

PARESH PANCHAL

Professional Summary

Skilled and results-driven Embedded Hardware Engineer with 10+ years of experience in designing, developing, and optimizing embedded systems. Proficient in hardware design, circuitry analysis, PCB layout with a strong understanding of industry standards and best practices. Adept at collaborating with cross-functional teams to ensure seamless integration of hardware and software components. Proven ability to identify and troubleshoot hardware issues, optimize performance, and enhance product reliability. Committed to staying updated with emerging technologies and industry trends to drive continuous improvement and exceed project objectives.

Core Qualifications

- Strong understanding and experience in designing digital and analog circuit, including schematic design, component selection, PCB layout and prototyping
- Proficiency in working microcontroller such 8051 Family, Arm7 & Arm9, Microchip, ST Controller
- Ability to analyze and debug complex hardware circuit, including the use of tools like oscilloscope, logic analyzer, multi meter and other lab equipment
- Knowledge of various communication protocol such SPI, I2C, UART, USB, Ethernet and wireless protocol like Bluetooth, Wi-Fi and Zigbee
- Experience in hardware testing, verification and validation
- Strong documentation skills to create technical specification, design document and test reports.
- Ability to collaborate with software engineers to optimize the interaction between hardware and software components
- Using designing tool Orcad, Kicad and Altium
- Familiar with LTspice of design simulation

Professional Experience

Sr Hardware Design & Test Engineer

Feb-18 to Present

CIMCON Software India Pvt Ltd.

- Board bring up, Schematic Review, Bill of material preparation, Component selection
- Hardware testing such ripple testing, supply test with load, short circuit. current consumption, Signal integrity, peripheral testing
- Product life cycle test with different case such temperature, by on/off device, continues on
- Alternate Component finding and testing
- Support to Software engineer for development product application
- Test report and SOP documentation preparation
- Return product analysis
- Product EMI/EMC testing

Sr. Design Engineer – R&D Electronics

July13–Jan18

Neuation Technologies Pvt Ltd/Accumax Lab Technology

- New product design , Board bring up, Bill of material preparation, Component selection
- Schematic & PCB Design in Orcad
- Hardware testing such ripple testing, current consumption, Signal integrity, peripheral testing
- Support to Software engineer for development product application
- SOP documentation preparation for manufacturing
- Product EMC certification test
- Existing product troubleshooting
- Return product analysis and troubleshooting

SilCore Technology

- Schematic & PCB Design
- Assemble & Testing Proto PCB
- Hardware testing such ripple testing, current consumption, Signal integrity, peripheral testing
- Bill of material Preparation
- Failure product analysis and repairing
- Product demo and installation
- Existing product troubleshooting
- Return product analysis and troubleshooting

Work on Product and Achievement**Cimcon Software India Pvt Ltd**

- Different type RF Street Light Controller
- Vibration sensor (Wi-Fi, Bluetooth, RS485)
- Remote Terminal Unit (Wifi, Bluetooth, RS232, RS485, LAN)
- Product EMI/EMC certification
- Got application developed for return product testing
- Working with china vendor for product manufacturing

Neuation Technologies Pvt Ltd/Accumax Lab Technology

- Different Type Centrifuge
- Different Type Roller Mixer
- Over Head Stirrer
- Heater Control Product
- Developed 24Vdc and 300Vdc BLDC motor driver with using ASIC driver
- Interface temperature sensor such RTD and thermocouple
- Product EMI certification
- 3.8V lithium battery reverse protection implement

SilCore Technology

- RS232 to RS485 converter
- Fire Alarm System
- GSM base Security System
- Digital and Analog IO card
- Developed 24Vdc Stepper Motor Driver with using ASIC driver
- Interface character and graphic LCD

Education

EXAMINATION	BORAD	PASSING YEAR	PERCENTAGE
DIPLOMA IN ELECTRICAL ENGINEERING	T.E.B	NOVEMBER 2007	67.53%
POST GRADUATE DIPLOMA TO DEGREE IN ELECTRICAL ENGINEERING	GTU	July 2014	5.92 CGPA
S.S.C	G.E.B	MARCH 2004	74.57%

PERSONAL DETAILS		
	<ul style="list-style-type: none"> ▪ Date of Birth ▪ Father's Name ▪ Marital Status ▪ Languages Known ▪ Nationality ▪ Health 	<ul style="list-style-type: none"> ▪ 19th APRIL, 1989 ▪ Sheri Pravinbhai R. Panchal ▪ Married ▪ English, Hindi, Gujarati ▪ Indian ▪ Excellent

Declaration

I hereby declare that the above information is true to the best of my knowledge.
If given a chance, I will try my best to fulfil your aspirations and prove my mettle in the most trying situations.

**TRUSTED
PARESH PANCHAL**