADC's and calculation the power and energy values, displaying the required values on 36 Pin LCD display and handling the different tamper based on electrical conditions.

Responsibilities:

- Configuring the meter firmware as per customer requirements with maintaining the meter accuracy as per Indian standards.
- Implementing the primary battery measurement feature using 16bit SAR ADC.
- Handling the different energy registers with meter configurable feature in Uni-Directional and Bi-Directional meter.
- Handling the different MCU peripherals in low power modes.
- Development and testing the tamper logics as per customer specified ratings.
- Implementing the temperature measurement feature using 16bit SAR ADC.

EDUCATION QUALIFICATION:

- **B tech:** Electrical and electronic engineering
College name: Laqshya institute of technology and sciences, Khammam.
Year of passing: 2013 – 2016.
Percentage: 68.6.
- **Diploma:** Electrical and electronic engineering
College name: S.E.S & S.N. Murthy polytechnic college, Khammam.
Year of passing: 2010 -2013.
Percentage: 73.8.
- **SSC:**
School name: Tagore high school, Madhira.
Year of passing: 2010.
Percentage:74.6.