GLOBALFOUNDRIES, Fudan Team to Deliver Next Generation Dual Interface Smart Card

November 14, 2017

GF's 55LPx platform with embedded non-volatile memory and integrated RF enables Fudan to create China's most advanced CPU bank card

Santa Clara, Calif. and Shanghai, China, November 14, 2017 – GLOBALFOUNDRIES and Fudan Microelectronics Group today announced they have produced a next generation dual interface CPU card, using GF's 55nm Low Power Extended (55LPx) technology platform. GF's 55LPx platform has the capability to integrate multiple functions onto a single chip that results in a secure, low power, and cost effective solution uniquely suited for the Chinese bank card market, including financial, social security, transportation, healthcare, and mobile payment applications.

Fudan's dual interface CPU card, FM1280, supports both contact and contactless modes of communication, and shares a low power CPU that automatically selects the desired interface. The non-contact interface utilizes GF's readily available and silicon-proven 55LPx RF IP. Fudan's FM1280 also uses the embedded EEPROM-based on Silicon Storage Technology (SST) SuperFlash® memory technology to ensure user code and data security.

"With the increasing usage of smart bank cards, and in order to maintain our leadership position in this market, a solution with low power consumption was critical," said Shen Lei, VP of Technology Engineering at Fudan. "Our FM1280 card offers lower power consumption, enhanced reliability, and uses an advanced process node. GF's advanced platform, 55LPx, with its low power logic and highly reliable embedded non-volatile memory, is ideal for our next generation bank card offering. Fudan is pleased to continue our long-standing relationship with GF to manufacture our industry leading products."

The 55nm LPx platform provides a fast path-to-product solution, and includes SST's SuperFlash® memory technology, which is fully qualified for consumer, industrial and automotive applications. GF's 55LPx implementation of SuperFlash offers a small bitcell size, very fast read speed, and superior data retention and endurance.

"GF is delighted to expand our relationship with Fudan Microelectronics, who is the acknowledged leader in the Chinese smart card industry," said Dave Eggleston, Vice President of Embedded Memory at GF. "Fudan joins our rapidly growing customer base for GF's 55LPx platform, which offers a superior combination of low power logic, embedded non-volatile memory and RF IP for the smart card, wearable IoT, industrial MCU and automotive markets."

GF's 55LPx-enabled platform is in volume production at the foundry's 300mm line in Singapore. GF has previously announced that On Semiconductor and Silicon Mobility are currently using GF's 55LPx platform for wearable IoT and automotive products.

Process design kits, and an extensive offering of silicon proven IP, are available now. For more information on GF's mainstream CMOS solutions, contact your GF sales representative or go to globalfoundries.com.

About Fudan

Shanghai Fudan Microelectronics Group Co., Ltd. is a company specialized in the design, development and system solution provision of super-large-scale integration, and also one of the earliest listed companies in integrated circuit design field of China.

Since its establishment in 1998, Fudan has gradually grown into the leading manufacturer of contactless card chips in China, and delivered a cumulative total of 400 million contactless/dual-interface CPU card chips. In the transportation card field of China, its clients are widely distributed in Beijing, Shanghai, Guangzhou, Shenzhen and almost all the provincial capitals, with a 50%+ market share. It has also delivered more than 50 million contactless card reader chips and more than one billion contactless logic security cards annually, leading the industry in both cases.

About GF:

GLOBALFOUNDRIES is a leading full-service semiconductor foundry providing a unique combination of design, development, and fabrication services to some of the world's most inspired technology companies. With a global manufacturing footprint spanning three continents, GLOBALFOUNDRIES makes possible the technologies and systems that transform industries and give customers the power to shape their markets. GLOBALFOUNDRIES is owned by Mubadala Investment Company. For more information, visit globalfoundries.com.

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