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Semiconductor firms call for cross-use platforms

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Cross company platforms with multiple applications are the answer to the electronics industry's problems, according to industry experts at a recent conference.

"You don't want to develop ten different chips for ten different applications, you want to design a platform that can scale to different applications, with different protocols and service," said Mark Pinto, vice-president and general manager of Agere Systems' processing, aggregation and switching division.

Susumu Kohyama, corporate senior vice-president at Toshiba, said: "Platforms allow you to minimise the design effort for each individual design - otherwise customers can't afford to pay."

Jurgen Knorr, who led the MEDEA programme which pioneered the platform concept, said: "At higher levels of integration, platforms - meaning something which several companies can use as the basis of their products - are clearly the answer."

The problem is the complexity of designing a custom or semi-custom chip such as an Asic or an SoC.

"Designing an SoC takes one year, and costs $20m-$25m, for 60m-70m gates, and everyone has been surprised at how difficult 130nm has proven to be," said Ray Bingham, president and CEO of Cadence Design Systems.

"Projects are failing, not because of physics, but because of complexity," said Chris Hamlin, chief technology officer of LSI Logic.

"Yield predictability is very difficult but it is essential for time-to-market and time-to-profit," agreed Toshiba's Kohyama.

"Moore's Law has almost run aground," said Roger Blethen, chairman and CEO of tester company LTX, "ICs are so complex there's a new world order in which only a few firms can fabricate them."

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