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Communications speed between LSIs：three fold increase

Made possible by Advanced Photonics with addition of a signal line

Advanced Photonics Inc(Ota-ku, Tokyo, President & CEO Mr. Makoto Shigematsu), a venture company spun out of the University of Tokyo and specialized in development of opto-electronic components, has developed technology to interconnect large scale integrated circuits(LSIs) placed on the board by optical signal at 240 Gbps (G means a billion).

This development is expected to lead to faster communications for router, a relaying equipment on the net, as well as personal computers. The company aims at starting sample delivery within the current fiscal term.
Advanced Photonics already had 80 Gbps communications technology using optical signal.

This time, they made further innovation in the location of wiring and the method of mounting, and succeeded in adding lines to send electrical signal to a device which converts electric signal to optical signal.

They increased the number of lines to 24, three times as many as the conventional method, and thus improved the capacity three fold without changing the size of the board.

In the conventional high speed communications using optical fiber, optical signal is used only up to the end of the board, and thereafter it is converted to electric signal. It tends to result in reduction of communication speed which in turn results in delay of the images when moving image is viewed.

According to Advanced Photonics, application of this technology enables conversion of electric signal to optical signal on the board and thereby increases communication speed.