Fujifilm will introduce 1TB optical disc in 2015
18 November 2012, by Nancy Owano

According to Fujifilm, the procedure can bring about a recording density of 25 Gbytes per layer, the equivalent to the recording density of a Blu-ray Disc (BD), in addition to 20 layers per side of a disc. A double-sided optical disc with a 1TB storage capacity is possible. Fujifilm foresees bringing a 1TB optical disc to market in 2015.

Fujifilm simplified the manufacturing process by using "web coating" to form the recording, ultraviolet curable resin and adhesive material layers and sticking them together.

With BD, spin coating and sputtering are needed for each layer. "It takes 147 seconds to form a four-layer BD," the company said. "With our method, it takes only 58 seconds to form eight layers."

Overall, Fujifilm said that the new disc's manufacture will be cheaper than BD discs currently available. The two-photon absorption disc has a cost as low as that of a magnetic tape. A company spokesperson said that, "We will continue the development of the disc with help from drive makers."

This new recording method potentially will realize a 15-Tbyte disc. "In the future, it will be possible to realize a 15-Tbyte optical disc (25 Gbytes/layer x 3 (eight values) x 100 layers x 2 (two sides)," Fujifilm said.

Fujifilm was scheduled to discuss its latest results at the International Broadcast Equipment Exhibition 2012 in Chiba Prefecture, Japan, which wound down over the weekend. This year's event was described as focusing on "the next technological innovations beyond digitalization."

More information:

www.fujifilm.com/about/research...
ff_rd056_005_en.pdf
techon.nikkeibp.co.jp/english/...20121113/250732/?P=2