BHARAT ELECTRONICS LIMITED

Jalahalli P.O., Bengaluru 560 013.

Bharat Electronics Limited a Navartna Company and India's premier professional electronics Company under the Ministry of Defence, requires the following personnel for its Military Radars SBU, Bengaluru Unit.

Post / Grade	Domain / No. of posts	Minimum Post qualification experience as on 01.01.2022	Reservation
Senior Engineer (EIII)	RF Design – 4 posts	4 years for candidates with BE/B.Tech OR 2 years for candidates with ME/M.Tech	Gen – 03 OBC – 02 ST – 01
	Digital Design – 2 posts		

Pay Scale: Selected candidates will be inducted in E-III grade in the pay scale of **₹50000-160000/-** In addition to Basic Pay, other allowances like Dearness allowance, House Rent Allowance, 35% of the Annual Basic Pay as perquisites, Performance Related Pay (PRP), Group Life Insurance, Medical reimbursement, Provident Fund, Pension, Gratuity, etc. as per the Company's rules, will be part of the remuneration package.

Upper Age limit (as on 01.01.2022): The maximum age limit for General candidates is 32 years. The upper age limit will be relaxable for ST candidates by 5 years and for OBC candidates by 3 years. For candidates belonging to PWD category having minimum 40% disability or more will get 10 years' relaxation in addition to the relaxation applicable to the categories mentioned above.

QUALIFICATION CRITERIA

Full time BE/B.Tech course from reputed Institute/University in Electronics/ Electronics & Communication/ Communication /Electronics &Telecommunication / Telecommunication disciplines.

OR

ME / M.Tech. in RF& Microwave, Signal Processing or Digital System & Signal Processing, Digital Electronics or Communication Systems with a preceding degree in BE/B.Tech. in Electronics/ Electronics & Communication/ Communication /Electronics &Telecommunication / Telecommunication

Candidates should have secured First Class in the indicated qualification for General/OBC categories. Pass Class for ST/PWD candidates. Method of conversion of CGPA to percentage has to be attached.

POST QUALIFICATION EXPERIENCE (as on 01.01.2022)

Candidates should have worked in / possess expertise in either RF Domain or Digital Design in any of the areas specified below:

1. RF Design:

- Experience in RF & Microwave Circuit Design in various frequency ranges
- Experience in MMIC based Circuit Design
- Strong concepts in Transmission Line & Electro Magnetic Theory
- Experience in various circuit topologies including Microstripline, Striplines and Coplanar waveguides etc.
- Experience in Testing of RF modules including LNAs, RF Front Ends, Filters, Synthesizers, Power Amplifiers etc
- Work experience on Microwave Design Tools including ADS, System Vue, Microwave Office etc.
- Work experience of Electromagnetic Simulation Tools like HFSS (Ansys), CST Microwave Studio, FEKO, IE3D, etc.
- Well versed with using Lab instruments (Signal Generators, Spectrum Analyzers, Network Analyzers, etc.)
- Candidate should have strong analytical, team building, problem solving and organizational abilities.
- Experience in Radar System and Subsystem Design will be preferred.

2. Digital Design:

- Sound Knowledge in Digital, Analog and Mixed Signal Circuits design. Candidate should be able to Design, implement and test from module level through full system integration.
- Experience in design/testing of Signal and Data processors involving FPGA / DSP based hardware & firmware in the areas of FPGA development and debug tools.
- Experience in RTL design and simulation using Verilog and VHDL
- Experience in FPGA design tools such as Altera Quartus, Time Quest, Signal Tap, Xilinx Vivado.
- Experience with SoC architectures such as Altera Cyclone V SoC and Xilinx Zynq.
- Implementation experience of data acquisition, digital down conversion, matched filtering, FFT, Digital beam former and CFAR, Display systems and Inertial Navigation systems.
- Hands-on experience in using the test instruments like Logic Analyzers, Waveform Generator and Oscilloscopes etc.,
- Familiarity in digital design simulation tools (for e.g MATLAB, FPGA emulation tool for digital design & VHDL coding etc) is desired.
- Candidate should have Strong analytical, problem solving and creative abilities and good verbal and written communication skills.

- Candidates with knowledge of C /C++ /Linux Programming , work experience in Interface protocols like RS232, RS422, I2C, TCP/IP, UDP Ethernet, USB, MIL 1553, 1G/10G, Fibre optics, and with an understanding of the Radar system and subsystem will be preferred.

Note: Experience in teaching field or internship which is carried out to fulfill the requirements of any academic course will not be considered as post qualification experience. The experience acquired after completion of BE / B.Tech. or ME/M.Tech. (as applicable) only will be taken into consideration. The experience will be strictly scrutnised in line with the criteria indicated above and candidates who do not meet the above criteria will be summarily rejected.

