

Semiconductor Panel

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Panelists:

Jeff Dunn – Campus Relations Manager at Intel (moderator)

Sri Saripalle – Co-founder of Random Designs, previously of Global Foundries

Natalia Leonova – Recruiter at Experis (Manpower)

Vinod Menon – VP of Engineering at SiTime

SUMMARY:

What is happening in semiconductors:

- Design, testing, CAD layout – cyclical but not needed as much as in the past
- Many semiconductor skills can launch someone into a different industry
- Semiconductors are being utilized everywhere – even software companies hiring semiconductor people
- Trends are around automation – tasks, jobs, parts of a process – and outsourcing continues
- Demand is around automotive (AI/machine learning), IOT, wearables (includes UI/UX – how the customer will interact with the wearable), battery technologies, low power design, advanced computing power and advanced graphics, 5G
- Engineers must know how to tie software and hardware together for a system solution
- Companies such as Apple, Lab 126, Facebook and Google are hiring hardware engineers
- What hiring managers are looking for are people with system understanding/experience who also understand the targeted market segment (common job title for this profile is Product Manager), solution architects, low and high power circuit design, strong embedded software skills, and knowledge of hardware at the board level.
- Candidates need to show how they can adapt through the 4 E's (Enthusiasm, Expertise, Experience, Education). "Pivot fast!" Stay in shape physically – this shows energy.
- Know software no matter what your job title is! Take a course or get a certificate.
- Manufacturing still exists in the U.S. but not in Silicon Valley. Be willing to move. Look for commodity roles or coordination roles.

Resume tips:

- Don't remove old experience (take off dates) if it's relevant to the job and don't dumb down your education
- Everything on your resume is fair game in an interview. Make sure you have accomplishment stories for each item.
- Don't summarize your job duties/description. Give accomplishments.
- Have a strong summary that includes your strong skills and what you want to do. Then back up the statements in the rest of your resume with actual experience.
- Content rich! Use a headline rather than a title. "Program Manager" doesn't tell what you really did.
- Tailor your resume to the position.

LinkedIn:

- More important than a resume. LI profile should have everything; resume is a subset

- Talk about what you are good at, don't downplay what you want to do
- Put in extracurricular, education (all courses), volunteering – make yourself an interesting person!
- Don't say you are still employed when you're not
- Look through the windshield (larger) i.e. forward, rather than back through the rearview mirror – talk about career plans and how you can help a company in that area
- Get recommendations
- Explain gaps
- Make your profile a dynamic, living tool. Show you are commenting on articles, that you have followers and blog (write an article about your area of expertise)

Job search:

- Network and utilize referrals
- Apply on target company website so they can find your profile
- Most job descriptions today are very specific; apply if you can add value even if you are not a perfect fit.
- Don't worry about title; search for the content of a job you want to do. SV is very fluid with regard to titles. Companies are now very flat and in the future will mostly be virtual corporations.
- Have a project plan for your job search
- Be open to contract/temp roles – they give great experience and build networks

How to network better:

- Network with people from school (kindergarten up) and with people who have common interests
- Keep re-connecting with contacts
- Networking is a two-way street. Have things to offer your contacts.
- Have a business card!
- Make a good impression - Visual impact (dress appropriately, not too casual. Remember: you don't get a second chance to make your first impression. Vocal (good tone, be articulate, don't mumble). Verbal (get your point across without acronyms and too much jargon, speak professionally).
- Spend time on meeting people face-to-face

Interviewing:

- The interviewer is probably nervous too – it's a big deal to make a hiring recommendation
- Speak with clarity, be concise, and be consistent on your resume and in the interview (back up claims with work accomplishments)
- Talk like you are an insider: "How will we be measured?" "What problems am I likely to encounter in the first six months?"
- Make connections with the interviewer by asking thoughtful questions in order to learn more
- Demonstrate fit (soft skills, learnability, adaptability, ability to work with others)
- Do not ask about "work/life balance." Instead ask, "How are decisions made?" "What is the company culture?"
- BS (breath and smile!)

DETAILS:

Industry Trends

Srinivas: Semiconductors is a broad industry. Manufacturing is the worst hit due to consolidation. "Silicon Valley" has become "Software Valley." With manufacturing being hit, other areas like component design, CAD layout and test are also not as stable. ASIC SW engineer should be able to leverage their skills to other industries. Because the semiconductor industry is a "mature" industry, it is mostly occupied by those with "grey hair and bald heads."

