Resume

Full Name: Haque Khandoker Mohd Mazidul

| Current Location: Incheon

Nationality: Bangladeshi | Visa Status: E-7-1

**Professional Summary**

Experienced PCB Designer and Embedded Firmware Developer with over 10 years of expertise, including 2.5 years in South Korea. Proven skills in embedded systems design, STM32 and AM5718 microcontrollers, Embedded Linux, and industrial communication protocols such as Modbus TCP and CAN Bus. Strong hands-on experience in NXP i.MX8 and Rockchip-based platforms, stepper motor controllers, and real-time systems. Seeking opportunities in a dynamic working environment in Korea.

Also capable of operating CNC machines, Maintain and tech support for any type of Electrical and Electronic devices.

**Technical Skills**

1. Microcontrollers: STM32, AM5178, NXP i.MX8, Rockchip RK series
2. Firmware: C, C++, Embedded C, FreeRTOS, U-Boot, Device Drivers
3. PCB Design: Altium Designer, KiCad
4. OS & Tools: Embedded Linux, Yocto, Buildroot, Linux Device Tree
5. Communication: CAN Bus, Modbus TCP, UART, SPI, I2C, Ethernet
6. Motion Control: Stepper Motor, BLDC Motor Controllers

**Professional Experience**

**Senior Researcher**

**Sanion Co (www.sanion.com), South Korea**

March 2023 - Present

 Developed and maintained firmware for STM32 and AM5178-based industrial controllers.

 Designed 6-layer PCBs for a Flight Controller sensor board.

 Implemented Modbus TCP/IP protocol stack and CAN bus diagnostics module.

 Led stepper motor controller development for automation systems.

 Worked with Yocto-based Linux systems.

 Build Embedded Linux Firmware to collect High Density data from 50 types of sensors.

**Embedded Systems Developer**

**Energypac Engineering Ltd (www.energypac.com.bd), Bangladesh**

2014 – 2022

 Designed embedded systems for automation products using STM32 and Atmel MCUs.

 Created multi-layer PCBs for consumer and industrial devices.

 Contributed to firmware for sensor integration, motor control, and HMI systems.

 Collaborated with hardware teams to debug board bring-up issues.

**Projects**

**Industrial Stepper Motor Controller**

 STM32F4-based controller with Modbus interface.

 Integrated PID control, encoder feedback, and overcurrent protection.

 Embedded Linux Board with Rockchip RK3188

 Development Board Radxa running Embedded Linux.

 Outdoor Cabinet Ventilation Controller.

 Sensor Mesh Network and HMI using ESP32.

 FMCW Radar Firmware on STM32H7 processor.

 Educational Robots for kids.

Languages

English – Professional

Korean – Basic

E-7-1 Holder | Familiar with Korean corporate culture | Available for full-time roles