ABHISHEK Y.T

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Professional Summary

- Having **16+** Years of Professional Experience on RF and Hardware Development and Evaluation.
- Extensive experience in WIFI and Bluetooth(BT) validation..
- Hands on experience on Satellite and Cable Set Top box Frontend Solutions involving FEM, Tuners and Demodulators.
- Design & delivery on end to end product life cycle of Set Top Boxes which includes WIFI & BT hardware which conform to the product requirement, Schematic Design, Circuit analysis, Preparation of BOM, Layout review, Hardware validation.
- Hands on evaluation of DC-DC and AC-DC power solutions.
- Hardware board Design of Mobile processor, Board Bring up, Functional testing, Hardware Testing.
- Involved in Introduction of 3 ODM Mobile phones for Asian market.
- Review and Certification of the system for CE, FCC and other PS&C specifications for ODM.
- Working closely with manufacturing team on Initial build schedule, Material Selection, Line Qualification, etc.
- Proficient in designing and optimizing test automation frameworks using Python scripts for automation, system framework integration, and C# scripting for test configuration and customization.
- Well-versed in software tools such as Python, Visual Studio Code, Visual Studio Professional, Java, and Android IDE for software development, debugging, and test framework integration.
- Experienced in Design and Testing of Receivers, Transmitters, LNAs, Multipliers.
- Having good knowledge on RFIC's and MMIC's.
- Good proficiency in Schematic Entry, PCB designing, Layout optimization.
- Flexible and versatile to adapt to any new environment and work on any project.
- Comprehensive problem-solving abilities, excellent verbal and written Communication skills

Equipment proficiency:

Litepoint IQXEL WIFI and BT analyzer, Keysight PXI, Network Analyzer, Spectrum Analyzer, Vector Signal Generator and Analyzer, EMI EMC setup, oscilloscope, Sniffer probes, AC Power and Harmonic Analyzer

Educational Qualification

- Bachelor's degree in Engineering
  - Branch : Telecommunication

Professional Experience

Vantiva / Arris India Private Limited/ Commscope India Private Limited / Pace Micro Technology

Role: Staff Hardware Engineer.
Experience: March 2015 – Till now

Job Profile:

- Evaluation of WIFI and BT in set top box and Access points.
- Hand on experience with 802.11n/ac/ax/be validation
- Also experienced in BT 4.0 and BT 5.0 validation
- Hands on experience in Broadcom, Quantenna, Cypress chipsets.
- Worked on providing test procedure for BT to qualify the product performance.
- Proficient with WIFI and BT Testing and configuring wireless products.
- Involved in infrastructure of performance verification for both WIFI and BT testing.
- Conducted extensive lab evaluations and integration testing of network elements to include formal documentation of results.
- Involved in the development of proprietary software from scratch for RF hardware evaluation, including providing feature enhancements, bug fixes, and issue resolution across multiple hardware platforms.

Pace Micro Technology (India) Private Limited

Role: Senior Hardware Engineer.
Experience: August 2010 – June 2013

Job Profile:

- Design and validation of RF frontend for satellite and cable, involving RF switch, LNA, DVB-S/S2 tuner-demodulator and RF video re-modulator.
- Evaluation of tuner and demodulator silicon from various vendors like Availink, Airoha, Montage and NXP for development of existing and new platforms.
- Design and validation of DC-DC Converters and AC–DC.
- Evaluation and Qualification of new IC for DC DC converters for new products.
- Failure analysis and reliability assessment of Power supply for set top box.
- Specification and technical procurement of MMIC and IC components.

GE INDIA PVT LTD

Role: Product and Process Quality Engineer.
Experience: June 2009 – Dec 2009

Job Profile:

- Provide technical support to improve product quality and be highly process oriented throughout the product manufacturing cycle.

- Root cause investigation through coordination with Production Support Engineers, Design Engineers and Supplier Quality Engineers.
- Driving for improvements in product quality related to rejections from customers & internal yields.
- Conduct validation for the production process and the jigs & fixtures
- Preparation and approval of process work sheets, work instructions, test sheets. Train & Evaluate production members to carry out jobs & deliver quality output.
- In charge of quality of output from the manufacturing line - Track and close quality issues in the manufacturing line / returns from customer.

MOTOROLA INDIA PVT LTD.

Role: RF and System Design Engineer.
Experience: October 2006–FEB 2009

Job Profile:

- Designed and development of a Internet access device based on the Mobile processor (TI OMAP Chipset), also involving Power management IC,HS USB, USB HUB and LAN Circuitry.
- Introduction of 3 ODM Refresh candy bar Mobile phones with CMF, ID& ECO-Resin changes
- Conducting Design Reviews and feasibility study of the future products, making various reports related to the projects.
- Designing and testing of antenna for the lower frequency range.
- Optimization of the PCB layout for best performance of the system.
- Layout optimization of the components to handle signal integrity and high speed signal lines.
- Catering of the SWA region needs of enhancements on the mobile features.
- Working closely with manufacturing team on Initial build schedule, Material Selection, Line Qualification etc.
- Qualification of the Product under Accelerated Life cycle Test which involved ESD, Temperature Cycle, Humidity, Proto-cert etc. before the final SA.

ALPHA MICROWAVE SYSTEMS PVT LTD/UNITED MICROWAVES (P) LTD

Role: RF Design Engineer
Experience: June 2004 –October 2006.

Job Profile:

CRABEX - Coherent Radio Beacon Receiver - VSSC

Description: CRABEX program was launched by to study the Ionosphere changes with the help of radio beacons generated by the LEO's orbiting around the earth. The CRABEX receivers were designed and developed in the company itself. The receivers are installed in various locations all over India to acquire the required data. The receiver uses the 400MHz and the 150MHz frequency that are being continuously transmitted by the satellites as radio beacons.

C-Band Receiver - DRDL
Description: The project was to develop a receiver at C-Band. The 5.5 GHz was the specified C-Band signal. The received signal was demodulated and the video output along with its TTL output was provided.

LNA
Description: The low noise Amplifier for a 135MHz frequency was designed using shunt feedback amplifier and using the RFIC's. The low noise Amplifier had a specs of gain +40dB, with a P1dB of +21 dBm. The frequency bandwidth was 5MHz and the linearity was 0.5db

802.11 a/g Maxim radio Boards - Wipro
Description: The Maxim radio boards with both the 802.11 a/g Trans receiver capability was fabricated and tested and supplied as front ends for the router soutions.