Photonics Test Engineer
Location: San Diego CA, United States

Company Description
RAM Photonics has its headquarters in San Diego CA, with facilities in San Diego CA and Rochester NY. The company portfolio includes specialty optical and optoelectronic systems for defense, commercial, and industrial applications, including advanced signal processing, high-power lasers, and instrumentation systems. RAM Photonics seeks capable, creative, and driven contributors skilled at communicating and performing within a technical team composed of leading photonics, electronics, and software engineers.

Job Description
The Photonics Test Engineer will be responsible for developing and executing test methodologies for photonics integrated circuits (PIC) in accordance with internal and/or industrial standards (e.g., Telcordia GR-468). The candidate is expected to develop test plans in coordination with designers, build test benches, develop automation hardware/software using off-the-shelf or in-house developed packages, perform statistical analysis, and provide test reports. The candidate will coordinate with foundry / OSAT to develop wafer-scale test protocols. Exact title and compensation package will be offered based on the candidate's experience and skills.

Minimum Qualifications:

- Bachelor's degree in EE / ME / Physics or related field with minimum 3 years of relevant industrial experience.

- Knowledge in basic optical devices (fiber and chip waveguides, spot-size converters, vertical grating couplers, directional couplers, filters, modulators, photodetectors, semiconductor lasers, external cavity lasers, fiber amplifiers, semiconductor amplifiers).

- Experience in optical device characterization e.g., fiber alignment, die / wafer handling, electrical and optical probing, characteristics extraction (insertion loss, power splitting ratio, modulator extinction ratio, polarization extinction ratio, photodetector responsivity, etc.)

- Experience in high-speed device characterization (VNA calibration using calibration kit / calibration substrate, knowledge of reference plane and embedding / de-embedding, probing technique for high-speed devices).

- Proficient with optoelectronic test equipment necessary for device characterization e.g., laser sources, optical / electrical spectrum analyzers, network analyzers, high-speed oscilloscopes, RF synthesizers, power meters, erbium fiber amplifiers, etc.

- Hands-on experience in fiber-optic and microwave device handling e.g., cleaning, connector mating, splicing, etc.

- Knowledge in NI LabView or Python-based instrument control, data collection, and data analysis.

Preferred Qualifications:

- Deep understanding in foundry-based fabrication processes and respective constraints on integrated photonics device performance.

- Experience in CAD design (e.g., Solidworks) for optomechanical fixture prototyping.

- Experience in electrical circuit designs and prototyping for building device test-set (low-noise laser driver, temperature controller, transimpedance amplifier, ADC / DAC interface, etc.).

- Experience in C/C++/Python programming language.

Qualified applicants should submit resume, with cover letter, using the link below:

http://completepayroll.evolutionadvancedhr.com/JobApplication.aspx?jobpostingkey=feb73125-076e-4d65-95e0-30ebb75a6e78