

Application: 4713

Jebaseelan Varuvel

**Page: General Information**

Provide information about the company to be considered for the award. If you will be nominating an individual, specify the nominee's employer.

**Name of Organization/Company**

Samsung

**Additional Contacts**

I would also like to have others receive emails about the disposition of our entries.

**Page: Entry Information**

**Entry Title**

Jebaseelan Varuvel

**Category**

Q11e. Employee of the Year - Information Technology - Hardware/Peripherals

**Employee Nominee Submission Format**

Written Answers

**a. Briefly describe the nominated non-executive person's employer: the organization's history and past performance (up to 200 words). Required**

Samsung started its foundry business in 2005 to provide cutting-edge technologies to a broad market. Samsung Foundry has decades of manufacturing experience with revolutionary semiconductors. As a leading-edge foundry, we collaborate with customers across the globe to relentlessly drive towards the development of the cutting-edge technologies. Along with our state-of-the-art process technologies, we provide clients with value-added solutions from the Foundation Library, Process Design Kit (PDK), Design Methodology (DM), and Design Services to Intellectual Property (IP) enablement, packaging technology, and cloud service. Customers can rely on our deep expertise in advanced processes and design technologies, which is backed by a history of proven high-volume manufacturing.

Samsung Electronics Co., Ltd., a world leader in advanced semiconductor technology, today unveiled its latest innovations in analog and logic semiconductor technologies and outlined its blueprint for upcoming technological advancements at its inaugural Samsung System LSI Tech Day 2023 event. Attended by approximately 300 customers and partners at its Samsung Semiconductor U.S. headquarters, the event featured tech sessions led by Samsung executives, covering a wide range of topics from System LSI humanoids to AI and the company's R&D endeavors in the U.S

<https://semiconductor.samsung.com/foundry/about-samsung-foundry/company-info/>

<https://semiconductor.samsung.com/news-events/news/samsung-showcases-groundbreaking-logic-innovations-at-system-lsi-tech-day-2023/>

**b. Outline the nominated non-executive employee's achievements since the beginning of 2022 that you wish to bring to the judges' attention (up to 250 words). Required**

Accomplished 19 Years of Research and Development of Semiconductor design (CPU and GPU) Experience at Fortune 500 Companies including ARM Inc, Google, Qualcomm Technologies Inc, Samsung Austin Research and Development. And received multiple awards for Research and innovations in Low power designs, Custom MSCTS Clock implementation, Low power Leakage Optimization and more.

Diverse Portfolio of Accomplishments: Throughout his illustrious career, Mr. Jebaseelan Varuvel, has left an indelible mark on various sectors spanning Memory Design, Low power CPUs, High speed GPUs, and beyond. His ability to adapt and thrive in different environments showcases his versatility and adaptability.

25+ successful tape-outs of small ASICs to large GPU SoC's in Netlist to GDSII flow on lower cutting-edge technologies critical for PPA. Worked on the latest nanometer technologies including 3nm and 2nm designs.

Specialized in GPU design's Clock methodology and implementation. And part of the research and development team of innovative AI based semiconductor chips.

Leading the Artificial Intelligence based GPU design and part of the research team for various other innovative products.

Some of my recent GPU designs includes the Xclipse chip which is used in Samsung's flagship mobile phones of Galaxy S23 and S24 series. I have received an award and gift as Galaxy S23 Ultra mobile phone for the contributions.

Mr. Jebaseelan Varuvel proudly holds Masters Degree in Microelectronics and Post Graduation in Artificial Intelligence and Machine Learning from University of Texas, Austin. And accomplished multiple AI projects and is currently working on the AI Enabled Low Power Semiconductor GPU designs.

**c. Explain why the achievements you have highlighted are unique or significant. If possible compare the achievements to the performance of other employees or to other workers in your industry and/or to the nominee's past performance (up to 250 words). Required**

19+ years of technical innovations and management experience in semiconductor chip design implementation including GPU, CPU and SoC

High performance, low power, multi-million gates, lower nodes (up to 2nm) chip tape-outs using Synopsys and Cadence tools

High competence in roles from techno-management with project/team handling to Individual contributor  
- Alumnus of the prestigious Birla Institute of Technology and Science, Pilani.

Worked in Samsung's research team responsible for the cutting-edge GPUs. Some of the recent GPUs were implemented in Samsung Galaxy 23 and 24 mobile phones.

Hands-on responsibility from synthesis to place and route of a Premium GPU block through signoff flows including timing and physical verification.

