GlobalFoundries Unveils Innovative Solutions that Deliver a New Era of More in Semiconductor Manufacturing

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New solutions announced at GF Technology Summit include rich features essential for smart mobile devices, datacenter, IoT and automotive

Malta, New York, Sept. 15, 2021 – GlobalFoundries® (GF®), a global leader in feature-rich semiconductor manufacturing, today announced a portfolio of new features that extend its solutions roadmap and accelerate the next wave of innovation in chip design for smart mobile devices, datacenter, IoT and automotive.

The announcements come as the industry is experiencing unprecedented demand for semiconductor chips, with the market expected to double to more than $1 trillion by the end of the decade.1 Semiconductor chips are now pervasive - inside everything from appliances to thermostats, smartphones to automobiles, and industrial equipment to medical devices.

"This past eighteen months has demonstrated what a semiconductor is and that they are vital to everything we do. This awareness and demand have catalyzed innovation in areas such as automotive and IoT, and this requires a new way of thinking," said Juan Cordovez, senior vice president of sales at GF. "At GF, we are shattering the old paradigm of what innovation in semiconductor manufacturing means by delivering differentiated solutions that are more intelligent and intuitive, more connected and secure, more powerful and energy efficient to meet not only the demands of today but also for the future."

At the summit, GF introduced the new solutions, features and platforms for the fast-growing end markets and applications. Highlights include:

- **Smart, mobile devices:** GF announced advanced feature sets for the newest generation of 5G and Wi-Fi 6/6e mobile phones and smart devices. GF RF-SOI sub 6GHz Solutions include new features so chip designers can provide a stronger 5G connection today with fewer dead zones for more talking, playing, and streaming, and more time on a single charge.
  - **GF FDX™-RF** Solutions include new features to enable the 5G mmWave generation of devices for more robust connections and more connected experiences.
  - **GF Wi-Fi Solutions** now include new features for enhanced RF and Power Amplifier functionality so Wi-Fi 6 and 6e chip designers can provide a higher performing, stronger Wi-Fi connection for the newest generation of Wi-Fi-enabled products for more coverage and more connections.
  - **GF Display Solutions** includes new features that allow display driver IC designers to enable variable refresh on OLED displays to deliver blazing fast refresh rates for more immersive gaming and moderated refresh rates for battery savings while browsing.
  - **GF Audio Solutions** include new features, as well as a non-volatile memory option, that allow audio amp designers to provide more life-like sound quality with a minimal amount of noise or distortion resulting in crystal clear audio for playback and talk.
  - **GF Imaging Solutions** now includes new features that allow image sensor designers to enable stacked CMOS image sensors with >200 Mpixels of resolution, high-dynamic range, slow-motion, and lower power for the newest generation of smartphone cameras.
- **Datacenter:** GF is extending its silicon photonics manufacturing leadership by announcing a new platform and features for more power and energy efficient.
  - **GF Silicon Photonics Solutions** are available on GF's new Silicon Photonics 45nm platform which has passed critical technology milestones and is on track for full technology qualification by Q1 2022. The monolithic platform, combining RF CMOS and optical components on the same chip, includes an innovative new feature, the first micro ring resonator (MRR) optical component in 300 mm wafer technology. GF is engaged with leading customers and partners on this new platform.
- **IoT:** GF Microdisplay Solutions for IoT include new features that optimize and improve process speed and reduce leakage as well as provide enhanced pixel driver functionality for enabling smaller and lighter augmented reality (AR) glasses that last longer on a single battery charge. GF Microdisplay Solutions are based on the GF 22FDX+ platform which is seeing broad industry acceptance with more than $7.5 billion in design wins worldwide.
- **Automotive:** GF announced the GF 22FDX™ platform is Auto Grade 1 Ready at Fab 1 in Dresden, Germany providing customers with faster time-to-market. GF has announced that it is making $1B investment in Dresden, as well as an additional $5B to expand capacity globally.

For more information on GF's announcements at the GF Technology Summit 2021, please visit https://gf.com/news-events/gf-technology-summit-media-kit

[1]SEMI Industry Strategy Symposium

About GF

GlobalFoundries (GF) is one of the world's leading semiconductor manufacturers and the only one with a truly global footprint. GF delivers feature-rich solutions that enable its customers to develop innovative products for pervasive chips for high-growth markets. GF provides a broad range of feature-rich process technology solutions with a unique mix of design, development and fabrication services. With an at-scale manufacturing footprint spanning the U.S., Europe and Asia, GF is a trusted technology source to its customers across the globe. GF is owned by Mubadala Investment Company. For more information, visit www.gf.com.

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