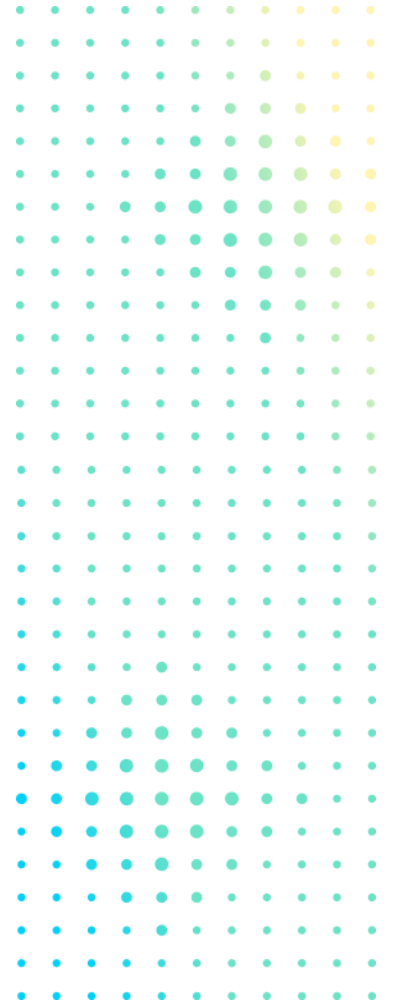


Lam Research Electrical Interview

Timeline and Concept Evaluation



Engineering Interview Overview

Please ensure to completely read this entire document before your interview. Any questions may be directed at your recruiter prior to the interview as needed.

- 01 Interview Timeline
- 02 What to Bring
- 03 How to Best Prepare
- 04 Details for EE Concept Evaluation
- 05 Summary

Typical Concept Evaluation Interview



While many interviews may deviate from this structure, these topics will be discussed during the interview process at Lam.

- Candidate and Interviewer Introductions – 15 minutes
- Candidate Background Discussion – 5 minutes
- Candidate to Share Concept Evaluation – 30 minutes
- Evaluation Q&A – 15 minutes
- Candidate Questions and Wrap-up – 15 minutes

What to Bring

Congratulations on your interview with Lam Research! Please review suggested items to bring with you on the day of your interview.



Government-Issued ID for security and identification purposes.



Your latest resume to share with interviewers



Optional: An example from your engineering portfolio

Please bring a relevant projects or design that showcases your skills for discussion during our background review. This can include code, schematics, and/or PCBs you've designed that can be shared publicly.



A backup copy of your concept evaluation content

!!! We recommend sending a digital copy of your concept evaluation content to your recruiting team should you need to present on slides or simply bring your own laptop with HDMI output support. USB drives are NOT supported at LAM for security reasons.

How to best prepare

Understand the Company and Role

- Understand the company's products, services, and market position. Familiarize yourself with their recent projects, technologies, and any news or press releases.
- Review the job description thoroughly to understand the specific requirements and responsibilities of the role.

Review Technical Fundamentals

- Brush up on key electrical engineering principles, including circuit design, signal processing, power systems, and electromagnetics.
- Be comfortable with whiteboard exercises, as you may be asked to sketch circuits, write equations, or outline design processes during the interview.

Digital Content Preparation

- Lam meeting rooms are equipped with digital projectors with HDMI support. Please consider this if planning for presenting digital content.



04

EE Concept Evaluation

Introduction and Details



Concept Evaluation Introduction

At Lam Research, we seek to better understand how you develop concepts and make engineering decisions. We are interested in discussing the following scenario during your in-person interview. Before your interview, please consider the scenario and prepare for the questions we will ask during the interview. You may prepare any form of content that will best support your presentation.

Important: You may present digital content during your interview, however due to Lam security policies, this content must be emailed to your recruiting contact at least 24 hours prior to the interview. USB drives are NOT supported.



Design Scenario

As an **electrical engineer** at Company Z, you have been selected to lead a critical electrical engineering project. The program director aims to release the project into production within two months to meet a customer deadline. Your responsibilities include:



Identifying potential design solutions.

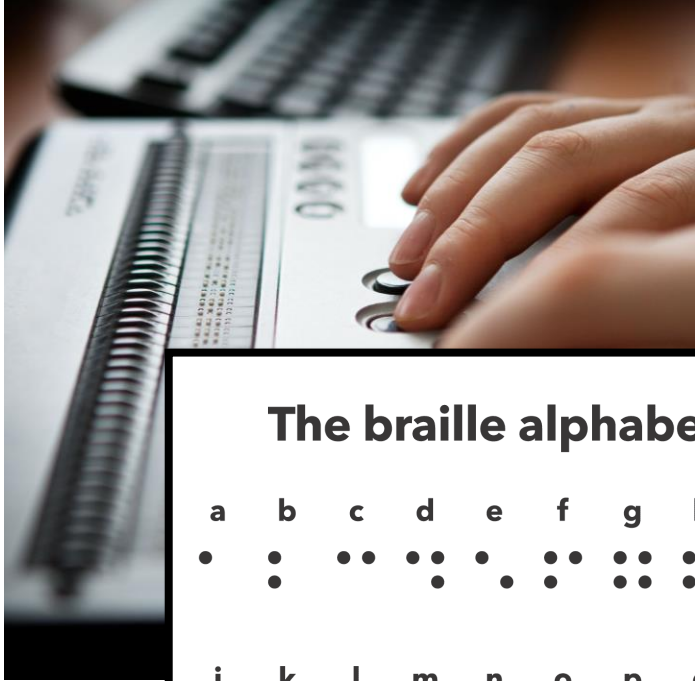


Formulating a concept recommendation.



Outlining the approach for advancing to the next phase of the development process.

Design Scenario



The braille alphabet

a	b	c	d	e	f	g	h	i
⠁	⠃	⠉	⠙	⠑	⠋	⠎	⠈	⠊
j	k	l	m	n	o	p	q	r
⠚	⠅	⠌	⠍	⠘	⠥	⠞	⠟	⠗
s	t	u	v	x	y	z		w
⠠	⠤	⠥	⠦	⠨	⠣	⠤		⠵

Objective

Company Z would like to develop a portable, low cost, high volume companion device to a cell phone. This device will allow a sight impaired person to read text from the cell phone.

Function

The functional aspect of the product displays a single line of braille text. After the line of text is read, the device can update the line of braille to read the next line of text.

Company Z is asking for help to design the electronics where the input is text information from the cell phone and the outputs are control signals to 32 braille characters. Each character has 6 dots which are either raised or lowered based on signals from your control system.

Design Scenario Scope

In this scenario, you will be expected to:

1. Identify key technical requirements, including system, electrical, and other relevant specifications.
2. Develop and describe multiple alternative solutions.
3. Evaluate the proposed solutions by discussing their advantages and disadvantages, as well as any other considerations that influenced your final selection.
4. Outline the process for transitioning the concept from initial design to volume production.