Synthesis, Floor plan, Place & Route in chip-level and hierarchical physical implementation environment

Running MBIST and DFT insertion into block, understanding impact of MBIST/Scan and debug logic is desirable.

Interact with RTL counterpart to resolve design issues pertaining to block closure.

Optimize GPU blocks to meet aggressive power/performance/area targets.

Driving the clock activity includes the PPA, clock mesh implementation for the entire GPU sub-system.

Tile lead of the 20+ medium to complex tiles and responsible for the entire synthesis to GDSs delivery. This includes the area optimization, PPA sweeps to improve clock and Total power, eco implementation (timing, PV closure) by collaborating with the RTL, DFT, STA, PV teams.

Received the "Idea of the Month" and few other awards for the clock PPA improvement and implementation.

Lead the team of 6 engineers and involved in training, performance review and Salary appraisals

**d. Reference any attachments of supporting materials throughout this nomination and how they provide evidence of the claims you have made in this nomination (up to 250 words). Optional**

LinkedIn : <https://www.linkedin.com/in/jebaseelan-varuvel-28575529/>

Educational achievements:

- Post Graduation program in Artificial Intelligence and Machine Learning from University of Texas, Austin
- Master of Science in Microelectronics from Birla Institute of Technology and Science, Pilani-India
- Diploma in Electrical and Electronics Engineering, First Class with honors, 92.4%, "College Topper"

International awards for Judging:

- Judge | Golden Bridge Awards® • Jebaseelan Varuvel • Globee Awards  
<https://credential.globeeawards.com/473798d2-e19a-410b-8f11-80d4e20375bd#gs.ali7fr>
- Judge | Globee® Awards for Technology • Jebaseelan Varuvel • Globee Awards  
<https://credential.globeeawards.com/b1567c54-40f6-4396-9f2a-e922007a19ff#gs.ali88p>

Professional Awards:

- "Idea of the Month" award for the "Non-uniform mstap sink assignments to improve clock and total power", from Samsung SARC
- Cheers for Peers: Great Team Support, from Samsung SARC
- Qualstar, from Qualcomm (06/2019)
- Qualstar, from Qualcomm (04/2019)
- Pinnacle: Spotlight Award, from Qualcomm (11/2018)
- Qualstar, from Qualcomm (10/2018)
- Qualstar, from Qualcomm (07/2018)
- Pat on the Back Award, from einfochips (06/2016)
- Bravo award, from ARM Inc's senior management (12/2014)
- "Hats off to you" award, from ARM Inc (03/2014)

Technical Papers & Presentations:

- Presented "leakageOpt by Powerwizz" to entire Qualcomm SOC team
- Presented the paper "Is VOLTUS the right power integrity solution for ARM Testchips?" in ARM's Regional Engineering Conference-2015
- Webinar on "Lower Geometry Challenges and Optimization of ARM Cores", jointly with einfochips Ltd and ARM Inc  
[http://biz.einfochips.com/arm-einfochips-webinar-mar2017?utm\\_source=arm](http://biz.einfochips.com/arm-einfochips-webinar-mar2017?utm_source=arm)

**Webpage Link**

<https://www.linkedin.com/in/jebaseelan-varuvel-28575529/> (<https://www.linkedin.com/in/jebaseelan-varuvel-28575529/>)

**Would you like to add an additional webpage link?**

Yes

**Webpage Link 2**

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**Would you like to add an additional webpage link?**

Yes

**Webpage Link 3**

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**Would you like to add an additional webpage link?**

No

**Supporting Document**

Download File ([https://stevies-tech.secure-platform.com/file/67274/eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJtZWVpYUlkIjo2NzI3NCwiYWxsY3dOb3RTaWduZWRVcmwiOiJGYWxzZSIsImNbnm9yJebaseelan\\_Varuvel\\_Achievements.pdf](https://stevies-tech.secure-platform.com/file/67274/eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJtZWVpYUlkIjo2NzI3NCwiYWxsY3dOb3RTaWduZWRVcmwiOiJGYWxzZSIsImNbnm9yJebaseelan_Varuvel_Achievements.pdf))

**Would you like to add an additional supporting document?**

No

By your submission of this entry to The Stevie Awards, you verify that you have read and agreed to abide by the regulations, terms and conditions of the competition (<https://www.asia.stevieawards.com/rules-and-terms-conditions-competition>).

**Terms and Conditions**

I Agree