Big trends that cross multiple industries including semiconductor are automation of tasks through robots and process automation in order to deliver products faster. Emerging trend across industries is research labs focused on a wide range of innovations like self-driving cars, IOT, and "info-tainment."

Vinod: Disagrees that the semiconductor industry is predominately "grey hair and bald heads." The industry needs people with all kinds of skills. In addition to VLSI and SW skills, the industry can also use those with backgrounds in chemistry and material science. The core skill that is truly sought after is creativity. The industry trends he is seeing are innovation around healthcare applications, IOT, new battery technology (e.g. low and high power design), automation, compute power, self-driving cars, factory automation. All companies including Facebook and Google are looking for engineers with semiconductor background to address these types of products/projects.

Jeff: Additional industry trends: virtual/augmented reality, AI/machine learning, wearables.

Jobs hardest to fill in the past 6 months

Srinivas: Product Manager. Someone who can take the product from "cradle to grave" including design, manufacturing and then to market. A "torchbearer" who fully understands the target segment with a systems background/understanding and perspective. They are often looking for the 100% job description match, but on occasion will hire someone who requires some ramp-up time.

Natalia: Job descriptions now are very specific, oftentimes requiring a unusual combination of different skills. When looking at these jobs, you don't have to be a 100% fit, but consider what else you can bring to the table. Difficult jobs to fill include: Solution Architect, UI/UX with HW products for wearables,

Vinod: Hard jobs to fill are Subject Matter Experts (SME) in a key HW or SW area like low or high power circuit design, automation, system architects, product managers. Beyond SME, Vinod looks for the 4 "E"s: Enthusiasm, Expertise, Experience, Education. Being versatile is key. ****Don't remove experience over 10 years old since it could be relevant. Don't "dumb down" your resume. Include your PhD and MS if you have it.*

Natalia: Do include experience older than 10 years, but you must be able to speak about it in an interview.

Jeff: Hardest to fill at Intel: software development, AI. Recommends getting a certificate or taking a course in AI. You can transition into the semiconductor industry even without semiconductor background. Other backgrounds valued include design, electrical, software, mechanical, and chemical.

Hiring process – beyond technical skills, what are you looking for?

Srinivas: Enthusiasm. Remember, you got the interview because there is something in your background that compelled the interviewer to bring you in, so it is on you to make that connection.

Natalia: Be informed and prepared. Understand what the job requires and research the company. What connects you to that company? Summarize how your background relates to the role.

****Having a referral exponentially increases your ability to get the job so find a connection. In order to win, you must be prepared. Research on glassdoor. For the interview, be curious, passionate. Show “learnability.” Show your ability to adapt.*

Vinod:

- In the interview, from the candidate, Vinod is looking for 3 “P”s: Preparation, Planning and Persistence. For bigger roles, the gestation period is longer so while you are job searching, you MUST be in circulation e.g. ProMatch, C-SIX, meetups. **** Network or No-work! When you are interviewing, remember everyone you interact with is part of the interview team from the receptionist until you walk out the door at the end of the day. Remember to follow up after the interview. Reaffirm your value proposition.*
- In the interview, ****Vinod reminds us that the interviewer is more nervous than the candidate because the interviewer is the one representing the company and is the one who has to make a decision on you as a candidate to his/her peers.* Vinod also encourages candidates to “breathe and smile” since this builds rapport, and also provides opportunity for the interviewer to answer questions. He recommends candidates “behave like an insider” by saying “we” and “us” rather than “you”.
- From the resume, Vinod is looking for 3 “C”s: Clarity, Conciseness and Consistency. Especially given in the last 3 weeks he has looked at 900 resumes, one of which was 17 pages long!

Jeff: The ideal candidate is someone with focus, direction, purpose. Just as you wouldn’t want to date someone who just wants a date, Jeff’s advice is don’t say things like “I can do anything. I just want to get my foot in the door.” When evaluating a candidate, 50% of the decision is on technical skills, the other 50% is on “fit” / soft skills (e.g. learnability, adaptability, proactiveness, leadership).

For your resume to stand out

Srinivas: 5 sentences on not just your skills, but the results you got for the company using your skills.

