RESUME

M. V. CHANDRASEKHARA BABU
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PROFESSIONAL SUMMARY:

. Having 24 Years of experience in Product Design, Development and testing of Hardware Systems with end to end design solutions for Embedded, RF, Wireless communications, IoT including Project/Program Management. Worked for Defense, Medical, Space, Telecom and Railways Sectors with experience gained in the System Level Design, Module Level Design and Board Level Design.

KEY RESPONSIBILITIES:

- Managing specifications relating to system architecture, program management, project planning, life cycle management, execution, optimization, validation, analysis and freezing of I/O specifications.
- Strong knowledge and Led teams for Embedded Hardware, Firmware with communication interfaces (USB, Ethernet, I2C, RS 232, SPI), high speed design with FPGA, power management/supply circuits, Mechanical and Thermal design for the system requirements.
- Preparation of Project schedules, Mile stone reports including team allocation with goal settings. Requirements and discussions with all cross functional teams, encouragement for innovation ideas.
- Led teams for high speed design, development of Microcontroller and power management circuits for the system requirements. Defined the resources required for completion of a project and allocated resources accordingly. Guiding several departments in designing and developing projects through production stage.
- Evaluate Checking and Verification of all Circuit Schematics and PCB Layouts with reference to Gerber files for manufacturing. Review, Ideas and Optimization of PCB layout in RF, Analog and Digital signals. Checking, Verification Analyzation of EMI/EMC and ESD issues.
- Preparation of Technical Documents, interactions, negotiations with Suppliers, Vendors & Manufacturers. Delivered Presentations and led meetings to discuss techno commercial aspects with major American and European clients and Business Partners.
- Familiar with Hardware Design Process, NPI, PCB Assembly process and ability to influence with Design Engineering to ensure compliance.
- Worked for Sustain Engineering Projects (Value Engineering, RoHS analysis, Reduction of Cost, Re design, Obsolete etc). Good knowledge in processes involved in component second source qualification, BOM structuring, managing changes to BOM, design verification tests, reliability tests
- BOM Management, preparation of report with risks, mitigation plans after Proto testing to release for Production. Preparation of Technical Document, compliance test plans and interaction with ODMs, OEMs, and Vendors & Customers.
- Development and initiation of internal processes to improve program delivery within specific timeframes. fined goals and milestones as per the desired results to be generated by the project.

- Evaluation of timely performance of different teams working on a project and documented the progress accordingly. Assistance to the engineers in documenting the project designs and making changes as per needs.
- Ensured that all programs were executed within established time period and complied with the defined standards.

DETAILS OF EXPERIENCE:

- Worked as a Principal Consultant with INFOSYS Ltd., Hyderabad for 08 years up to Feb2020 .Leading teams for Product Engineering Design for Embedded, RF, IoT, Telecom and Medical Projects.
- Worked as a DGM R&D at Icomm Tele Ltd, Hyderabad for 2.0 years in Hardware System Designs for Programmable Synthesizer unit and TDOA based LF system for HF,V/UHF Bands.
- Worked as AGM, Technical (R&D) in Shyam Telecom Ltd, Gurgaon for 2.5 years in the in Hardware System Designs and Development of Signal Enhancement products for GSM, PCS, NCDMA, WCDMA, TETRA, UMTS and LTE with ISO,ETSI, FCC, TSEC Standards.
- Worked as a Sr Design Engineer/Project Leader in VXL Technologies Ltd, Kolkata for 1.2 years in the in-Hardware System Designs and Development of Embedded, Communication systems for ISM, L, GSM Bands.
- Worked as a Team Leader R&D in HBLNIFE P/S Ltd, Hyderabad for 6.4 years. Engaged in the in-Hardware System Designs, Development and testing of Microwave, Embedded, Analog, Digital, Wireless & RF components, systems and subsystems
- Worked as a Design Engineer in FLIC Microwaves Pvt. Ltd, Hyderabad for 2 years. Engaged in the Design, Development of various RF and Embedded systems.
- Worked as a Contract Engineer in DLRL, Hyderabad for 2 years. Engaged in testing, designing of different types of communication Modules and Sub units.

Education:

Bachelor of Engineering in Electronics and Communication Engineering from G. P. R. College of Engineering, S. K. University, in the year 1994.

Simulation Tools/Languages:

OrCAD, Altium DXP 2004 Microwave Office (AWR), SyscalC, JTag, MultiSim, MPLAB, C.

Equipment Handled:

Signal Analyzer, Tektronix Digital Storage Oscilloscope Agilent Spectrum Analyzer, Agilent Power Meter, Agilent Vector Network Analyzer, Agilent Multi Tone Signal Generator and Power supply Units.

Certifications:

SAFe 4 Agilist from Scaled Agile

Refer Annexure for project details

ANNEXURE

- **Patient Data Communicator:** This System works for to monitor the patient data (CGM) through remotely through wireless communication for one of the Medical Client. The Data Logger is a small form-factor handheld device with a small screen display to show the trend of glucose readings and generate alarms. This is wall pluggable equipment that can communicate and collect data from a patient via Zig Bee/Bluetooth. The Data Logger can store the collected patient data and forward it to a central server using Wi-Fi, BT, and GSM connection. Involved in system design and development of a Remote/Mobile patient monitoring system. Design, development, followed the medical standards of IEC 60601, ISO13485 & ISO14971 Standards. The physicians have access to the patient data anytime anywhere on the internet from the server via the computer or an internet enabled device.

