



POSITION DESCRIPTION

Position Title:	Microelectronic Packaging Engineer
Position Reference Number:	ECRRSD002
Division	Research Services Division
Position Classification:	S&T 3-4
Position Location:	Edinburgh
Security Level:	NV2
Minimum Academic Qualification:	Bachelor
Enquiries:	Shyam Mehta shyam.mehta@dst.defence.gov.au 08 7389 6917

Academic Disciplines

<input type="checkbox"/> Aerospace/ Aeronautical Engineering, Naval Architecture	<input type="checkbox"/> Chemical, Radiological, Biological, Food sciences	<input type="checkbox"/> Materials Science
<input type="checkbox"/> Computer Sciences, IT, Software Engineering, Telecommunications	<input checked="" type="checkbox"/> Mathematics and physics	<input type="checkbox"/> Psychology and Social Sciences
<input checked="" type="checkbox"/> Mechanical and Mechatronic Engineering (including robotics)	<input checked="" type="checkbox"/> Electronic/ Electrical Engineering	<input type="checkbox"/> Other

Position Overview

Scientific Engineering Services (SES) is looking for a suitably qualified and motivated Microelectronic Packaging Engineer seeking to develop a career in miniaturized electronic (including miniaturized RF hardware), electro-optic, and micro-mechanical systems, at the leading edge of engineering. The Microelectronics Packaging Specialist undertakes design, integration, and assembly of complex micro-scale systems and devices. The role requires knowledge of micro-assembly techniques (wire bonding, flip chip bonding, bond testing, dicing and packaging) and also the design and integration of micro-scale devices into larger systems under limited supervision

SES provides specialised scientific engineering, design and fabrication solutions contributing to keeping DST at the forefront of Australian Defence innovation, and providing valuable support to Defence and National Security operations. SES provides integrated, multidisciplined, leading edge, rapid response and innovative scientific engineering solutions to DST, across the breadth of Defence technologies. SES fosters a culture of excellence, world leading capability and strong external partnerships dedicated to supporting the engineering needs of DST.

SES will strongly consider part-time applicants.

Position Duties

Under guidance and tutelage of Microengineering leaders, the Microelectronic Packaging Engineer will:

- Create, maintain and review processing documents to achieve quality and reliable devices in accordance with quality management principles and associated business procedures within an ISO 9001 accredited quality system.
- Apply standard Project Management principles in managing small to medium size projects using computerized tools and reports.
- Develop strong external relationships as part of the Australian Micro engineering community and leverage academia, external agencies and industry to deliver S&T outcomes
- Collaborate and partner with DST researchers to design and manufacture to unique and innovative requirements
- Technical Duties include:
 1. Provide technical expertise in the assembly and testing of Microelectronic devices, such as radio frequency devices, optical devices, sensors, Multi-chip Module Microcircuits and MEMS devices.
 2. Operate and support processes such as wire/ribbon bonding, flip-chip bonding, high component density surface mount assembly, connectorisation of high frequency interfaces, device packaging and other fabrication processes in a cleanroom environment.
 3. Assist Microengineering facility manager in identifying and carrying out repair and maintenance activities associated with Microengineering assembly equipment and associated services.
 4. Undertake improvement activities in respect to safety procedures associated with working in a chemical laboratory and use of hazardous chemicals and materials. Actively participate in identifying and solving WH&S issues.

Other Requirements

The position may be exposed to chemical or plant hazards, personal protection equipment will be provided. Some interstate travel and participation on trials may be required. The position works as part of a dynamic team and there may be some peaks and troughs in the workload.