Introducing: Samsung and GLOBALFOUNDRIES Collaboration

A new strategic collaboration between Samsung and GLOBALFOUNDRIES

Provides unprecedented global capacity for leadership 14nm FinFET technology

Gives customers choice and assurance of supply that can only come from true design compatibility at multiple sources across the globe

Addressing industry needs with a necessary advancement of the foundry supply chain model

Covers both 14LPE and 14LPP, the leading choice for high-volume, power-efficient SoC designs
Power Efficiency Driving FinFET Technology Adoption

Mobile and Wireless Applications
- Extend Battery Life

Computer, Network, Storage Applications
- Reduce Energy OPEX
- Meet Thermal Constraints
- Improve Reliability
- Reduce Carbon Footprint

All while increasing performance!
14nm FinFET Offers Breakthrough Power/Performance

- Intrinsic lower supply voltage
- Lowest off-state leakage
- Faster switching speed

Gate length shrink enables performance scaling

FET is turned on its edge

Double-gate reduces off-current

Performance
- 20% improvement

Power
- 35% reduction

Intrinsically operates at a lower supply voltage

Lowest off-state leakage

Faster switching speed
Delivering Maximum Value with Leadership 14nm

- Aggressive gate pitch
- Smallest memory solution
- Innovative layout schemes for compact logic

Smallest Area
Meeting the Growing Market Demand

Mobility and Wireless

- Smartphone
- Tablet
- Mobile PC

LOWER WATTS PER GHz

Computer, Network and Storage

- Ethernet Switch
- Fiber Access
- Base Station
- Wireless Access
- Data Center

MORE PERFORMANCE PER WATT

~$25B
2017 Advanced Node Projected TAM
Source: Gartner Foundry Supply & Demand 4Q13 Update

Mobile data traffic Increasing exponentially
Pressure of increased bandwidth through the infrastructure
Increasing need to efficiently scale out of the infrastructure
We are Advancing the Supply Chain Model

**New model – Single design, Flexible sourcing**

- Technology information shared
- Fab synchronized
- Concurrent source(s) bring up
- Risk mitigated production ramp
Ready for Design In, Ramping by end 2014

14LPE qualified in Feb 2014
14LPE & 14LPP PDK Released
MPW shuttles available
Libraries and IPs
Design Kits Ready
Prototyping now,
Mass production by end 2014
Recap of Today’s Announcement

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