Natalia: Only include what you are prepared to talk about in the interview. Don't bring in skills or results that you can't speak to in detail.

Vinod: Include the impact you had. Start each bullet with the result you achieved, then explain how you achieved it. Prioritize your bullets according to their relevancy. ****Your job title should provide clarity, e.g. everybody has to manage programs, so "Program Manager" is a "content-free" title.*

Where do you find candidates?

Srinivas: Networking and referrals.

Natalia: Networking, referrals, LinkedIn and additional job sites (e.g. Careerbuilder, Dice, Monster).

Vinod: Since resumes are tailored, Vinod uses LinkedIn since the information is more stable.

Jeff: ****Intel looks at internal database first, so don't assume if you complete an application and you don't get a response that you are in a black hole.*

For your LinkedIn profile to stand out

Srinivas: Since your resume is tailored, for your LI profile provide information on what you are really good at and what you would like to do. LI should be a superset of what you have done. Don't be repetitive. If you did the same thing across multiple jobs, focus on your accomplishments in that position. Publish your thoughts. Don't just "like" something. If you are active, this will prompt others to look more closely at you (and your resume).

Natalia: Make your profile dynamic. See LI as a networking tool. Complete your profile with extracurricular activities; e.g. include if you are on a board, if involved in non-profits or charities. Provide your education and any courses you are taking since these can help you connect with others. Share content.

Vinod: ****Don't indicate on your profile that you are currently employed if you are not. When you are driving, the windshield is bigger than the rearview mirror, so be focused on where you are going, not where you have been.* Address your gap on your profile with courses you are taking or where you are volunteering.

Jeff: Load up on key words. Your Summary should tell who you are and where you are going. Have a complete profile including work history, endorsements, recommendations, posts and blog.

Networking tips

Srinivas: Personally keeps in touch with 30 kids from his kindergarten class, 18 of which are here in Silicon Valley. Network with people you meet professionally by sending a LI invite. If they accept, thank them, then make sure to interact.

Natalia: Networking is a two-way street. Recognize that you have something to offer as well including your current network.

Vinod: Have a business card even if you are not working. Use it to establish your identity. Use both sides of the card to include your Experience, Expertise, Education. When networking remember the 3 "V"s: Visual (****Remember, you don't have second chance to make a first impression. Dress professionally.*) Vocal (don't mumble). Verbal (use vocabulary that reflects the type of work you are looking for, e.g. slang, swear words may not be appropriate).

Jeff: You need to be networking face-to-face. Don't just sit at your computer. During business hours you should be out meeting people.

How to stand out in interview

Srinivas: Do your research. Be able to talk about industry trends and their product roadmap. Use "we." Even if you have a massive vacation coming up, when you are asked "When can you start?" say you can start now. Anything in the future can be negotiated.

Natalia: Ask thoughtful questions based on your research. This can reveal intelligence which will better allow you to link your experience to their objectives.

Vinod: Not just what you ask, but how you ask. Make your interview conversational. ****Do not ask about "work/life balance." Instead ask "How are decisions made?" "What is the company culture?"*

Jeff: Be prepared with success stories so you are ready for behavior-based questions around "greatest technical challenge" or "how you went above/beyond for a customer."

Advice for jobseeker in transition whose funds may be depleted. Should he/she take a lower level position?

Srinivas: ****In this valley anyone can work for anybody. Your boss can end up working for you. Don't worry about titles, since corporations will soon be entirely virtual. If you can do the work, apply.*

Natalia: Be proactive. Plan out your transition plan for how long you can look for your ideal job before you need to be open to expand your search to consider short-term opportunities.

Vinod: ****In your job search, do not think of yourself as "let go" from your previous job. Instead you have "become available" for new opportunities. Do not "settle" for a job. Explore other opportunities, don't balk at a temporary role.*

Q&A:

Advice for hidden job market?

Vinod: Network using LinkedIn and ask for informational meetings. Be ready for any opportunity.

Natalia: Know your value proposition.

Job trends for those who have manufacturing background?

Vinod: Even though these jobs are no longer in this area, if you know the job, you can be a good interface between the R&D here and wherever the product is being made.

Srinivas: There is a lot of opportunity if you are willing to move. Cypress (Bloomington, MN), Intel (Oregon), Samsung (Austin, Tx), Global Foundries (New York, east coast).