FOUNDRY TECHNOLOGY IN SOC ERA

S. Y. Chiang
Taiwan Semiconductor Manufacturing Company

The IC foundry business model provides semiconductor companies and designer with technology, wafer capacity and service. The objective is to meet the manufacturing needs of multiple customers, with a level of technology and service that is better than the customers could achieve through their own fabs. In this role, it is incumbent upon today’s foundry to offer not only leading edge technology, but also needs to a very broad technology base that can be optimized for each specific customer applications. The foundry industry is also a driver of two major trends in the today’s semiconductor marketplace. It is enabling much of the disintegration of the industry while, along with independent library and IP vendors, is driving the emergence of System-On-a-Chip (SOC) design.