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A compact embedded finger vein authentication unit for note-PCs
- $^{1}/_{20}$th current size achieved -

Compact finger vein authentication unit
Volume 19ml [39mm(d)×34mm(w)×15mm(h)]

Prototype note-PC with embedded finger vein authentication unit

The Central Research Laboratory of Hitachi, Ltd. (General Manager: Mr. Yasushi FUKUNAGA) announced the development of technology to significantly reduce the size of its finger vein authentication unit. The volume of the prototype unit fabricated using this technology, is just 19*ml* (39*mm* [d] x 34 *mm* [w] x 15*mm* [h]), $^{1}/_{20}$th volume of previous units (Hitachi comparison), and the smallest-in-the-world to date. This biometric technology uses light to image the vein pattern in the finger to authenticate an individual's identity. Hitachi started developing this original technology in 1997, establishing the basic technologies in 2000, and has since been pursuing various improvements. This time, a new irradiation method, whereby the finger is irradiated from below, was developed to achieve a flat and compact size. As a result, the unit can be embedded into portable information devices such as note-PCs and PDAs, expanding the range of applications for finger vein personal ID.