UNIVERSITI TEKNOLOGI MARA

INDUSTRIAL TRAINING FINAL REPORT

CARSEM (M) SDN BHD

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INTRODUCTION

1.1 Company Background

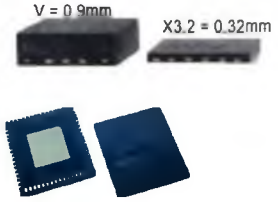
Figure 1.1 Carsem Company

Carsem is a leading provider of turnkey packaging and test services to the semiconductor industry, and offers one of the largest package and test portfolios in the world. The company was founded in 1972 which is among the most experienced companies in the industry, and it is recognized as one of the largest in unit volume production. The company has over 5,000 employees and assembles in excess of 100 million units each week, more than 65 percent of this volume is fully electrically tested product.

Both Carsem (M) Sdn Bhd in Malaysia and Carsem Semiconductor (Suzhou) Co., Ltd in China are active members of RBA. The company has three high-technology factories. Two factories are located in Ipoh, Malaysia, a 90-minute drive from Penang, 2 hours from Kuala Lumpur and has a daily flight to Singapore. The China factory, Carsem-Suzhou, is located in the province of Jiangsu, 50 miles west of Shanghai, started production in 2004.

Carsem is a member of the Hong Leong Group which was founded in 1963, the Hong Leong Group is one of the largest conglomerates in Malaysia with activities that span the globe. The Group companies have a blue-chip reputation with listings on stock exchanges of Kuala Lumpur, Singapore, Hong Kong, Manila and Europe. The Group's entrepreneurial and innovative spirit is shown clearly through its dominance in key growth sectors of the economy – financial services, manufacturing, distribution, property and infrastructure development.

Table 1.1 List of products

No.	Name	Figure
1	Power Management	
2	MLP	
3	MEMS & Sensors	
4	SOIC	
5	MICRO	

CHAPTER 2

JOB RESPONSIBILITIES

2.1 Task Execution

During my training at Carsem Company, I executed various task related to electrical systems. Each task was carefully assigned to provide me with practical experience and deepen my understanding of electrical engineering principles. I learned to repair a test socket which is a component of the machine that act as intermediary for the handler and the tester. The test socket is like an extension to connect from the handler to the tester which make will make it open circuit if the test socket is damaged or absent. Other than that, I also learned to repair the machine when the SSY fall below 95% because of over-reject which cause by continuity open or continuity short. This is problem occurred when there is no connection between the I.C. and the tester. Lastly, I learned to do setup for the machine whenever there is a new device needed for production. Together, these assignments enhanced my training experience and gave me the tools I needed to succeed in my future career.

2.1.1 Repair test socket

A test socket is an essential tool in electronics and semiconductor industries, designed to provide a temporary yet reliable connection between a device under test (DUT) and the testing equipment. These sockets enable engineers and manufacturers to evaluate the performance, functionality, and reliability of components like integrated circuits (IC), microprocessors, or memory chips, without requiring permanent soldering. By facilitating easy insertion and removal of components, test sockets streamline the testing process, especially during prototyping, mass production, or failure analysis.

Test sockets are engineered to maintain high electrical performance with minimal signal degradation, even at high frequencies, ensuring precise test results. They are built to handle thousands of insertion and removal cycles, offering durability and efficiency in repetitive testing scenarios. Depending on the application, there are various types of test