Co-Chairs Sollman, Bynum, and Members of the Joint Committee on Semiconductors:

For the record, my name is Jason Sullins. I am a 3rd generation native Oregonian and a two-time alumnus of Oregon Tech. I have worked 30 years in the high-tech industry, and of those three decades, I spent 22 years in the semiconductor industry working in numerous engineering roles for the world-class chip maker Maxim Integrated. Recently, I started my own business, Integrity Circuits, where I design electronic systems for the automotive and clean energy markets. I am providing this testimony to support additional investments in SB 4 in workforce development and semiconductor research.

Growing up in the 1980s, I remember the devastating loss of jobs that occurred when Oregon's timber industry was all but shut down. To offset this economic loss, tax breaks and other incentives were given to encourage high-tech companies to come to Oregon, which helped significantly offset losses in the timber industry and, ultimately, significantly increased our tax revenue base. One of the largest sub-sectors of high-tech that came to Oregon was semiconductors. Little did I know then that much of my career would be spent working in that industry.

When I graduated from Oregon Tech in the late 1990s, we were one of the few universities that taught specializations in semiconductors (integrated circuits) at the undergraduate level, and I had the opportunity to design an ASIC integrated circuit (aka a "microchip") for my senior project at the OIT Portland-Metro campus. This, in large part, led me to work for the semiconductor company Maxim Integrated (recently merged into Analog Devices) after graduating in 1998. I spent the following 22 years in the semiconductor industry performing quite a few different engineering roles and participated in helping to create the fiberoptics/electronic systems that are the backbone of the internet we all enjoy today.

Integrated circuits (the largest market of semiconductors) are the basic building blocks of modern electronic circuits and are, therefore, a critical market in the high-tech portion of the economy. Semiconductors have the second highest profit margin of all industries in the United States, second only to the financial market, thanks in part to the strong barriers to entry that include high capital and specialized skills. Essentially, once you complete the NRE (non-reoccurring engineering) design work, manufacturing the chips is like printing money! In the past, Locally, here in the Portland Metropolitan area (aka the Silicon Forest), we have numerous semiconductor companies, including Maxim/ADI, Intel, Quorvo, Skyworks, On Semiconductor, Microchip, Micron, Apple, TSMC, Jireh, Hitachi, SiFive, Ampere Computing, Dupont (semiconductor mask maker), ASML (semiconductor equipment mfg.), and Lam Research (semiconductor equipment mfg), to name a few! Semiconductor companies are great for the economy because they create high-paying, high-skilled, and environmentally clean jobs. From what I've seen, these companies are desperate for engineers to hire and often have to recruit from out of state, which can require paying recruits moving incentives and bonuses only to risk having these employees move later on. Just last month, I was contacted by Analog Devices asking for the availability of electrical engineering students to hire. They reiterated their interest in hiring locally here in Oregon and wanted to avoid having to recruit from out of state.

I encourage you to follow in the footsteps of our Oregon legislators, who helped save our economy in the 1980s by once again supporting high-tech in Oregon. As a conservative, I generally do not support the expansion of government spending, but given the high return on investment of funds used towards education in high tech, and especially in the lucrative market of semiconductors, I strongly support additional investment into education targeted for the semiconductor industry. Of available opportunities towards this goal, supporting and promoting the new Oregon Tech Portland-Metro area campus in Wilsonville has the highest potential.