- **VAVE & Benchmarking for Ethernet Switches-** Two customer products were to be benchmarked against competitor product. We used 12 physical customer products during the exercises and benchmarked them against 10 competitor product samples using Infosys Proprietary methods, laboratories and databases. Led a 35 member's value engineering team that bring the $40M saving to one of the biggest telecom manufacturer of network switches in the industry.

- **Cost Optimization of Aerospace Products:** Worked for should cost, value analysis and value engineering activity for various products with aerospace client. Final deliverables are should costing report and cost saving ideas based on the inputs data provided by client. I worked as a program manager and giving guidance to team for design changes and finding alternate components. Project Planning, Interaction & discussion with team, and reviews with Client Managers for existing projects / new opportunities.

- **Programmable Synthesizer Unit:** This System works for 20MHz to 6000MHz frequency for generating different frequency outputs based on the selection of 17 modules. This is having 17 different RF outputs and controlling with GUI. All 17 Modules are DDS with PLL Based Synthesizers and loading thorough micro controller. Designed and developed total system including power supply module (developed with AC/DC converters and LDOs).

- **Signal Enhancement Solutions:** Designed and developed RF Repeaters for all different type of bands GSM, PCS, WCDMA, TETRA, NCDMA, UMTS and LTE. Worked as a system level designer and module level designer for Repeaters with different output powers of 1 Watt, 2 Watt etc. The power management circuit designed using with various LDOs within the board for Indoor Repeaters. Separate Power supply module developed for outdoor Repeaters including EMI Filter. There is an in-built with and without modem which serves remotely access the health conditions as well as configuring the parameters of the repeater. The configuration is using with USB interface using with Supervisory card including Op amps, ADC, DAC etc. There are indoor (Low output powers) and outdoor (High output powers) repeaters for different configurations.

- **UHF Transmitter:** The UHF transmitter is designed to operate at the frequency limits of 402.65 MHz to 402.85MHz for the output power 5W. The transmitter collects data from Tsunami-meter through Acoustic modem and transmits to satellite.

- **MSS Terminal For Tsunami Early Warning System:** A system for Early Warning of Tsunami and Storm surge is being developed for SAC& INCOIS, Hyderabad. The terminal transmits 5-watt RF output power in S-band (2670-2690MHz) and receives in S-band (2500-2520MHz). A nearly hemispherical coverage antenna is used for both transmission and reception.

- **Tactical Digital Radio Relay and L-Band Up/Down Converters:** Worked on Tactical Digital Radio Relay, It's purely wireless point-to-point communication system for L band frequency I, as a Team Leader, have dealt in the System Designing and Development of RF and Embedded Modules for Transmitter, Receiver and Power Supply Module with AC/DC, DC/Converters. Completed up/down

converters for DEAL Dehradun working for L band frequency of 950-&1550MHz.I, as a Project Leader have dealt in the Designing and Development and integration.

- **RF Transceiver For Train Actuating Warning System;** This is purely a wireless communication data system for upper VHF range of frequencies. This system is basically being used at unmanned cross-levels for the train indication. I, as a System Designer have dealt System level design, Development and Project Management. Also worked for the Design of RF transmitter, Receiver, Power Management Boards and Analog Digital Circuits. All parameters (RSSI, O/P Power, Synthesizer ON/OFF, Power supply Monitoring including ON/OFF) to be monitored through digital circuits using with ADC, DAC and IO expanders.

- **Low Power Noise Jammer:** This system is basically a Noise Jammer, designed to jam the GPS by injecting NOISE of more power level than the minimum detectable signals from the satellite to the GPS receiver, to determine the position. I, as a Senior Design Engineer, had contributed in the design, development of Embedded, RF modules and engaged in the system integration.

Key Accomplishments:

- As a Technology Architect, developed Complex design involving multiple radios (All in one Radio). The project was delivered on schedule. Primary challenges were tight timelines and stringent compliance requirements. This project resulted in repeat orders and getting listed as preferred vendor.

- Single unit with multiple frequency bands was designed as part of the project. The prototype was delivered within schedule and exceeded teh required spec within budget.This resulted in production order to the tune of $25M.

- Led a 35 member's value engineering team. Project involved design optimization that resulted in $40M saving. Managed the entire program and delivered on schedule. Received Hi CSat for scoring 6/6 Customer Satisfaction.

- Received best performer award for design and development of RF Signal Enhancement Solutions (RF Repeaters) for Telecom Applications. The design used for multiple projects/products, this has been saved development time and delivery schedule. Managed technical and functional for multiple programs with quality deliverables.

- Developed for a leading Govt. sector space organization. Project was executed within short notice. Stringent Space grade requirements were met and product was highly appreciated. Company received award of excellence from Govt. of India.

- Successfully developed for critical defence applications and field usage. This was part of Indigenization drive. Completed all field trials and deployed in record time. Appreciated by Client and received KPA.

- Designed and developed a Transceiver for railway applications in VHF band. Delivered within time and budget despite challenges with challenging requirements and stringent quality requirements. Managed entire delivery including stake holder management.