JOB DESCRIPTION

Senior Engineer (E-III)- RF Design:

- Design & Development of RF subsystems like Receiver, LNA, down converter, Synthesiser from the given specifications.
- Usage of EDA Tools for RF Front End Design
- Usage of RF Test & Measurement Instruments including Signal Generators, Spectrum Analysers, Modulators, Vector Network Analysers, etc.
- Participate in Design Review and progress review of System/Subsystems.
- Ensuring all subsystem specification meets the overall system requirements.
- Preparation of Engineering documents, Technical manuals, User manuals, etc.
- Testing, evaluation and acceptance of the RF subsystems.
- Integration of RF subsystems in the system
- Verify and validate the system through in-house and field trials.

Senior Engineer (E-III)- Digital Design:

- Design & Development of Digital Receiver, Signal processing, Beam forming, Wave form Generator, System Controller, Interfaces between subsystems to meet system requirements.
- Design & Development of Signal Processing algorithms, Beam forming algorithms & timing generation, ground clutter mitigation.
- Design and testing of high speed and mixed signals PCB design.
- Design with High speed data transfer protocols such as SRIO/10G LAN/ Aurora etc.
- Design based on Microcontroller/ Processor/FPGA/DSPs architecture.
- Preparation of Engineering documents, Technical manuals, User manuals, etc.
- Testing, evaluation and acceptance of the subsystems.
- Verify and validate the system through in-house and field trials.

METHOD OF SELECTION: Selection will be through a Written Test, followed by an Interview, only for those candidates who qualify in the written test.

HOW TO APPLY:
Candidates who meet the above mentioned criteria are required to download the application form provided as a link to this advertisement. The duly filled in application along with the photocopies of the below mentioned documents/enclosures are to be sent through post to-

DGM (HR/MR, MS &ADSN)
Bharat Electronics Limited,
Jalahalli Post, Bengaluru-560 013.

The last date to apply is 9th February 2022.

Applications that are incomplete, not in the prescribed format, not legible, received after due date or without the required enclosures, will be summarily rejected without assigning any reasons and no correspondence in this regard will be entertained.

Documents to be submitted along with the application form:

i) 10th Standard marks card (as proof of date of birth)
ii) B.E/ B.Tech. Degree certificate and M.E./M.Tech. Degree certificate (as applicable)
iii) All semester marks cards of BE/B.Tech. and ME / M.Tech. (as applicable)
iv) CGPA to percentage conversion formula issued by the University / Institute.
v) Tribe/ Community/ Disability certificate in case of candidates belonging to ST/OBC/PWD respectively. Candidates claiming reservation under any of the above categories are required to submit the certificate in the prescribed format. The formats of various certificates are provided as link to the advertisement. Candidates belonging to OBC category should produce the certificate issued on or after 01.01.2021.
vi) Post qualification work experience certificate/s from previous / current employer. Where current employment certificate is not produced, the Offer of current appointment, Employee ID proof and latest pay slip should be compulsorily enclosed.
vii) A detailed write-up on the post qualification experience specifying job role / responsibilities and areas worked in.
viii) Candidates working in PSUs / Govt. organizations should compulsorily submit the application through proper channel or produce 'No Objection Certificate' at the time of the interview.
ix) SBI Challan for having remitted the application fee.

Note: The BE / B.Tech. and ME / M.Tech. certificates should clearly indicate the discipline and the class secured.

PAYMENT OF APPLICATION FEE:

- General / OBC candidates are required to remit an amount of Rs. 750/- towards application fee through SBI Collect (through online mode or through SBI Branch). The application fee

should be remitted through SBI Collect (through online mode or through SBI Branch). ST and PWD candidates are exempted from payment of application fee.

- Candidates are requested to read the details and screenshots for making the payment which is provided below the advertisement. Candidates may make the payment by clicking on the link provided below the web advertisement.
- Candidates can also make the payment by approaching SBI branch. You have to select SBI branch in the payment option and download pre-printed challan generated through SBI Collect and deposit the application fee (as applicable) plus applicable bank charges in any SBI Branch. The candidate should ensure to obtain the seal and signature of the bank official.
- Candidates have to enter the "**SBI Collect Reference No.**" generated after payment, in the online Application Form.
- Candidates may go through all instructions and eligibility criteria carefully before remitting Application Fee and submitting the application. Fee once paid will not be refunded.
- The fee receipt / challan may be printed on making payment of the application fee and enclosed along with the application form.

GENERAL:

- Candidates are required to possess at least one valid e-mail id, which is to be entered in the application form.

- There will be no separate communication to any candidates on their non-selection at any stage.

- Candidates whose specialization mentioned in the degree certificate does not tally with the branch mentioned in the advertisement will not be considered for selections. In the event it is found that candidates have disclosed false information in the application form, BEL reserves the right to disqualify their candidature at any stage during the selection process.

- Only Indian nationals need apply. The posts indicated above may vary based on the actual requirement at the time of selection. Canvassing in any form will result in disqualification. BEL reserves the right to debar / disqualify any candidate at any stage of the selection process for any reason what so ever.

For further details or any clarifications, you may write to us or contact us:

e-mail ID– hrmr@bel.co.in

Telephone no.: 080-22195314